

#### NOTES

A Defense of Industrial Design Rights in the United States Maggie Diamond	
Somewhere Beyond the ©: Copyright and Web Design	
Morals Clauses: Past. Present. and Future	

#### ARTICLES

<i>Foreword</i> : The International Evolution of Intellectual Property Rights	. Richard A. Epstein
Towards a New Dialectics: Pharmaceutical Patents, Public Health and Foreign Direct Investments	Valentina S. Vadi
Addressing Climate Change: Domestic Innovation, International Aid and Collaboration	Joy Y. Xiang
Lost and Found: Intellectual Property of the Fragrance Industry; From Trade Secret to Trade Dress	Charles Cronin

VOLUME 5

## NEW YORK UNIVERSITY JOURNAL OF INTELLECTUAL PROPERTY & ENTERTAINMENT LAW

#### VOLUME 5

#### NUMBER 1

### CONTENTS

Preface	v
---------	---

#### Notes

A Defense of Industrial Design Rights in the United States Maggie Diamond	1
Somewhere Beyond the ©: Copyright and Web Design Florina Yezril	
Morals Clauses: Past, Present, and Future Caroline Epstein	

#### ARTICLES

<i>Foreword</i> : The International Evolution of Intellectual Property Rights <i>Richard A. Epstein</i>	107
Towards a New Dialectics: Pharmaceutical Patents, Public Health and Foreign Direct Investments Valentina S. Vadi	113
Addressing Climate Change: Domestic Innovation, International Aid and Collaboration Joy Y. Xiang	196
Lost and Found: Intellectual Property of the Fragrance Industry; From Trade Secret to Trade Dress <i>Charles Cronin</i>	256



#### Statement of Purpose

Consistent with its unique development, The New York University Journal of Intellectual Property & Entertainment Law (JIPEL) is a nonpartisan periodical specializing in the analysis of timely and cutting-edge topics in the world of intellectual property and entertainment law. As NYU's first and only online journal, JIPEL also provides an opportunity for discourse through comments from all of its readers. There are no subscriptions, or subscription fees; in keeping with the open-access and free discourse goals of the students responsible for JIPEL's existence, the content is available for free to anyone interested in intellectual property and entertainment law.

#### Cite as N.Y.U. J. INTELL. PROP. & ENT. L.

The New York University Journal of Intellectual Property & Entertainment Law is published two times per year at the New York University School of Law, 139 MacDougal Street, New York, New York, 10012. In keeping with the Journal's open access and free discourse goals subscriptions are free of charge and can be accessed via www.jipel.law.nyu.edu. Inquiries may be made via telephone (212-998-6101) or electronic mail (law.jipel@gmail.com).

The Journal invites authors to submit pieces for publication consideration. Footnotes and citations should follow the rules set forth in the latest edition of *The Bluebook A Uniform System of Citation*. All pieces submitted become the property of the Journal. We review submissions through ExpressO Bepress (http://law.bepress.com/expresso/) and through electronic mail (submissions.jipel@gmail.com).

All works copyright  $\bigcirc$  2015 by the author, except when otherwise expressly indicated. For permission to reprint a piece or any portion thereof, please contact the journal in writing. Except as otherwise provided, the author of each work in this issue has granted permission for copies of that article to be made for classroom use, provided that (1) copies are distributed to students free of cost, (2) the author and the Journal are identified on each copy, and (3) proper notice of copyright is affixed to each copy.

A nonpartisan periodical, the Journal is committed to presenting diverse views on intellectual property and entertainment law. Accordingly, the opinions and affiliations of the authors presented herein do not necessarily reflect those of the Journal members.

The Journal is also available on WESTLAW, LEXIS-NEXIS and HeinOnline.



## NEW YORK UNIVERSITY

# JOURNAL OF INTELLECTUAL PROPERTY & ENTERTAINMENT LAW

#### EDITORIAL BOARD 2015-2016

*Editor-in-Chief* Caroline Epstein

Senior Articles Editors David Krone Wen Xiu

Senior Notes Editor Nicole Liberman

Ryan Brown Rachael Browndorf David Cottrell Trevor Dodge Daniel Funt

> Emma Bechara Christine Chen

David Bailey Jiyeon Barta Perri Blitz Janie Buckley Naadia Chowdhury Lara Cohen Christopher Cooksey Mikaela Dealissia John DiNapoli Matthew Dunay Eddie Guers Victor Guo Sophie Ha *Executive Editor* Sherrone Ricks

Senior Web Editors Ty Callahan Florina Yezril

Senior Editors Jakarri Hamlin Rebecca Lasky Eliza Marshall Anna Mascoli Kelsey Nussenfeld

Web Editors Fernanda Crispim Han Hilda Li

Staff Editors Katharine Haydock Sarah Higgins Luan Khuong Victoria Kim Caroline Lau Katherine Levy Mingzhu Li Carl Mazurek Christine McLellan Austin McLeod Thomas Merante Katherine Nemeth Inzer Ni

Faculty Advisors Amy Adler Barton Beebe Managing Editors Margaret Diamond Christian Scarlett

Online Content Editor Latore Price

> Catherine Seibel Yang Amy Song Daryl Steiger Michael Zoltan

Breck Wilmot

Eric Parker Christopher Pearson Efraim Pruzansky Julian Pymento Mark Sanchez Alex Schindler Russell Silver-Fagan John Taeschler Zachary Travis Michael Vincent Kayla Wieche Jackson Yates

## PREFACE

Intellectual property law transcends national boundaries and reflects our changing view about property rights in creations of the mind. The outgrowth of the Internet has hastened this development, providing both a new frontier for innovation and more opportunities for theft. We approached the Fall Issue with these ideas in mind, examining the intersection of intellectual property law, entertainment law, international law, and the Internet. As technology has developed, the law has attempted to keep pace. How successfully has it adjusted?

A wide range of topics is addressed in this issue, but all explore the intersection of technology and the law, internationally and within the United States. Professor Charles Cronin explores the history of intellectual property protection in the fragrance industry, highlighting the challenges that new technologies pose to the protection of the industries secrets. Professors Joy Xiang and Valentina Vadi examine this tension between innovation and protection on an international level, scrutinizing the effects of intellectual property law on climate change and the pharmaceutical industries, respectively. In his introduction to Xiang and Vadi's pieces, Professor Richard Epstein comments on this tension, and the larger implications it has for the coexistence of intellectual property law and international law. The notes featured in this issue expand on this central theme, mounting a comparative analysis of industrial design rights in the United States, exploring the applicability of copyright to web design, and examining evolution of morals clauses in the Internet age.

We sincerely hope you enjoy this issue.

Sincerely,

Caroline Epstein Editor-in-Chief NYU Journal of Intellectual Property & Entertainment Law

## NEW YORK UNIVERSITY JOURNAL OF INTELLECTUAL PROPERTY AND ENTERTAINMENT LAW

VOLUME 5	Fall 2015	NUMBER 1

## A DEFENSE OF INDUSTRIAL DESIGN RIGHTS IN THE UNITED STATES

#### MAGGIE DIAMOND<sup>\*</sup>

The protection of industrial design in the United States has been criticized for its ill-aligned functionality doctrines, as an inefficient incentive scheme, as well as for its costly and prolonged rights acquisition periods. This note explores the scope of U.S. industrial design protection in copyright, trademark and design patent, concluding that design patent provides the strongest basis to rebut these criticisms. Not only does the positive enforcement of design patents speak to the protection's strength, but the normative scope of the right is calibrated to incentivize innovative designs. A wholesale reform of U.S. industrial design is not required to address cost and time criticisms; compliance with certain national and international obligations is sufficient.

<sup>&</sup>lt;sup>\*</sup> J.D. Candidate, New York University School of Law, 2015. The author would like to thank the Editorial Board of the Journal of Intellectual Property & Entertainment Law and participants of the 2015 Innovation Policy Colloquium.

INTR	ODUCTION	2
I.	INDUSTRIAL DESIGN IN THE U.S.	
	A. What is Industrial Design?	4
	B. Industrial Design Protection in the U.S.	5
	C. Criticisms of U.S. Industrial Design Protection	9
	1. Functionality Criticism	9
	2. Effects of Decreased Protection Criticism	14
	3. Cost and Time Criticism	17
II.	ALTERNATIVE AVENUES OF INDUSTRIAL DESIGN PROTECTION	21
	A. European Community Framework	21
	B. The European Community Framework: A Solution to Design Rights	23
III.	DEFENSE OF U.S. INDUSTRIAL DESIGN	26
	A. Enforcement is Definitive of IP Rights	26
	B. The U.S.'s Broad Design Right	30
	1. Comparative Protection in the U.S. and the EU	31
	2. The Design Dichotomy	33
	3. Rationale for Broad U.S. Design Right	34
IV.	SUGGESTIONS TO ADVANCE PARITY AND PREVENT ABUSE	
	A. International Obligations	37
	B. Cost and Time Issues	38
	C. Obviousness Standard	40
CON	CLUSION	42

#### INTRODUCTION

Coined the "patent trial of the century,"<sup>1</sup> the litigation between Apple and Samsung brought the importance of industrial design to the attention of the mainstream media and intellectual property professionals alike. Over the course of three years,<sup>2</sup> Apple asserted ten utility patents, eight design patents and twenty-two

<sup>&</sup>lt;sup>1</sup> Ashby Jones & Jessica E. Vascellaro, *Apple v. Samsung: The Patent Trial of the Century*, WSJ.COM (Jul. 24, 2012, 1:01 PM), http://www.wsj.com/articles/SB10000872396390443295404 577543221814648592.

<sup>&</sup>lt;sup>2</sup> Apple's first complaint was brought on April 15, 2011, re-trial concluded in November 2013 and the Federal Circuit issued an appeal decision on May 18, 2015. *See* Complaint for Patent Infringement, Apple, Inc. v. Samsung Elecs. Co., Ltd., No. CV-11-1846-LB (N.D. Cal. Apr. 15, 2011); Apple, Inc. v. Samsung Elecs. Co., Ltd., 920 F. Supp. 2d 1079 (N.D. Cal. 2013) and Apple, Inc. v. Samsung Elecs. Co., Ltd., 786 F.3d 983 (Fed. Cir. 2015).

forms of trade dress and trademarks in the United States against Samsung.<sup>3</sup> The U.S. Court of Appeals for the Federal Circuit (the Federal Circuit) ultimately affirmed Apple's claims of infringement, with design rights securing the majority of the \$548 million damages award.<sup>4</sup> Apple's industrial design was a central issue in several of the nine other countries where suits were filed,<sup>5</sup> but no other case resulted in such a sweeping victory for Apple's design rights. The *Apple v. Samsung* litigation is just one example of the strength of U.S. industrial design protection, particularly as compared to the EU's Community design right, which is frequently touted as the Holy Grail of design protection.<sup>6</sup> Part I of this note provides a background on industrial design and presents the relevant criticisms of U.S. industrial design protection and its comparative benefits. Part III defends the U.S. system of industrial design protection, particularly design patents. This section also discusses the inherent flaws in the EU's regime. The results of the *Apple v. Samsung* litigation across various jurisdictions stand as one example of the United States'

<sup>4</sup> The District Court basis of liability was three design patents, two forms of trade dress protection and three utility patents. Amended Jury Verdict, Apple, Inc. v. Samsung Elecs., Co., Ltd., No. 11-CV-01846-LHK (N.D. Cal. Aug. 24, 2012). The Federal Circuit rejected the trade dress claims and affirmed the design and utility patent claims. Apple, Inc. v. Samsung Elecs. Co., Ltd., 786 F.3d 983 (Fed. Cir. 2015). *See also* Jason J. Du Mont & Mark D. Janis, *The Origins of American Design Patent Protection*, 88 IND. L.J. 837, 840 (2013) (suggesting the size of Apple's verdict was largely driven by the presence of design patents).

<sup>5</sup> Suits were filed by either Apple or Samsung in Australia, France, Germany, Italy, Japan, the Netherlands, the United Kingdom, South Korea and Spain. Initial Joint Case Management Conference Statement - Correct Version at 13-14, Apple, Inc. v. Samsung Elecs. Co., Ltd., 909 F. Supp.2d 1147 (N.D. Cal. 2012) (No. 11-1846-LHK) (listing all related cases except filings at the OHIM); OHIM, Decision of the Invalidity Division, Samsung Elecs. Co., Ltd. v. Apple Inc. (May 7, 2011) (No. ICD 8539) (OHIM determination of Apple's RCD validity).

<sup>6</sup> See references cited *infra* note 129.

<sup>&</sup>lt;sup>3</sup> US Patent No. 7,469,381 (filed Dec. 14, 2007); U.S. Patent No. 7,844,915 (filed Jan. 7, 2007); U.S. Patent No. 7,864,163 (filed Sep. 4, 2007); U.S. Patent No. 6,493,002 (filed Mar. 20, 1997); U.S. Patent No. 7,812,828 (filed Feb. 22, 2007); U.S. Patent No. 7,669,134 (filed May 2, 2003); U.S. Patent No. 7,853,891 (filed Feb. 1, 2008); U.S. Patent No. 7,863,533 (filed Sep. 26, 2008); U.S. Patent No. 7,663,607 (filed May 6, 2004); U.S. Patent No. 7,920,129 (filed Jan. 3, 2007); U.S. Patent No. D'627,790 (filed Aug. 20, 2007); U.S. Patent No. D'618,677 (filed Nov. 18, 2008); U.S. Patent No. D'593,087 (filed Jul. 30, 2007); U.S. Patent No. D'504,889 (filed Mar. 17, 2004); U.S. Patent No. D'604,305 (filed Jun. 23, 2007); U.S. Patent No. D'617,334 (filed Jul. 15, 2008); U.S. Patent No. D'622,270 (filed Oct. 1, 2009). Apple initially asserted twenty-two registered, unregistered and pending applications for US trademark and trade dress. *See* Apple, Inc. v. Samsung Elecs. Co., Ltd., No. CV-11-1846-LB (N.D. Cal. Apr. 15, 2011), and Amended Complaint for Federal False Designation of Origin and Unfair Competition, Apple, Inc. v. Samsung Elecs. Co. Ltd., No. 11-CV-01846-LHK (N.D. Cal. Jun. 16, 2011).

comparative advantage over the EU system. Turning to a broader analysis, I argue that the U.S.'s superior protection is based on the breadth of the design patent's exclusionary scope. Concluding that a wholesale reform of the U.S. system is neither desirable nor necessary, in Part IV I suggest certain modifications that the U.S. ought to consider in light of the increasing economic importance of industrial design and the potential for abuse.

#### I Industrial Design in the U.S.

#### A. What is Industrial Design?

The Industrial Design Society of America defines industrial design as "products and systems that optimize *function*, *value* and *appearance* for the mutual benefit of both user and manufacturer."<sup>7</sup> This definition demonstrates that industrial designs are functional articles with both utilitarian purposes and creative designs. Protecting industrial design therefore challenges intellectual property traditions, which divide functional and creative articles into separate legal frameworks. Because of this, attempts to place industrial design into pre-existing legal frameworks ultimately result in theoretical incongruity.<sup>8</sup> Commentators argue that such placements create a protection deficit.<sup>9</sup>

This intellectual property challenge is not unique to the United States. Evidence of the world's puzzlement over industrial design protection is seen in the efforts of the World Intellectual Property Organization (WIPO) to distinguish industrial design subject matter from patentable subject matter. WIPO states that industrial design covers the "appearance or aesthetic features of a product, whereas a patent protects an invention that offers a new technical solution to a problem."<sup>10</sup> WIPO implicitly strips the functional aspects from industrial design protection, but includes inherently functional products such as furniture, lighting, and electric devices as examples of eligible products for industrial design protection.<sup>11</sup> Such

<sup>&</sup>lt;sup>7</sup> INDUSTRIAL DESIGN SOCIETY OF AMERICA, *What is Industrial Design?*, ISDA.ORG (2014), http://www.idsa.org/education/what-is-industrial-design (emphasis added).

<sup>&</sup>lt;sup>8</sup> Susanna Monseau, *The Challenge of Protecting Industrial Design in a Global Economy*, 20 TEX. INTELL. PROP. L.J. 495, 538 (2012).

<sup>&</sup>lt;sup>9</sup> Id. at 538-539; Richard G. Frenkel, Intellectual Property in the Balance: Proposals for Improving Industrial Design Protection in the Post-TRIPS Era, 32 LOY. L.A. L. REV. 531, 533-34 (1999); Parchomovsky & Siegelman, Towards an Integrated Theory of Intellectual Property, FORDHAM L. & ECON. RESEARCH PAPER No. 18, 1 (2002).

<sup>&</sup>lt;sup>10</sup> WIPO, *Frequently Asked Questions: Industrial Designs*, WIPO.INT, http://www.wipo.int/designs/en/faq\_industrialdesigns.html.

<sup>&</sup>lt;sup>11</sup> Id.

examples demonstrate that only aesthetic aspects of products should be protected under industrial design, and functional aspects left to patents. However, implementation of industrial design protection is totalitarian, which results in effective protection over the entire object including its functional aspects.<sup>12</sup> Difficulties drawing precise boundaries on industrial design protection and enforcement exist on a global scale. As the industry becomes more economically significant, these issues are becoming harder to ignore.<sup>13</sup>

#### B. Industrial Design Protection in the U.S.

In the U.S., industrial design protection is accomplished through copyright, trade dress, and design patents.<sup>14</sup> Of the three, trade dress and design patents offer the most protection of the three. Each regime is detailed and compared below for clarity.

Copyright offers protection for "pictorial, graphic and sculptural" elements of useful articles so long as they can be "identified separately" from the utilitarian aspects.<sup>15</sup> The language "identified separately" gives rise to the separability doctrine, which attempts to separate the creative and protectable elements of a design from its ineligible functional elements.<sup>16</sup> However, the doctrine is so

<sup>&</sup>lt;sup>12</sup> See, e.g., European Community design protection which exempts only those features or appearances of a product that are "solely dictated by its technical-function." Directive 98/71/EC, Art. 7, of the European Parliament and of the Council of 13 October 1998 on the Legal Protection of Designs, 1998 O.J. (L 289) 28; Council Regulation (EC) 6/2002, of 12 December 2001 on Community Designs, 2002 O.J. (L 3/1), 8. *See also* U.S. design patents which similarly limit protection of functional aspects only if they are "solely dictated by functionality." Rosco v. Mirror Lite, 304 F.3d 1373, 1378 (Fed. Cir. 2002).

<sup>&</sup>lt;sup>13</sup> WIPO, WORLD INTELL. PROP. INDICATORS 2014 at 98 (2014), *available at* http://www.wipo .int/edocs/pubdocs/en/wipo\_pub\_941\_2014.pdf (noting a larger than 50% growth rate in industrial design applications globally since 2009); Monseau, *supra* note 8, at 496 ("Design-led companies have produced dramatically better share-price performance for their investors.") (quoting Design Council, The Impact of Design on Stock Market Performance, DESIGN COUNCIL (2005), http://www.designcouncil.org.uk/knowledge-resources/report/impact-office-design-busin ess-performance).

<sup>&</sup>lt;sup>14</sup> Susan Scafidi et al., Panel II: The Global Contours of IP Protection for Trade Dress, Industrial Design, Applied Art, and Product Configuration, 20 FORDHAM INTELL. PROP. MEDIA & ENT. L.J. 783, 786 (2010); see also Daniel H. Brean, Note, Enough is Enough: Time to Eliminate Design Patents and Rely on More Appropriate Copyright and Trademark Protection for Product Designs, 16 TEX. INTELL. PROP. L.J. 325, 328-332 (2008) (describing the protection of designs under patents, copyright and trademark, respectively).

<sup>&</sup>lt;sup>15</sup> 17 U.S.C. § 101 (2010).

<sup>&</sup>lt;sup>16</sup> *Id*.

unwieldy that it is regarded as "impossible to carry out."<sup>17</sup> As a result, copyright affords little protection to industrial design, which inherently involves the convergence of functional and aesthetic elements.<sup>18</sup> For those few products that can survive the test,<sup>19</sup> copyright offers protection for a term of the author's life plus seventy years.<sup>20</sup> Protection attaches once the creative work is fixed in a tangible medium, and the right is enforceable upon registration.<sup>21</sup>

Trademark law provides protection for design through trade dress. Product design, a category of trade dress, is the primary form of trademark protection available for industrial design. The U.S. Supreme Court announced in 1992 that trade dress was eligible for trademark protection,<sup>22</sup> and in 2000 it divided trade dress into two categories: product design and product packaging.<sup>23</sup> In order for product design to be eligible for trademark protection it must have acquired distinctiveness.<sup>24</sup> A mark must be distinctive as to the source of a product, and can either be inherently distinctive or acquire distinctiveness through consumer recognition.<sup>25</sup> Inherently distinctive marks are those so unique they are unlikely to be used by multiple producers. Fanciful and arbitrary marks comprise the category of inherently distinctive marks.<sup>26</sup> Suggestive and descriptive marks must acquire distinctiveness in order to be protected under trademark law. These marks must establish that consumers identify the mark with the source of the product.<sup>27</sup> A higher showing of consumer association is required because such marks may be more common and thus pose a greater risk of harm to consumers and competitors if removed from the public domain.<sup>28</sup> Unlike copyright and design patents, product

<sup>&</sup>lt;sup>17</sup> Scafidi, supra note 14, at 787 (identifying the challenges in applying the separability doctrine).

<sup>&</sup>lt;sup>18</sup> See Brandir Int'l v. Cascade Pac. Lumber Co., 834 F.2d 1142, 1147-48 (2d Cir. 1987) (denying copyright protection to a bicycle rack because the aesthetic elements were not conceptually, or physically, separable from the functional aspects of the rack).

<sup>&</sup>lt;sup>19</sup> See Mazer v. Stein, 347 U.S. 201 (1954).

<sup>&</sup>lt;sup>20</sup> 17 U.S.C. § 302 (2012).

<sup>&</sup>lt;sup>21</sup> 17 U.S.C. § 102 (2012) ("original works of authorship fixed in any tangible medium of expression.").

<sup>&</sup>lt;sup>22</sup> See Two Pesos, Inc. v. Taco Cabana, Inc, 505 U.S. 763 (1992).

<sup>&</sup>lt;sup>23</sup> See Wal-Mart Stores, Inc. v. Samara Bros, Inc., 529 U.S. 205 (2000).

<sup>&</sup>lt;sup>24</sup> *Id.* at 212 ("It seems to us that design, like color, is not inherently distinctive.").

<sup>&</sup>lt;sup>25</sup> See Abercrombie & Fitch Co. v. Hunting World, Inc., 537 F.2d 4 (2d Cir. 1976).

<sup>&</sup>lt;sup>26</sup> *Id.* at 11. A fanciful mark is one that had no pre-existing meaning such as "Kodak." An arbitrary mark is word that had a pre-existing meaning but is applied in a novel context such as "Apple" for computers.

 $<sup>^{27}</sup>$  *Id.* at 10.

<sup>&</sup>lt;sup>28</sup> *Id.* at 11.

designs do not need to be registered in order to establish or enforce rights.<sup>29</sup> Product designs are protected so long as the right-holder can establish that consumers identify the product design as a designation of source. This indefinite term is highly desirable for industrial design. However, establishing acquired distinctiveness can be expensive and may involve a prolonged rights acquisition period, diminishing the effective protection of trade dress for industrial design.<sup>30</sup> Product design also requires that the design be non-functional, similar to copyright and design patent.<sup>31</sup>

Design patents were the U.S. solution to the intellectual property needs of industrial designers. At the time of the regime's inception, copyright and utility patent standards failed to cover industrial design.<sup>32</sup> Design patents, however, cover the ornamental design of an article of manufacture and tolerate a greater amount of functionality.<sup>33</sup> Only if a design element is "solely dictated by functionality" is it removed from design patent protection.<sup>34</sup> This greater functionality tolerance makes design patents ideal for industrial design articles. Design patents currently protect design patents resulting from applications filed on or after May 13, 2015 for fifteen years from the date of the patent's grant.<sup>35</sup> The estimated acquisition period is fifteen months from time of application.<sup>36</sup> This long acquisition period undermines the value of design patents to industries rapidly innovating or with short product development lifecycles.

One explanation for the protection of industrial design under a patent regime lies in the origins of its protection. In the mid-19<sup>th</sup> century, cast-iron stove

<sup>&</sup>lt;sup>29</sup> See 15 U.S.C. § 1125(a) (2012), which does not require registration for protection of marks.

<sup>&</sup>lt;sup>30</sup> Sebastian M. Torres Rodriquez, *The Convergence of Design Patent Law, Trademark Law and Copyright Law for Better Protection of Intellectual Property for Commercial Designs*, 5 No. 2 U. PUERTO RICO BUS. L.J. 122 (2014).

<sup>&</sup>lt;sup>31</sup> 15 U.S.C. § 1064(3) (2012).

<sup>&</sup>lt;sup>32</sup> Du Mont & Janis, *supra* note 4, at 850-52 (detailing the nineteenth century cast-iron makers manufacturing developments which allowed for increased design elements in mass manufacturing, the state of intellectual property law at the time and the corresponding need for protection of design on articles of manufacture.) *But see* STEPHEN P. LADAS, II PATENTS, TRADEMARKS, AND RELATED RIGHTS: NATIONAL AND INTERNATIONAL PROTECTION 830 (1975) (asserting design patents as historical accidents).

<sup>&</sup>lt;sup>33</sup> 35 U.S.C. § 171(a) (2012).

<sup>&</sup>lt;sup>34</sup> Rosco v. Mirror Lite, 304 F.3d 1373, 1378 (Fed. Cir. 2002).

<sup>&</sup>lt;sup>35</sup> 35 U.S.C. § 173 (2012). See sources cited infra notes 232-33 and accompanying text.

<sup>&</sup>lt;sup>36</sup> USPTO, DESIGN PATENTS REPORT: JANUARY 1990 – DECEMBER 2014 at 1 (2014), *available at* http://www.uspto.gov/web/offices/ac/ido/oeip/taf/design.pdf.

manufacturers complained to Congress that because they had no legal protection for their designs, competitors were ruinously copying their designs.<sup>37</sup> Recent advancements in molding techniques had enabled manufacturers to add decorative elements to their cast-iron stoves which resulted in greater sales of their products. According to the manufacturers, the competitors' copies were limiting the "salable value" of their products.<sup>38</sup> Henry Ellsworth, the Commissioner of Patents at the time, urged Congress to enact the 1842 Patent Act<sup>39</sup> to create design rights and provide the financial incentives necessary for increasing manufacturer design output and quality.<sup>40</sup> Utility patent protection is based on a similar incentive rationale, suggesting one reason for placing industrial design protection under a patent regime.<sup>41</sup>

Of copyright, trademark, and design patent, the latter two offer the most substantive protection for industrial design. Copyright's separability doctrine renders it nearly useless for design. Consider a bicycle: all functional aspects thereof are precluded from copyright, but are instead regulated by utility patents. A design patent protects the overall ornamentation, or external appearance of the bicycle. Trademarks protect aspects that have come to identify source. Trademark and design patent thus provide overlapping protection for an aspect if it is both a part of the ornamentation and a source identifier.<sup>42</sup> Utility patents and design patents may also coexist; however, the utility patent is intended to cover only functional aspects.<sup>43</sup> In practice, it is

<sup>&</sup>lt;sup>37</sup> Du Mont & Janis, *supra* note 4, at 850.

<sup>&</sup>lt;sup>38</sup> ARTHUR J. PULOS, AMERICAN DESIGN ETHIC: A HISTORY OF INDUSTRIAL DESIGN TO 1940, at 9 (1983)0; Gorham Co. v. White, 81 U.S. 511, 525 (1871) ("The law manifestly contemplates that giving certain new and original appearances to a manufactured article may enhance its salable value ....") *quoted in* Du Mont & Janis, *supra* note 4, at 850-51. The "salable value" rationale for design protection is much more akin to the justification for trademarks protection which is founded on the selling power of a mark. Frank I. Schechter, *The Rational Basis of Trademark Protection*, 40 HARV. L. REV. 813, 821-24 (1927).

<sup>&</sup>lt;sup>39</sup> Act of Aug. 29, 1842, ch. 263, § 3, 5 Stat. 543 (1842).

<sup>&</sup>lt;sup>40</sup> Thomas B. Hudson, A Brief History of the Development of Design Patent Protection in the United States, 30 J. PAT. & TRADEMARK OFF. SOC'Y 380, 380-81 (1948). But see Du Mont & Janis, supra note 4, at 864-73 (advancing new legislative history in support of extrinsic political rationales for design patents and Ellsworth's self-serving incentives).

<sup>&</sup>lt;sup>41</sup> Du Mont & Janis, *supra* note 4, at 845.

<sup>&</sup>lt;sup>42</sup> TMEP, § 1202.02(a)(v)(A) (Jan. 2015); Ellie B. Atkins, Unchecked Monopolies: The Questionable Constitutionality of Design Patent and Product Design Trade Dress Overlap in Light of Egyptian Goddess, Inc. v. Swisa, Inc., 4 INTELL. PROP. BRIEF 57 (2013), available at http://digitalcommons.wcl.american.edu/cgi/viewcontent.cgi?article=1087&context=ipbrief.

<sup>&</sup>lt;sup>43</sup> See generally Apple, Inc. v. Samsung Elecs. Co., Ltd., 920 F. Supp. 2d 1079 (N.D. Cal. 2013) (finding the iPhone covered by both design patents and utility patents). Interestingly,

not clear that these aspects are mutually exclusive.<sup>44</sup> This overlapping protection has both been praised for providing flexibility for designers,<sup>45</sup> and also used as a basis for criticism.

#### C. Criticisms of U.S. Industrial Design Protection

Over the past decade and a half, the U.S. industrial design regime has been criticized for various inadequacies.<sup>46</sup> This note will focus on three primary complaints. The first is that the functionality doctrine found in copyright, trademark, and design patent limits the scope of industrial design protection.<sup>47</sup> From this follows the second criticism that as a result of diminished protection, competitors are able to copy the design, which deprives innovators of profits and source distinctiveness. Critics state that the lack of protection decreases innovation and its corresponding public benefit, because financial incentives are no longer driving innovators to design.<sup>48</sup> The third and final criticism that this note addresses is the costs and time of obtaining design protection.<sup>49</sup> If costs are too high, or right acquisition takes too long, then smaller design companies and rapidly innovating industries are greatly disadvantaged.

#### 1. Functionality Criticism

The basis of the functionality doctrines is to remove from other regimes what ought to be protected by utility patent law.<sup>50</sup> Utility patents delicately balance incentivizing innovation and ensuring public benefit with the disclosure of such

trademark protection is essentially prohibited for trade dress with a parallel utility patent. TMEP § 1202.02(a)(v)(A); TrafFix Devices, Inc. v. Mktg. Displays, Inc., 532 U.S. 23, 29 (2001) (clarifying *Morton-Norwich* factors).

<sup>&</sup>lt;sup>44</sup> See Int'l Seaway Trading Corp. v. Walgreen, 589 F.3d 1233 (Fed. Cir. 2008) (identifying internal protrusions and grooves as part of protected ornamentation, despite not being externally visible and thus not a part of the overall external appearance).

<sup>&</sup>lt;sup>45</sup> Tiffany Mahmood, Note, *Design Law in the United States as Compared to the European Community Design System: What do we Need to Fix?*, 24 FORDHAM INTELL. PROP. MEDIA & ENT. L.J. 555, 581 (2014).

<sup>&</sup>lt;sup>46</sup> See sources cited supra note 9.

<sup>&</sup>lt;sup>47</sup> Orit Fischman Afori, *The Role of the Non-Functionality Requirement in Design Law*, 20 FORDHAM INTELL. PROP. MEDIA & ENT. L.J. 847 (2010); Lena Schickl, *Protection of Industrial Design in the US and in the EU: Different Concepts or Different Labels?*, 16 J. WORLD INTELL. PROP. 15 (2012).

<sup>&</sup>lt;sup>48</sup> Monseau, *supra* note 8; Hemphill & Suk, *infra* note 79.

<sup>&</sup>lt;sup>49</sup> Schickl, *supra* note 47.

<sup>&</sup>lt;sup>50</sup> Afori, *supra* note 47, at 849; Jason J. Du Mont & Mark D. Janis, *Functionality in Design Protection Systems*, 19 J. INTELL. PROP. L. 261, 262 (Symposium) (2012).

innovative knowledge.<sup>51</sup> In order to receive the utility patent's monopoly, an innovation must meet the regime's high patentability standards. Removing functional aspects from all other IP regimes safeguards the public from unjustified monopolies.<sup>52</sup> Functionality exists in copyright under the separability doctrine,<sup>53</sup> in trademark as either utilitarian functionality or aesthetic functionality,<sup>54</sup> and in design patent under a rather watered-down standard, which prohibits only articles solely dictated by functionality.<sup>55</sup>

Industrial design protection does not seek to "encourage the development of new technologies, but rather to encourage the development of their external appearance."<sup>56</sup> Thus industrial design protection is only concerned with the product as visible to the consumer, not its internal functioning.<sup>57</sup> The functionality criticism states that putting industrial design into any of the three primary categories of IP protection diminishes the right because the various functionality doctrines are not properly calibrated to the development of external appearances. If industrial design is the harmonization of functional tools with external aesthetics, a regime must incentivize innovation in external appearance and provide no protection for the functional internal aspects. Overinclusive functionality tests, such as copyright's separability doctrine, remove protection from innovative external appearances because there is some functionality. Underinclusive functionality tests, which arguably include design patent law, allow protection for internally functional aspects in addition to the external appearance. The application of this criticism to each regime is explored below.

U.S. copyright's functionality doctrine, encompassed in the separability doctrine, is quite broad. Nearly any functionality meets its low standard, thereby preventing copyright protection. As a result, copyright's functionality does not just limit industrial design protection, but practically bulldozes industrial design protection entirely. The functionality standard was first articulated in *Mazer v. Stein*, in which a lamp with a statute for a base was found sufficiently utilitarian to

<sup>56</sup> Afori, *supra* note 47, at 849.

<sup>57</sup> In re Webb, 916 F.2d 1553, 1558 (Fed. Cir. 1990) (finding a hip replacement to meet the ornamentally requirement because it was, "clearly intended to be noticed during the process of sale and equally clearly intended to be completely hidden from view in the final use."). *But see* Int'l Seaway Trading Corp. v. Walgreens Corp., 589 F.3d 1233, 1241 (Fed. Cir. 2009).

<sup>&</sup>lt;sup>51</sup> Afori, *supra* note 47.

<sup>&</sup>lt;sup>52</sup> *Id*.

<sup>&</sup>lt;sup>53</sup> 17 U.S.C. § 101 (2012).

<sup>&</sup>lt;sup>54</sup> TrafFix Devices, Inc. v. Mktg. Displays, Inc., 532 U.S. 23, 33 (2000) (clarifying the distinction between the two doctrines).

<sup>&</sup>lt;sup>55</sup> Rosco, Inc. v. Mirror Lite Co., 304 F.3d 1373, 1378 (Fed. Cir. 2002).

trigger the separability doctrine.<sup>58</sup> Once an aspect is found functional, protection for the non-functional aspects is dependent on the court's ability to physically separate or conceptually separate the functional aspect from the other aspects.<sup>59</sup> Physical separation is satisfied in situations such as the lamp base in *Mazer*, which the court found could be physically separated from the lighting apparatus.<sup>60</sup> Under conceptual separability, if there is a potential aesthetic purpose for the design separate from the functional one, as with a belt buckle worn as jewelry, then the aesthetic aspects are copyrightable.<sup>61</sup>

Although conceptual separability offers protection for the entirety of the product and only withholds protection for certain uses, the doctrine does not align with industrial design protection's objective. Copyright will protect external appearances and therefore incentivize innovation, but industrial designs are by definition products with functional uses. Offering protection for an artistic bottle opener only when it is used as a decorative element misses the purpose of industrial design entirely. Industrial design is intended to be used not just viewed. The doctrine is also unworkable in practice, resulting in minimal use for industrial design protection.<sup>62</sup>

U.S. trademark law has two forms of functionality: aesthetic functionality and utilitarian functionality.<sup>63</sup> Determining which doctrine applies can be challenging. Generally, analysis aligns with a product's predominate purpose; however, a combined analysis has been applied when a disputed product had a mixed purpose.<sup>64</sup> Under aesthetic functionality, only those trade dresses which would put competitors at a "non-reputation-related disadvantage" are excluded

<sup>&</sup>lt;sup>58</sup> Because the lamp also contained a sculpture on the base which is a "pictorial, graphic, or sculptural feature," that aspect could be protected only if it could be separated from and exist independently of the utilitarian aspects. Mazer v. Stein, 347 U.S. 201, 213-14 (1959).

<sup>&</sup>lt;sup>59</sup> Pivot Point Int'l, Inc. v. Charlene Prods., Inc., 372 F.3d 913, 922 (7th Cir. 2004).

<sup>&</sup>lt;sup>60</sup> Mazer, 347 U.S. at 204-05; see also Esquire, Inc. v. Ringer, 591 F.2d 796, 803-05 (D.C. Cir. 1978).

<sup>&</sup>lt;sup>61</sup> Kieselstein-Cord v. Accessories by Pearl, Inc., 632 F.2d 989, 993 (2d Cir. 1980).

<sup>&</sup>lt;sup>62</sup> See Brandir Int'l, Inc. v. Cascade Pac. Lumber Co., 834 F.2d 1142, 1147-48 (2d Cir. 1987); see also infra notes 125-27 (discussing the sui generis regimes under copyright that afford some protection to specific types of industrial design).

 $<sup>^{63}</sup>$  The functionality exception was enacted into legislation in 1998 in 15 U.S.C. § 1064(3) (2012).

<sup>&</sup>lt;sup>64</sup> See, e.g., Christian Louboutin S.A. v. Yves Saint Laurent Am. Holding, Inc., 696 F.3d 206, 219-220 (2d Cir. 2012) (applying a combined analysis of utilitarian and aesthetic functionality analysis to the red under sole of a women's high heel).

from protection.<sup>65</sup> This analysis is sometimes referred to as a competitive needs evaluation—aesthetic trade dress which a competitor needs to compete in the market cannot be protected under U.S. trademark law. The existence of alternative designs is highly probative that a trade dress is not functional.<sup>66</sup>

Utilitarian functionality prohibits protection of trade dress when it is "essential to the use or purpose of the device, or when it affects the cost or quality of the device."<sup>67</sup> This language has been interpreted far more narrowly than aesthetic functionality's competitive needs test,<sup>68</sup> and explicitly excludes protection for features which have an expired utility patent.<sup>69</sup>

Compared to utilitarian functionality, the aesthetic functionality doctrine offers protection to a broader scope of eligible product designs. However, aesthetic functionality is not calibrated to industrial design objectives and may permit protection for more than external appearance alone. Trademarks protect designations of source by preventing others from marketing or selling products which may confuse the consumer. If a product design is protected, competitors cannot market any design which causes consumer confusion. Exact replicas of the product, as well as products having confusingly similar designs, would be prohibited. Thus, aesthetic functionality protects not only external appearances that differ from the intended design, but also internal aspects. Conversely, when industrial design is seen as primarily utilitarian it may receive too little protection because a utilitarian patent will prevent protection for the entire trade dress, not just the external aspects. Even absent a utility patent, some courts applying the utilitarian functionality doctrine, such as the Fifth Circuit in Eppendorf v. Ritter, have found the entire trade dress precluded from protection rather than simply precluding functional aspects of the design.<sup>70</sup> In *Eppendorf* the design of laboratory

<sup>&</sup>lt;sup>65</sup> Qualitex Co. v. Jacobsen Prods. Co., 514 US 159, 165 (1995) (quoting Inwood Labs., Inc. v. Ives Labs., Inc, 456 U.S. 844, 850, n.10 (1982)).

<sup>&</sup>lt;sup>66</sup> See In re Morton-Norwich Prods., Inc., 671 F.2d 1332, 1340-41 (C.C.P.A. 1982) (setting out four factors of functionality, the third of which is the availability of alternative designs); Wallace Int'l Silversmiths v. Godinger Silver Art Co., 916 F.2d 76, 81 (2d Cir. 1990) (embracing the availability of alternative designs in the aesthetic functionality context).

<sup>&</sup>lt;sup>67</sup> TrafFix Devices, Inc. v. Mktg. Displays, Inc., 532 U.S. 23, 32-33 (2000).

<sup>&</sup>lt;sup>68</sup> See Eppendorf-Netheler-Hinz GmBH v. Ritter GmBH, 289 F.3d 351, 357-58 (5th Cir. 2002) (finding previously non-functional aspect of a trade dress functional after applying newly articulated *TrafFix* standard). *But see* Valu Eng'g, Inc. v. Rexnord, Corp., 278 F.3d 1268, 1276 (Fed. Cir. 2002) (finding alternative designs can still be evaluated under the *Morton-Norwich* Factor 3); TMEP § 1202.02(a)(v)(C) (Jan. 2015) (indicating an "examining attorney should request information about alternative designs" in determining trade dress functionality).

<sup>&</sup>lt;sup>69</sup> *TrafFix*, 532 U.S. at 23-24.

<sup>&</sup>lt;sup>70</sup> *Eppendorf*, 289 F.3d at 351-52.

pipette tips were found to be unentitled to trade dress protection because various elements thereof were functional.<sup>71</sup> A superior result would be protection for the overall external appearance of the pipette tips, leaving functional aspects subject to utility patent standards.<sup>72</sup> Thus, within trademark the functionality doctrine creates conflicting schemes improperly calibrated to incentivize the innovation of external appearances of functional objects.

Design patents have the highest functionality tolerance of all U.S. regimes. Design patent functionality only prohibits aspects which are solely dictated by functionality.<sup>73</sup> All other ornamental aspects are protected.<sup>74</sup> Design patents, by definition, do not cover utilitarian aspects of the design.<sup>75</sup> Critics suggest this creates the same problem as copyright's separability, forcing a dissection of aesthetic and utilitarian aspects which risks becoming unworkable.<sup>76</sup>

Functionality doctrines pose several issues to industrial design, including incongruence across regimes and variable protection.<sup>77</sup> When the protection is too great, it may unjustifiably extend a utility patent monopoly. When protection is too low, innovation is stymied and the public is harmed by decreased industrial design innovation.<sup>78</sup>

<sup>77</sup> *Id.* at 859-60.

<sup>&</sup>lt;sup>71</sup> *Id.* at 358. Plaintiff, Eppendorf, alleged eight elements of trade dress and carried the burden of proving non-functionality. Such procedural mechanisms may also account for the all-or-none protection.

 $<sup>^{72}</sup>$  Cf. Apple, Inc. v. Samsung Elecs. Co., 678 F.3d 1314, 1333 (Fed. Cir. 2012) (finding Apple's registered and unregistered trade dress utilitarian functional and therefore unprotectable, but finding aspects of Apple's design patent functional and refusing to remove them from infringement analysis).

<sup>&</sup>lt;sup>73</sup> Rosco, Inc. v. Mirror Lite Co., 304 F.3d 1373, 1378 (Fed. Cir. 2002).

<sup>&</sup>lt;sup>74</sup> There was a period where the Federal Circuit cut back on this broad ornamental protection. *See* Graeme B. Dinwoodie, *The Protection of Designs Under U.S. Law*, 4/2008 IPRINFO 1, 10 (2008) ("[I]n a recent case, PHG Technologies LLC v. St. John Cos. Inc., the Federal Circuit arguably tightened the functionality requirement...appear[ing] to revive an older, stricter test that looks at a number of factors, including 'whether alternative designs would adversely affect the utility of the specified article."")

<sup>&</sup>lt;sup>75</sup> Because a design patent does not require a showing of utility, utilitarian aspects of the covered product are not covered by the design patent. Afori, *supra* note 47, at 853-54.

 $<sup>^{76}</sup>$  *Id.* at 854.

<sup>&</sup>lt;sup>78</sup> Query who is actually being harmed under this rationale. Industrial design is a manufacturer driven doctrine. It benefits the "saleability" of articles of manufacture. For a critique of IP protection as a net harm to the public because it functions as a sumptuary code see

#### 2015] **INDUSTRIAL DESIGN RIGHTS IN THE UNITED STATES**

#### 2. Effects of Decreased Protection Criticism

The second criticism is a logical extension of the first; critics argue that an inadequate amount of protection results in an increased amount of otherwise actionable infringement. If the innovator cannot prevent the copying, their incentives to innovate are reduced because their monopoly right is limited, resulting in less overall innovation.<sup>79</sup>

This argument has been relied on domestically in the context of fashion design copying.<sup>80</sup> Because of the high rates of innovation and copying in the industry, fashion designers are particularly vulnerable. Fashion designers produce new designs continually for a series of collections throughout major cities across the globe each year.<sup>81</sup> The entire industry accounts for \$1,306 billion, or 2.1% of the global gross domestic product (GDP).<sup>82</sup> The U.S. market, valued at \$338 billion in 2012, is second only to the European market.<sup>83</sup> Copyists have kept up with the rapid pace of fashion innovation. With the instantaneous transmission of runway styles over the internet and low-cost, large-scale manufacturers located overseas,<sup>84</sup> copyists such as Zara, Topshop and Forever 21 are able to bring runway designs to market in weeks.<sup>85</sup> Fashion lobbyists have used the economic importance of

<sup>80</sup> See id.; Monseau, supra note 8, at 538-39.

<sup>81</sup> See Kal Raustialia & Christopher Sprigman, The Piracy Paradox: Innovation and Intellectual Property in Fashion Design, 92 VIRGINIA L. REV. 1687, 1693 (2006); Eveline Van Keymeulen & Louise Nash, Fashionably Late, INTELL. PROP. MAGAZINE 53 (2012), http://www.cov.com/files/Publication/8fc11e54-27e2-4da3-9323-0663dd0a5746/Presentation/ PublicationAttachment/45a27275-df92-475b-9e11-11154b0c1061/Fashionably Late.pdf.

<sup>82</sup> Keymeulen & Nash, *supra* note 81, at 1.

<sup>83</sup> Id.; Mike King, US Apparel Industry Reached a Value of \$338 Billion in 2012, COMPANIESANDMARKETS.COM (Mar. 17, 2015), http://www.companiesandmarkets.com/News/ Textiles-and-Clothing/US-apparel-industry-reached-a-value-of-338-billion-in-2012/NI8084.

<sup>84</sup> Monseau, *supra* note 8, at 508-10; Hemphill & Suk, *supra* note 79, at 1173.

<sup>85</sup> Copycat Designers Poised to Pounce on Paris Fashion, NEW YORK DAILY NEWS (Sep. 22, 2014, 1:56 PM), http://www.nydailynews.com/life-style/fashion/copycat-designers-poisedpounce-paris-fashion-article-1.1948443. As of 2006, Zara took only four to five weeks to deliver copied design. See Hemphill & Suk, note 79, at 1173 n.91.

Barton Beebe's article Intellectual Property Law and the Sumptuary Code. 123 HARV. L. REV.

<sup>809 (2010).</sup> <sup>79</sup> C. Scott Hemphill & Jeanie Suk, *The Law, Culture, and Economics of Fashion*, 61 STAN. L. REV. 1147, 1174 ("Mass copyist undermine the market for the copied good. Copies reduce the profitability of originals, thus reducing the prospective incentive to develop new designs in the first place. The predicted results, a reduced *amount* of innovation is familiar from copying in [creative industries other than fashion], such as file sharing of copyrighted music and films." (emphasis in original)).

fashion and the high rate of copying to argue for increased design protection.<sup>86</sup> They argue that because copyists are able to bring knockoffs to market so rapidly, the designers enjoy only a margin of the profits they once did and thus are less likely to continue innovating.<sup>87</sup>

Interestingly, these complaints arose over a decade ago,<sup>88</sup> and the apparel market has since seen a steady increase in profitability despite copyists' continual growth.<sup>89</sup> Professors Raustialia and Sprigman suggest that an explanation for this continued growth is the so-called piracy paradox. They argue that copying is actually beneficial to fashion's innovators.<sup>90</sup> Once copyists start mass-producing designs, the designs lose desirability to those in the know—the cognoscenti of fashion. Innovators must then create new designs to satisfy the void of desirable items.<sup>91</sup> This cycle perpetuates the continued sales of innovative designs despite rampant copying.<sup>92</sup> While this domestic example may be limited in its broad applicability across all industrial design sectors, it highlights the fact that innovation in U.S. industrial design is robust, despite theoretical shortcoming in IP protection.<sup>93</sup>

<sup>87</sup> Id.

 $^{91}$  *Id.* 

<sup>&</sup>lt;sup>86</sup> See H.R. 5055, 109th Cong. (2006); H.R. 2196, 111th Cong. (2009); S.3728, 111th Cong. (2010); H.R. 2511, 112th Cong. (2011); Katherine Boyle, *Fashion Industry Testifies in Favor Design Copyright Protection (Again)*, WASHINGTONPOST.COM (Jul. 18, 2011, 11:47 AM), http://www.washingtonpost.com/blogs/style-blog/post/fashion-industry-testifies-in-favor-of-design-copyright-protections-again/2011/07/18/gIQAd2MuLI\_blog.html.

<sup>&</sup>lt;sup>88</sup> See H.R. 5055, 109th Cong. (2006).

<sup>&</sup>lt;sup>89</sup> Compare \$196 billion annual sales in 2007, Hemphill & Suk, *supra* note 79, at 1148 n.1, *with* \$338 billion annual sales in 2012, King, *supra* note 83. Forbes reports Forever 21's revenue at \$3.85 billion as of October 2014 which is a 4.1% increase in yearly revenue. *Company Profile: Forever 21*, FORBES.COM (last visited Mar. 17, 2015), http://www.forbes.com/ companies/forever-21/.

<sup>&</sup>lt;sup>90</sup> Raustialia & Sprigman, *supra* note 81, at 1717-34.

<sup>&</sup>lt;sup>92</sup> Several commentators have argued against this piracy paradox, most notably Professors Hemphill & Suk. *Supra* note 79, at 1180-83 (arguing a variety of counterarguments to the piracy paradox including a lack of designed initiated induced-obsolescence and incongruence in trademark law); *see also* Keymeulen & Nash, *supra* note 81, at 55 (offering evidence against the piracy paradox including the European Community's increased market share of apparel sales, and increased "cheapchic" design around, as a result of their greater industrial design protection).

<sup>&</sup>lt;sup>93</sup> See also BrandZ, TOP 100 MOST VALUABLE GLOBAL BRANDS, 24 (2013), available at http://www.wpp.com/wpp/marketing/brandz/brandz-2013/ (finding that of the top ten global brands, nine are U.S. brands). Of those nine at least six rely on industrial design protection to protect their innovation, i.e., Apple, Google, IBM, Coca-Cola, AT&T and Microsoft.

The Intellectual Property Clause of the U.S. Constitution bases copyright and patent rights on a rationale that the exclusive right will incentivize "the Progress of Science and useful Arts."<sup>94</sup> Internationally, some countries such as France base their artistic rights on a moral rights theory, not an incentivization theory.<sup>95</sup> Regardless, the European Community relied on the criticism that inadequate protection de-incentivized innovation in their formation and adoption of the Community design right. The Commission of the European Communities identified a Community "wish to promote investment in design development" as a primary concern in considering industrial design protection.<sup>96</sup> The Commission continued that a more unified and robust system of design protection would address the increasing concern of piracy both within the then European Community, and across the globe.<sup>97</sup> In the press release announcing the first registered Community design, the Office for Harmonization in the Internal Market (OHIM) articulated the regime's purpose as addressing counterfeiters and thus relieving industrial designer reluctance to innovate.<sup>98</sup>

Support for this criticism both nationally and internationally, and across various IP regimes, suggests that it is a weighty concern. But in order for this criticism to hold, the premise must be true—U.S. industrial design protection must actually be inadequate. Part III.B and III.C will provide a response to this and the functionality criticism.

<sup>97</sup> *Id.* at 33.

<sup>&</sup>lt;sup>94</sup> US Const. art. I, § 8, cl. 8.

<sup>&</sup>lt;sup>95</sup> France's copyright system stems from a theory that artists have a moral right to their artistic expressions. Russell J. DaSilva, *Droit Moral and the Amoral Copyright: A Comparison of Artists' Rights in France and the United States*, 28 BULL. COPYRIGHT SOC'Y 1, 3 (1980).

<sup>&</sup>lt;sup>96</sup> Commission Green Paper on the Legal Protection of Industrial Design, at 15, COM (1991) 111/F/5131/91-EN (July 1991), available at http://ec.europa.eu/internal\_market/indprop/docs/ design/green-paper-design\_en.pdf. The Commission explicitly rejected a moral rights theory of protection for designs under the new regime. To the extent a design receives any morals rights they must derive from copyright law exclusively. *Id.* at 95-96.

<sup>&</sup>lt;sup>98</sup> Press Release, OHIM, The first registered designs are published (Apr. 1, 2003) (Alicante, Spain), *available at* http://ec.europa.eu/internal\_market/indprop/docs/design/oami-pressrelease\_ en.pdf ("Indeed, the counterfeiting industry is more and more well organised and is the scourge that often paralyses the European industry. This is why the business would often feels so reluctant and frustrated; we create, they copy and gain the benefits of our investments and years of our effort. The aim of the Community design is to prevent that kind of abuse of a company's creation.").

#### 3. Cost and Time Criticism

The third and final criticism this paper will address is the prohibitive nature of protective-acquisition delays and the associated costs of protection.

Prolonged acquisition periods can prohibit the use of industrial design protection in rapidly innovating industries for two reasons. First, delayed rights acquisition limits the effective monopoly period if a product has a limited window of profitability.<sup>99</sup> The monopoly right is also limited by delayed acquisition periods because counterfeiters can legally enter the market and establish a market share in the interim.<sup>100</sup> Fashion design provides an example of the latter issue.<sup>101</sup> Apparel is produced in less than a few months and copies are made within a matter of weeks.<sup>102</sup> Protection must be near simultaneous with public release in order to prevent copyists. Industries such as consumer electronics tend to be plagued by both issues.<sup>103</sup> If protection takes a year to acquire, it will be of no use to products that may be profitable for less than a year's period.<sup>104</sup> In addition, copyists may have established a market share during that time.

<sup>&</sup>lt;sup>99</sup> William T. Fryer, *Industrial Design Protection in the United States of America--Present Situation and Plans for Revision*, 19 J. PAT. & TRADEMARK OFF. SOC'Y 820, 834-35 (1988) ("Another factor decreasing the usefulness of the design patent system is the time it takes to obtain an average of almost 2.5 years according to current figures. During that time the application is pending there are no rights, and copiers can operate without risk." (citation omitted)).

<sup>&</sup>lt;sup>100</sup> *Id.;* Perry J. Saidman, *The Crisis in the Law of Designs*, 89 J. PAT. & TRADEMARK OFF. SOC'Y 301, 331 (2007) ("By the time a design patent has issued, the product design may have been long supplanted in the marketplace.").

<sup>&</sup>lt;sup>101</sup> Mahmood, *supra* note 45, at 582.

<sup>&</sup>lt;sup>102</sup> See sources cited supra note 85.

<sup>&</sup>lt;sup>103</sup> Sarah Burstein, Moving Beyond the Standard Criticisms of Design Patents, 17 STAN. TECH. L. REV. 305, 331 n. 147 (2013) (referencing Hearings on H.R. 902, H.R. 3017, and H.R. 3499 Before the Subcomm. on Courts, Intellectual Prop., and the Admin. of Justice of the Comm. on the Judiciary, 101st Cong. 165 (1990) (written testimony of Robert Drobeck, on behalf of the Industrial Designers Society of America) ("Today you need to recoup your investment in under two years if you are competing in the consumer electronics industry. Yet designs can be stolen in a matter of days. That hardly gives you time to spend the two to three years it takes to get a design patent.")).

<sup>&</sup>lt;sup>104</sup> Christopher P. Bussert, *Copyright Law: A Review of the "Separability Test" and a Proposal for New Design Protection*, 10 RUTGERS COMPUT. & TECH. L.J. 59, 68 (1984) ("Immediate protection [of industrial design] ... was often crucial to an industry because of the relatively short successful commercial life enjoyed by many designs.").

#### 2015] INDUSTRIAL DESIGN RIGHTS IN THE UNITED STATES

Costs can create barriers to protection alongside prolonged acquisition periods.<sup>105</sup> If the costs of protection are too high, then a portion of the market that cannot afford the upfront costs is systematically excluded from protection. Higher costs tend to disadvantage smaller companies who cannot bear the costs as easily. Given that IP protection in the U.S. is meant to provide incentivizes to innovation, and that smaller companies have been known to produce the most disruptive and innovative designs,<sup>106</sup> a framework that disfavors small companies does not align with the policy objective of incentivizing innovation.

Copyright, trademark, and design patents have different costs and delays in rights acquisition. Ideally, the hurdles to protection should correspond with the extent of protection provided by the regime.<sup>107</sup> The stronger the protection granted, the more hurdles there should be to receiving protection. However, delays and costly hurdles may nullify any benefits or systematically bias certain innovators. Each regime's impact on design is explored below.

Copyright protection is nearly free and instantaneous.<sup>108</sup> The right begins as soon as the artistic expression is fixed in a tangible medium.<sup>109</sup> However, to enforce the copyright, it must be registered, which costs between \$35 and \$140 as of May 2014.<sup>110</sup> This cost is low enough that even a designer with limited resources can effectively enjoy copyright protection. However, unfortunately, as mentioned above, the separability doctrine eliminates nearly all industrial design from copyright eligibility.

Trademark protection for product designs is inherently biased toward large design companies.<sup>111</sup> Because of the current standards to establish rights, bigger

<sup>105</sup> Id.

<sup>&</sup>lt;sup>106</sup> See Martin Reeves, et al., Lessons from Mavericks: Staying Big by Acting Small, BCG PERSPECTIVES (June 17, 2013), https://www.bcgperspectives.com/content/articles/growth\_business\_unit\_strategy\_lessons\_from\_mavericks\_staying\_big\_by\_acting\_small/ ("[M]any large corporations find themselves looking over their shoulders for the next disruption—the iPhone equivalent that could reshape their industry. In many cases, these disruptions come from *mavericks*—small outlier companies that think and act differently from incumbents.")

<sup>&</sup>lt;sup>107</sup> See William M. Landes & Richard A. Posner, The Economic Structure of Intellectual Property Law 294-96 (2003).

<sup>&</sup>lt;sup>108</sup> Presumably there are costs associated with fixing a design, though minimal.

<sup>&</sup>lt;sup>109</sup> 17 U.S.C. § 102 (2012).

<sup>&</sup>lt;sup>110</sup> US COPYRIGHT OFF., FEE SCHEDULE (2014), http://copyright.gov/about/fees.html.

<sup>&</sup>lt;sup>111</sup> See e.g., Note, *The Devil Wears Trademark: How the Fashion Industry Has Expanded Trademark Doctrine to Its Detriment*, 127 HARV. L. REV. 995, 1013 (2014) (discussing the inherent bias in trademark law towards well-known, famous brand names over emerging designers in the context of fashion design which is considered to be product design).

companies receive rights faster and are better able to shoulder the financial burden. Product design, the primary vehicle for trademark industrial design protection, may but does not need to be registered in order to receive rights.<sup>112</sup> Registered or unregistered, product design requires a showing of acquired distinctiveness. In registering a product design, "[a]pplicants face a heavy burden in establishing [acquired] distinctiveness....<sup>\*113</sup> Ordinarily, five years of exclusive use is sufficient to establish acquired distinctiveness; however, for trade dress five years of exclusive use is not sufficient, as an applicant must have "actual evidence" the mark is perceived as an indicator of source.<sup>114</sup> This has required showing up to twenty-four years of exclusive use.<sup>115</sup> Showing acquired distinctiveness during litigation is fact-intensive, requiring a multi-factor analysis.<sup>116</sup> Factors can include the amount and manner of advertising, the volume of sales, and costly consumer surveys.<sup>117</sup> Thus, costs of product design protection include any applicable registration fees plus the substantial and necessary costs of advertising, voluminous sales, and consumer surveys.

Bigger companies can meet these factors within a few hours of release. A company such as Apple releases a product on the market and acquires instantaneous secondary meaning.<sup>118</sup> A smaller company producing furniture in upstate New York will have a substantially harder time proving acquired distinctiveness through an analysis that looks to the volume of sales and the geographic extent of advertising. Bigger companies can also more readily afford the costly consumer surveys. Trademark protection lasts indefinitely and trade dress protection may be particularly harmful to competitors, providing possible justifications for this tremendous standard.<sup>119</sup> However, other potentially

<sup>115</sup> In re The Black & Decker Corp., 81 USPQ.2d 1841, 1844 (TTAB 2006).

<sup>116</sup> Frosty Treats, Inc. v. Sony Comput. Entm't Am., 426 F.3d 1001, 1003-06 (8th Cir. 2005). <sup>117</sup> *Id.* 

<sup>118</sup> Apple sold nine million iPhone 5s across the globe within three days of launch. *See* APPLE, *First Weekend iPhone Sales Top Nine Million, Sets New Record*, http://www.apple.com/pr/library/2013/09/23First-Weekend-iPhone-Sales-Top-Nine-Million-Sets-New-Record.html.

<sup>119</sup> The underlying justification for heightened showing of source distinctiveness in product design is routed in a competitive needs analysis, similar to functionality. Wal-mart Stores, Inc.v. Samara Bros., Inc., 529 U.S. 205, 206 (2000) ("With product design ... consumers are aware of the reality ... that [the] feature is intended ... to render the product itself more useful or more appealing.")

<sup>&</sup>lt;sup>112</sup> 15 U.S.C. § 1125(a) (2012).

<sup>&</sup>lt;sup>113</sup> TMEP § 1202.02(b)(i) (8th ed. 2011).

<sup>&</sup>lt;sup>114</sup> 15 U.S.C. § 1052(f) (2012) (allowing five years of exclusive use as prima facie case of acquired distinctiveness; TMEP § 1212.05(a) (8th ed. 2011) (explicitly requiring a higher showing for product design).

competition-limiting trademarks, such as surnames, are not required to show "actual evidence" of acquired distinctiveness, suggesting such a costly and prolonged rights acquisition period is inconsistent and perhaps unwarranted.<sup>120</sup>

Design patents, which are the most fitting U.S. regime for industrial design protection, have significant costs, though less than trademark. Design patent registration fees range from about \$1,000 to \$2,000.<sup>121</sup> The primary issue with design patents is the examination period. Because design patents are within the same statutory framework as utility patents, they are subject to a regimented examination process that results in an average right acquisition period of fifteen months.<sup>122</sup> For consumer electronic companies like Apple and Samsung who are producing new models on an annual basis, receiving an exclusionary right fifteen months after release results in near-zero benefit. Designers can initiate registration before public release of their product. Design patents are not published, unlike utility patents, so competitors are not immediately tipped off to future designs.<sup>123</sup> However, if the product is being produced and released within a matter of months, the acquisition period will still overlap significantly with the sales period, rendering the design vulnerable to copying for the majority of the fifteen-month period.

Delays are harmful to industrial design protection because they question the usefulness of the current system for incentivizing innovation. Costs create a bias towards larger design businesses, disadvantaging an entire segment of innovation. These points fit into a larger criticism of how well U.S. industrial design protection achieves the policy objective of incentivizing external appearances while leaving the functional aspects to utility patent law.

<sup>&</sup>lt;sup>120</sup> TMEP § 1212.05(a) (8th ed. 2011) ("For most surnames, the statement of five years' use will be sufficient to establish acquired distinctiveness.")

<sup>&</sup>lt;sup>121</sup> The USPTO maintains a variable fee schedule. Small entities and micro entities receive a substantially reduced fee schedule. A micro entity can receive a design patent for less than \$1,000. USPTO, FEE SCHEDULE (Mar. 1, 2015), http://www.uspto.gov/learning-and-resources/ fees-and-payment/uspto-fee-schedule - Patent Fees.

<sup>&</sup>lt;sup>122</sup> See 35 U.S.C. § 171 (2012) (subjecting design patent rights to the same conditions and requirements as utility patents); USPTO, DESIGN PATENTS REPORT: JANUARY 1989 – DECEMBER 2014 at 1 (Mar. 2015), http://www.uspto.gov/web/offices/ac/ido/oeip/taf/design.pdf (indicating an average of fifteen-months from application to design patent grant).

<sup>&</sup>lt;sup>123</sup> 35 U.S.C. § 122(b)(2) (2012).

#### ALTERNATIVE AVENUES OF INDUSTRIAL DESIGN PROTECTION

In asserting these three criticisms, commentators frequently suggest the U.S. adopt a *sui generis* regime for industrial design protection, which means that such protection would no longer fall into any of the three regimes exclusively, but would exist in some independent form.<sup>124</sup> This approach has been used in the U.S. for architecture,<sup>125</sup> boat hulls,<sup>126</sup> and semiconductors.<sup>127</sup> These industry-specific regimes are most similar to copyright protection with modifications to meet the specific needs of the industry. Reform adequate to meet the range of subject matter under industrial design would require a more significant shift. The European Community enacted legislation creating a uniform design right effective incrementally in 2002 and 2003.<sup>128</sup> This system is offered as an ideal model for U.S. industrial design protection, as well as our cost and time prohibitions.<sup>129</sup>

#### A. European Community Framework

In response to challenges enforcing design rights across the former European Community (now the European Union (EU)), the European Community enacted a Community-wide legal regime to protect industrial design and ensure investments in innovative designs.<sup>130</sup> At the time of enactment, member states had various

<sup>&</sup>lt;sup>124</sup> See Brean, supra note 14, at Section IX; Frenkel, supra note 9, Section VI; Mahmood, supra note 45; Monseau, supra note 8; J.H. Reichman, Past and Current Trends in the Evolution of Design Protection Law—A Comment, 4 FORDHAM INTELL. PROP. MEDIA & ENT. L.J. 387, 397 (1993); Eric Setliff, Copyright and Industrial Design: An "Alternative Design" Alternative, 30 COLUM. J.L. & ARTS 49, 71-76 (2006).

<sup>&</sup>lt;sup>125</sup> 17 U.S.C. § 102(a)(8) (2012).

<sup>&</sup>lt;sup>126</sup> 17 U.S.C. § 1301 (2012).

<sup>&</sup>lt;sup>127</sup> 17 U.S.C. §§ 901-914 (2012).

<sup>&</sup>lt;sup>128</sup> Unregistered Community Design (UCD) became automatically protected across the EU as of March 6, 2002. Registered Community Design (RCD) could be applied for as of January 1, 2003. Christopher M. Aide, *The Community Design: European Union-Wide Protection for Your Design Portfolio*, 1 Nw. J. TECH. & INTELL. PROP. 35-36 (2003), *available at* http://scholarly commons.law.northwestern.edu/njtip/vol1/iss1/2.

<sup>&</sup>lt;sup>129</sup> See Brean, supra note 14, at 374-81; Frenkel, supra note 9, at 565-71; Mahmood, supra note 45, at 580-82; Monseau, supra note 8, at 537-43; Setliff, supra note 124, at 71-76.

<sup>&</sup>lt;sup>130</sup> Aide, *supra* note 128; *see also Commission Proposal for Implementing the Community Lisbon Programme*, at 7, COM (2005) 488 final (Oct. 12, 2005) ("Most high-technology companies consider intellectual property (IP) to be their most valuable asset. Effective and efficient protection of IP is essential for research and innovation... The EU therefore needs an

levels and qualities of industrial design protection, resulting in uncertain legal rights for designers.<sup>131</sup> To address these issues, the EU harmonized member states' laws and enacted a parallel uniform regime at the EU level.<sup>132</sup> Jurisdiction over Community Designs resides in the OHIM.<sup>133</sup>

EU's Community Design protection comes in two varieties: registered and unregistered. Designs are automatically protected at the time of their public release under the Unregistered Community Design (UCD). However, UCD protection lasts just three years from the date of the design's first disclosure in the EU, and only provides protection against intentional copying.<sup>134</sup> A Registered Community Design (RCD) is renewable up to twenty-five years from the date of filing and provides protection from both intentional and good-faith infringement.<sup>135</sup> A grace period is offered, such that designers have up to a year from initial disclosure within the EU to file for a RCD.<sup>136</sup> While the UCD is free, the RCD costs €350 per design with discount rates for multiple applications.<sup>137</sup>

Both UCD and RCD offer uniform protection throughout the EU and cover a broad scope of designs. Article 3 of the Design Regulation covers "[t]he appearance of the whole or a part of a product resulting from the features of, in particular, the lines, contours, colours, shape, texture and/or materials of the product itself and/or its ornamentation."<sup>138</sup> OHIM interprets this language to cover nearly all industrial designs except for computer programs. Examples of eligible designs include: product packaging, a product itself, parts of products, logos,

<sup>133</sup> The EU also offers Community Trademark protection, which OHIM also oversees. Similar to the U.S. trademark and design patent system, there are overlaps in coverage. This note will focus on the UCD/RCD system.

<sup>134</sup> OHIM, *Designs in the European Union: Protection* (last visited Mar. 18, 2015), https://oami.europa.eu/ohimportal/en/designs-in-the-european-union.

<sup>135</sup> *Id*.

 $^{136}$  *Id.* 

<sup>137</sup> *Id*.

affordable, legally secure and user-friendly system of IP protection if it is to attract high-technology companies.")

<sup>&</sup>lt;sup>131</sup> Aide, *supra* note 128, at 35-36.

<sup>&</sup>lt;sup>132</sup> Directive 98/71/EC, of the European Parliament and of the Council of Oct. 13, 1998 on the Legal Protection of Designs, 1998 O.J. (L 298) 28 [hereinafter "Design Directive"], *available at* https://oami.europa.eu/tunnel-web/secure/webdav/guest/document\_library/contentPdfs/law\_ and\_practice/cdr\_legal\_basis/EUR-Lex - 31998L0071\_en.htm ; Council Regulation (EC) 6/2002, Dec. 12, 2001 on Community Designs, 2002 O.J. (L 3) 1 [hereinafter "Design Regulation"], *available at* https://oami.europa.eu/tunnel-web/secure/webdav/guest/document\_ library/contentPdfs/law\_and\_practice/cdr\_legal\_basis/62002\_cv\_en.pdf.

<sup>&</sup>lt;sup>138</sup> Design Regulation, *supra* note 132, art. 3.

computer icons, typeface, maps and "get-ups" such as store design.<sup>139</sup> The design must be new and possess individual character, but both parameters are defined favorably for the designer. Only identical or immaterially different designs are considered non-novel.<sup>140</sup> Individual character requires that the design must simply create a different overall impression on the "informed user"<sup>141</sup> from any single design previously disclosed.<sup>142</sup> Individual character also defines the scope of protection. A subsequent design is considered infringing if it produces the same overall impression on an "informed user."<sup>143</sup> Exceptions to protectable subject matter include computer designs, aspects of the product not seen during normal use, and those features "dictated solely by a technical function."<sup>144</sup>

#### B. The European Community Framework: A Solution to Design Rights

The EU's UCD/RCD system offers two primary benefits as compared to U.S. industrial design protection. The first is substantive. The broad scope of protection and uniform application throughout all member states reduces uncertainty over what subject matter the right covers and where the right can be enforced. Clarity and broader geographic enforcement produce a larger incentive to innovate.<sup>145</sup> The second advantage is procedural. The immediate protection assigned to any public design within the EU with the option to seek out a broader right under cheap and quick procedures removes the U.S. hurdles of prolonged acquisition periods and bias towards larger companies.<sup>146</sup>

Through creation of a uniform standard of design protection and more importantly a uniform definition of what is *not* covered, the issues associated with

<sup>&</sup>lt;sup>139</sup> OHIM, *Design Definition*, (last visited Mar. 18, 2015), https://oami.europa.eu/ohimportal/en/design-definition.

<sup>&</sup>lt;sup>140</sup> Design Directive, *supra* note 132, art. 4; Design Regulation, *supra* note 132, art. 5.

<sup>&</sup>lt;sup>141</sup> Design Directive, *supra* note 132, art. 5; Design Regulation, *supra* note 132, art. 6.

<sup>&</sup>lt;sup>142</sup> Karen Millen Fashions Ltd. v. Dunnes Stores, [2014] E.C.D.R. (17) ¶ 35.

<sup>&</sup>lt;sup>143</sup> Design Regulation, *supra* note 132, art. 10.

<sup>&</sup>lt;sup>144</sup> Design Directive, *supra* note 132, art. 1 (defining "product" to cover a variety of designs, "but excluding computer programs"); *Id.* at art. 7(1) ("A design right shall not subsist in features of appearance of a product which are solely dictated by its technical function."). *See also id.* at art. 3(3)(a) (stating that "[c]omponent parts of a complex product which are not visible during normal use" are also excluded from protection); Design Regulation, *supra* note 132, arts. 3, 8, 4(2)(a).

<sup>&</sup>lt;sup>145</sup> The OHIM indicates that design is responsible for €35 billion in annual turnover. OHIM, *Design Value* (last visited Mar. 18, 2015), https://oami.europa.eu/ohimportal/en/rcd-value.

<sup>&</sup>lt;sup>146</sup> OHIM, *Registration Process* (last visited Mar. 19, 2015), https://oami.europa.eu/ohim portal/en/rcd-registration-process ("Most online filings are registered within a couple of days.").

varying functionality tests disappear. No longer must designers weigh the cost and benefits of various regimes, trying to squeeze their creation into an incongruent IP framework. Designers and copyist alike are clear on what is protected and the extent of that protection. Additionally, the narrow definition of functionality, "dictated solely by a technical function,"<sup>147</sup> increases the overall protection granted.

A uniform and clear level of protection also removes the effects of varying standards. Specifically, it increases the incentives to innovate. There is empirical evidence to suggest the EU's uniform protection is resulting in less copying, increased innovation, and increased investment. EU Customs has reported a decreasing number of confiscated counterfeit articles since 2007.<sup>148</sup> Between 2008 and 2013 there was a total decrease of over 160,000 confiscated articles.<sup>149</sup> This suggests there is less infringing conduct occurring within the EU, to the extent a measure of import and export is representative of internal activity. OHIM reports that registrations total about 80,000 each year.<sup>150</sup> The U.S. reported a total of 23,468 registered design patents in 2013.<sup>151</sup> While design registration may not be representative of total design innovation, it suggests the EU system is at least relied upon more heavily than the U.S. system, even after correcting for population differences.<sup>152</sup> Through the international system of design right registration established by the Hague Agreement, the EU is the most highly preferred place of registration.<sup>153</sup> The EU saw a 9.7% increase in Hague registration from 2011 to 2012, while the entire system saw only a 3.3% increase in registrations.<sup>154</sup> This suggests that the preferred venue of those designers seeking protection internationally is the EU. Because the Hague Agreement only provides a

<sup>151</sup> USPTO, *supra* note 122, at 3.

 $\overline{^{154}}$  Id.

<sup>&</sup>lt;sup>147</sup> Design Directive, *supra* note 132, art. 7; Design Regulation, *supra* note 132, art. 8.

<sup>&</sup>lt;sup>148</sup> EU COMM'N TAXATION AND CUSTOMS UNION, Facts and Figures (last visited Mar. 19, 2015), http://ec.europa.eu/taxation customs/customs/customs controls/counterfeit piracy/statisti cs/. <sup>149</sup> *Id*.

<sup>&</sup>lt;sup>150</sup> OHIM, *Designs* (last visited Mar. 19, 2015), https://oami.europa.eu/ohimportal/en/designs ("At OHIM we register around 80 000 designs a year.")

<sup>&</sup>lt;sup>152</sup> At the time of writing, the US has a population of around 318 million. The EU's inhabitants total around 500 million. If U.S. registrations were proportional we would expect to see around 50,000 design patent registration. Because design rights are territorial and the U.S. has a significant, if not the most significant, consumer population, you would expect to see increased registration in the U.S. from international designers looking for design rights over products sold in the U.S.

<sup>&</sup>lt;sup>153</sup> WIPO, 2013 HAGUE YEARLY REVIEW: INTERNATIONAL REGISTRATION OF INDUSTRIAL DESIGN 6 (2014), available at http://www.wipo.int/edocs/pubdocs/en/designs/930/wipo pub 930 2013.pdf.

procedural mechanism to register in multiple countries, the substantive rights of each nation where application is filed apply. Thus, these statistics demonstrate that the EU is receiving a disproportionate amount of innovation, and it can be inferred that this is due at least in part due to its substantive design rights.

Procedurally, the UCD/RCD system provides parity among designers. Because a baseline of protection is automatically granted upon a design's public disclosure, with a reasonable charge of €350 for additional rights,<sup>155</sup> small designers are not disadvantaged in rights acquisition. Automatic rights through the UCD and a one-year grace period for the RCD remove delays and allow rapidly innovating industries to actually benefit from the right. The OHIM also has limited examination procedures, so RCD application examination is significantly quicker than U.S. design patent examination.<sup>156</sup> An OHIM examiner only reviews an RCD application for compliance with the definition of a design and whether the design is against public policy or morality.<sup>157</sup> Evaluations of validity, e.g., novelty and individual character, occur only upon third-party initiation.<sup>158</sup> As a result, the average acquisition period for a RCD is a couple of days.<sup>159</sup>

The EU has succeeded in providing a uniform right for all forms of design, offering an expansive scope of protection both substantively and geographically. Because the definition of design is limited to only those aspects of a product seen during normal use, the regime is aligned with the policy objectives of incentivizing the innovation of external appearances and leaving internal functional innovation to patent law. The EU system has also greatly reduced hurdles to protection and provides some protection at zero cost. This allows all industries and designers of all sizes to enjoy the right.

<sup>158</sup> *Id.* at § 13.3.

<sup>&</sup>lt;sup>155</sup> OHIM, *supra* note 134.

<sup>&</sup>lt;sup>156</sup> See generally OHIM, EXAMINATION OF APPLICATION FOR REGISTERED COMMUNITY DESIGNS §4 (Jan. 1, 2014), *available at* https://oami.europa.eu/tunnel-web/secure/webdav/guest/document\_library/contentPdfs/law\_and\_practice/designs\_practice\_manual/WP/examinatio n\_of\_applications\_for\_registered\_community\_designs\_en.pdf (explaining the substantive requirements of examination).

<sup>&</sup>lt;sup>157</sup> *Id.* at §§ 4.1-4.2. Examiners also determine if the application has met formal requirements by reproducing a proper image of the design and if it has provided identifying information. *Id.* at §§ 5, 6.

<sup>&</sup>lt;sup>159</sup> OHIM, *supra* note 146 ("Most online filings are registered within a couple of days."). Compare to the U.S. examination period of fifteen-months. USPTO, *supra* note 122.

#### III Defense of U.S. Industrial Design

The EU's substantive and procedural benefits appear to address the primary criticisms of the U.S. system. At first glance, the argument for U.S. adoption of an industrial design regime similar to the EU's regime appears worthy. Yet, a closer look at the positive state of protection and each system's theoretical underpinnings suggests that the U.S. system provides a broader right to designers. This note challenges the notion that U.S. industrial design protection is undermined by the functionality doctrine and asserts that the incentives to innovate are properly calibrated to both produce design innovation and maximize public benefit. Proceeding, this note will focus on the U.S. design patent as the basis for defending U.S. industrial design protection. Of the three regimes discussed, it is the most closely aligned with industrial design objectives. While trademark and copyright offer alternative routes to protection, design patent offers the greatest scope of protection and therefore supplies the strongest defense.

#### A. Enforcement is Definitive of IP Rights

The benefits of the EU's uniform industrial design rights are significant. However, a right is only as strong as the ability to enforce it. This is particularly true in IP, where the only right conferred is the ability to exclude others from using your invention, mark, or copyright. A limitation on the ability to effectively exclude others from using the protected IP is a limitation on the right. As applied to the UCD/RCD system, inconsistency in judicial application of the design right undermine its uniformity and geographic scope.

The initial litigation between Apple and Samsung provides a strong example of variable enforcement narrowing a broad right.<sup>160</sup> The litigation spanned ten different countries, six of which are members of the EU, but only Germany provided Apple with any relief.<sup>161</sup> A right that was supposed to be EU-wide was effectively diminished to a right in an area smaller than the state of Texas. This is due in large part to divided jurisdiction. Validity of community design claims can be adjudicated in any EU member states' Community design court or at the

<sup>&</sup>lt;sup>160</sup> Suits were filed by either Apple or Samsung in Australia, France, Germany, Italy, Japan, the Netherlands, the United Kingdom, South Korea and Spain. *See* sources cited *supra* note 5.

<sup>&</sup>lt;sup>161</sup> This note will focus on the first round of lawsuits marked by Apple's April 15, 2011 complaint filed in the Northern District of California. Complaint for Patent Infringement, Apple, Inc. v. Samsung Elecs. Co., Ltd., No. CV-11-1846-LB (N.D. Cal. Apr. 15, 2011).

OHIM.<sup>162</sup> Each court is meant to apply the uniform EU law; however, each jurisdiction has its own body of developed case law which guides its application, as well as residual notions of design rights from pre-existing national design regimes.<sup>163</sup> The result is discrepancies across jurisdictions. Regardless of what may be said as to the validity of Apple's design rights, any conceptual advantage of the EU's Community-wide uniform standard is severely diminished when enforcement occurs in multiple independent jurisdictions.

In the EU, Apple registered the design of its iPad with the OHIM in May 2004.<sup>164</sup> By 2011, Apple and Samsung had brought claims against each other in six EU countries, but suits in only four of these countries concerned Apple's registered design right.<sup>165</sup> Those four countries were the Netherlands, Germany, the United Kingdom, and Spain.<sup>166</sup> The fact that Apple did not assert design rights in all EU jurisdictions immediately suggests that the design right is recognized as having varying strength across jurisdictions.<sup>167</sup> Each country's approach to design rights before adoption of the Community design right is one explanation for such a result. Germany, for example, has a history of strong design rights. Germany also enforced Apple's RCD to the greatest extent, initially issuing a EU-wide preliminary injunction.<sup>168</sup> The United Kingdom on the other hand, has not historically viewed design rights with much deference, which some professionals suggests is the reason for the ultimate finding of non-infringement in the English and Wales Court of Appeals.<sup>169</sup> Each country's pre-existing view on the proper strength of a design right limits the uniformity of the design right and undermines its enforcement.

<sup>&</sup>lt;sup>162</sup> Graeme B. Dinwoodie et al., TRADE DRESS & DESIGN LAW, 2014-15 SUPPLEMENT at 12 (2014), *available at* Ch 8 of http://www.designlawbook.org/warehouse/supplements/2014-15/2014-15 Supplement to Trade Dress %26 Design Law %28Aspen 2010%29.pdf.

<sup>&</sup>lt;sup>163</sup> *Id.* at 11 (discussing continual national protection for unregistered rights).

<sup>&</sup>lt;sup>164</sup> OHIM RCD No. 000181607-0001 (filed. May 24, 2004).

<sup>&</sup>lt;sup>165</sup> Apple asserted its design right in the Netherlands, the United Kingdom and Germany. Samsung also challenged the RCD validity in the OHIM invalidity division located in Spain. OHIM, Decision of the Invalidity Division, Samsung Elecs. Co., Ltd. v. Apple Inc. (May 7, 2011) (No. ICD 8539)

<sup>&</sup>lt;sup>166</sup> France and Italy where the two remaining EU countries where either party filed claims, but did not raise design rights.

<sup>&</sup>lt;sup>167</sup> Dennis Crouch, UK Appellate Court Confirms Pan-European Win for Samsung on iPad Community Design Charges, PATENTLYO.COM (Oct. 18, 2012), http://patentlyo.com/patent/2012/10/apple-samsung-european-community-design.html.

<sup>&</sup>lt;sup>168</sup> See id. (asserting German's stronger support for design rights as compared to the UK's support for design rights).

<sup>&</sup>lt;sup>169</sup> See generally Samsung Elecs. Ltd. v. Apple Inc. [2013] ECDR 2 (CA).

The conflict between the United Kingdom's finding of non-infringement and the initial preliminary injunction issued by Germany highlights the additional hurdle of community-wide enforcement. Certain courts, designated by each EU country, and referred to as Community design courts enjoy jurisdiction over design right enforcement.<sup>170</sup> Jurisdiction exists in three successive tiers. Primary jurisdiction is given to a Community design court in a defendant's country of domicile or place of establishment. If a defendant does not have a domicile or an establishment in the EU, then jurisdiction exists in the country where the plaintiff is domiciled or has an establishment. If neither plaintiff nor defendant are domiciled, or have an establishment in the EU, then jurisdiction lies in Spain, where the OHIM is located.<sup>171</sup> Community design courts have EU-wide subject matter jurisdiction and therefore can issue EU-wide determinations.<sup>172</sup> While enforcement jurisdiction appears to be neatly defined, any court in the member state may have preliminary relief jurisdiction, such as over preliminary injunctions.<sup>173</sup> There is nothing in the Design Regulation to determine a hierarchy for preliminary injunction procedures and courts are free to apply national laws,<sup>174</sup> which may exacerbate effects of prior national jurisprudence on design laws. Despite the temporary nature of preliminary injunctions, they are quite powerful mechanisms. They give prevailing parties leverage in settlement negotiations,<sup>175</sup> and can result in relatively long-term exclusions of potentially infringing goods.<sup>176</sup> Thus, permitting concurrent jurisdiction over preliminary relief in design rights effectively permits conflicting results in design right enforcement. The litigation between Samsung and Apple showcases this dysfunction, in which enforcement of the design right is effectively limited.

<sup>176</sup> In the Apple v. Samsung litigation, Samsung designed around country specific preliminary injunctions within a matter of months suggesting the preliminary injunction costs were substantial enough to justify a new design that otherwise would not be issued. See Florian Mueller, Apple Won Preliminary Injunction in Germany Against Three Different Galaxy Tabs, FOSS PATENTS (Nov. 29, 2011), http://www.fosspatents.com/2011/11/apple-won-preliminaryinjunctions-in.html.

<sup>&</sup>lt;sup>170</sup> Design Regulation, *supra* note 132, art. 80. If a country has not designated a Community design court, national courts that normally handle design cases will have jurisdiction over Community design claims. Id.

<sup>&</sup>lt;sup>171</sup> *Id.* at art. 82. <sup>172</sup> *Id.* 

<sup>&</sup>lt;sup>173</sup> *Id.* at art. 90.

<sup>&</sup>lt;sup>174</sup> See Florian Mueller, Galaxy Tab 10.1 Injunction Suspended for all EU Countries Except Germany, FOSS PATENTS (Aug. 16, 2011), http://www.fosspatents.com/2011/08/galaxy-tab-101injunction-suspended-for.html (discussing the Germany district court's temporary suspension of enforcement on the EU-wide Tab 10.1 injunction on Korean Samsung for lack of jurisdiction).

<sup>&</sup>lt;sup>175</sup> PRACTICAL LAW CO., *Global Litigation Mapping* 5 (2012).

Compare the litigation in the U.S., where enforcement of the design rights was uniform nationwide. The Federal Circuit ultimately affirmed Samsung's infringement of Apple's three design patents and three utility patents.<sup>177</sup> The Court rejected Samsung's argument that functional aspects should be excluded from the right for purposes of infringement analysis and found Apple's exclusionary right to include the contested "rectangular form and rounded corners" as part of the design right.<sup>178</sup> The Federal Circuit's decision was binding not only on the trial court in the Northern District of California, but nationwide. While disputed designs in the U.S. surrounded the iPhone,<sup>179</sup> and the disputed designs in the EU regarded the iPad,<sup>180</sup> the litigations showcase comparative uniformity in enforcing design rights between the U.S. and the EU.<sup>181</sup>

The Community design right's uniformity throughout the EU may theoretically increase the scope of the right and its geographic enforceability; however, the right is limited by the institutions that enforce it. Independent and concurrent jurisdiction severely limits the proposed uniformity. It is only a matter of time before registrations both within the EU and through the Hague system

 <sup>&</sup>lt;sup>177</sup> See generally Apple, Inc. v. Samsung Elecs. Co., Ltd., 786 F.3d 983 (Fed. Cir. 2015).
<sup>178</sup> Id. at 20.

<sup>&</sup>lt;sup>179</sup> U.S. Patent No. D'618,677 (filed Nov. 18, 2008); U.S. Patent No. D'593,087 (filed Jul. 30, 2007); U.S. Patent No. D'604,305 (filed Jun. 23, 2007).

<sup>&</sup>lt;sup>180</sup> OHIM RCD No. 000181607-0001 (filed. May 24, 2004).

<sup>&</sup>lt;sup>181</sup> It is important to note that had complaints brought by Samsung against Apple in the International Trade Commission (ITC) been successful, Samsung could have effectuated a preliminary injunction on Apple products independent of the proceedings in the Northern District of California. However, only Samsung utility patents were at issue in the ITC proceeding. In the Matter of Certain Mobile Electronic Devices, investigation no. 337-TA-794 (2011). The ITC did find against Apple for infringing Samsung's patent. Two days before the order was implemented, the President exercised his veto power and prevented the injunction from taking effect. U.S. TRADE REPRESENTATIVE Letter to INTERNATIONAL TRADE COMMISSION (August 3, 2013), available at http://www.scribd.com/doc/157894184/13-08-03-USTR-Letter-Vetoing-ITC-794-Exclusion-Order. The ITC never made a determination on Apple's design rights, so enforcement of the design rights remained uniform within the U.S. Apple did file a separate claim against Samsung with the ITC. Seven days after President exercised his veto power, the ITC issues a preliminary injunction against Samsung phones on the basis of Apple utility patent rights. Apple did assert two design patents as well; however, no determination was made as to the design rights. INTERNATIONAL TRADE COMMISSION, Notice of Commission's Final Determination Finding a Violation of Section 337 (August 9, 2013) available at http://www.usitc.gov/ secretary/fed\_reg\_notices/337/337\_796\_Notice08092013sgl.pdf. The ITC's reluctance to make a determination on design rights while the same rights were being adjudicated by an Article 3 court implies that through respect of Article 3 jurisdiction, enforcement of rights are channeled to a single body and uniform enforcement is ensured.

begin to reflect the limitations on enforcing the Community design right throughout the EU. The reputation of the EU's framework has benefited from theoretical arguments,<sup>182</sup> but the positive extent of the rights cannot be ignored.

#### B. The U.S.'s Broad Design Right

Not only is the EU's design enforcement limited as compared to the U.S.'s design patent enforcement, but the EU right is also substantively narrow. Community design rights are much akin to the narrow protection of copyright. Comparatively, the U.S. design patent grants rightholders broad exclusionary rights. I argue that due to the nature of designs and an inability to precisely define the bounds of a design right, any design right tends to be either narrow or quite broad.<sup>183</sup> The EU has chosen an easy-to-obtain but narrow right, while the U.S. has chosen a broad exclusionary right in exchange for a more significant innovation requirement. Even taking into account the portion of designs that functionality excludes from design patent protection, the overall scope of the design right in the U.S. is broad. Thus, the criticisms that U.S. design rights are too limited and effectively decrease incentives to innovate are greatly marginalized, if not rebutted, under this analysis.

Going forward, broad scope is used to refer to the scope of the right conferred, meaning the scope of subsequent designs that the right can be used to exclude. The following example may be illustrative: if design X is made up of five components, a narrow right protects only those five components in X's specific context. A broad right defines the design not just by those five components, but as a sum greater than those parts. In broad exclusionary rights, design X can prevent products that have less than those five components, but still maintain the same overall appearance. A broad exclusionary right can also prevent similar designs in an alternate context.

<sup>&</sup>lt;sup>182</sup> See discussion supra Part II.

<sup>&</sup>lt;sup>183</sup> See Annette Kur, *TRIPS and Design Protection*, *in* FROM GATT TO TRIPS: THE AGREEMENT ON TRADE-RELATED ASPECTS OF INTELLECTUAL PROPERTY RIGHTS 141, 144-56 (Beier & Schricker eds., 1996), *quoted in* DINWOODIE ET AL., INTERNATIONAL INTELLECTUAL PROPERTY LAW & POLICY at 398 (2d ed. 2008) (describing three routes to design protection: (1) extending protection only to objects whose "raison d'être" is to be visually appealing, (2) extending protection for all designs unless they are improving a functionality, and (3) extending protection to all designs unless there is no other option to achieve a specific function).
#### 1. Comparative Protection in the U.S. and the EU

In both the EU and the U.S., the respective IP regimes calibrate the breadth of a right to the rigorousness of the regime's standards.<sup>184</sup> Regimes that require a more rigorous showing of innovation tend to grant a broad right.<sup>185</sup> Those regimes that only require a *de minimis* showing of innovation confer a narrower right.<sup>186</sup> The EU's Community design right is automatic, attaching simultaneously with public disclosure.<sup>187</sup> The originality required to obtain a design right is marginal,<sup>188</sup> and procedures for registration are a similarly marginal hurdle to increased protection.<sup>189</sup> Logically then, a design right confers a narrow right. Only those designs that produce the same "overall impression…on the informed user" will be precluded.<sup>190</sup> While such language sounds rather broad, in practice the standard creates a narrow right. Below are two images. On the left is a "Febreze" sprayer protected by Procter & Gamble's RCD. The "Air Wick" sprayer on the right was accused of infringement. Applying EU Community design law, the English and Wales Court of Appeals found that the accused design did not infringe despite the noticeable similarities.<sup>191</sup>







Non-infringing

<sup>184</sup> See discussion supra Part II.

<sup>185</sup> LANDES & POSNER, *supra* note 107.

<sup>186</sup> Id.

<sup>187</sup> OHIM, *supra* note 134.

<sup>188</sup> Novelty and individual character are required and are easily met. *See* sources cited *supra* notes 140-42.

<sup>189</sup> Only compliance with the definition of a design and public morality are evaluated. *See* OHIM, *supra* note 156.

<sup>190</sup> Design Regulation, *supra* note 132, at art. 10. A designer's degree of freedom is also considered; however, as discussed below this provides minimal limitations.

<sup>191</sup> Procter & Gamble Co. v. Reckitt Benckiser Ltd., [2007] EWCA (Civ) 936 (Eng.).

Conversely, U.S. design patents provide a broad exclusionary right following a rather extensive examination procedure, lasting on average fifteen months.<sup>192</sup> The exclusionary right conferred by a design patent is gestaltist, covering a design's overall appearance and designs in novel contexts.<sup>193</sup> Design patent infringement is defined to include designs which "an ordinary observer" familiar with the prior art designs, would be deceived into purchasing thinking it is the same as the patented design.<sup>194</sup> Although the design right itself is limited to the drawings contained in the application, an infringing design need not be an exact replica,<sup>195</sup> nor in the original context.<sup>196</sup> The Federal Circuit, in *Egyptian Goddess v*. Swisa, specifically overruled an infringement analysis known as "point of novelty" because it was providing too much focus on the novel elements and not the overall design.<sup>197</sup> This infringement analysis has been applied to find a Crocs' design patent infringed by a shoe with overall similar external appearance but with different hole designs, hole arrangements, and toe shapes.<sup>198</sup> Reproduction of the Crocs design and the infringing product are shown below, as well as the Samsung graphical user interface (GUI) which was found to infringe Apple design patent.<sup>199</sup> It is clear from these examples that minor differences are not prohibitive of an infringement finding.

<sup>&</sup>lt;sup>192</sup> USPTO, *supra* note 121, at 1; MPEP § 1504 (detailing the elements of design patents examination which include evaluations on (1) statutory subject matter, (2) novelty, (3) nonobviousness, (4) definiteness, (5) general restrictions, (6) double patenting and (7) priority).

<sup>&</sup>lt;sup>193</sup> Gestalt theory states the whole is greater than its parts, suggesting the totality of perception is something independent of the parts. ENCYCLOPEDIA BRITANNICA, *Gestalt Psychology* (Nov. 11, 2014), http://www.britannica.com/EBchecked/topic/232098/Gestalt-psychology.

<sup>&</sup>lt;sup>194</sup> Gorham v. White, 81 U.S. (14 Wall.) 511, 524 (1872). The statutory provision on design patent infringement is the same as utility patent infringement. 35 U.S.C. § 271 (2012).

<sup>&</sup>lt;sup>195</sup> OddzOn Prods., Inc. v. Just Toys, Inc., 122 F.3d 1396, 1406 (Fed. Cir. 1997) ("It is the appearance of a design as a whole which is controlling in determining infringement. There can be no infringement based on the similarity of specific features if the overall appearance of the designs are dissimilar.")

<sup>&</sup>lt;sup>196</sup> MPEP § 1504.01(a) ("We do not see that the dependence of the existence of a design on something outside itself is a reason for holding it is not [patentable subject matter.]" (quoting *In re* Hruby, 373 F.2d 991, 1001, 153 USPQ 61, 66 (C.C.P.A. 1967)); *see also* William J. Seymour & Andrew W. Toorance, (*R*)*evolution in Design Patentable Subject Matter: The Shifting Meaning of "Article of Manufacture"*, 17 STAN. TECH. L. REV. 183, 209-10 (2013) (discussing CGIs design patent eligibility and their protection across different contexts).

<sup>&</sup>lt;sup>197</sup> Egyptian Goddess, Inc. v. Swisa, Inc., 543 F.3d 655 (Fed. Cir. 2008).

<sup>&</sup>lt;sup>198</sup> Int'l Seaway Trading Corp. v. Walgreens Corp., 589 F.3d 1233 (Fed. Cir. 2009).

<sup>&</sup>lt;sup>199</sup> Apple, Inc. v. Samsung Elecs. Co., Ltd., 920 F. Supp.2d 1079 (N.D. Cal. 2013).



#### 2. The Design Dichotomy

U.S. design patents tend to create broad exclusionary rights, while EU design rights create a narrow right. This dichotomy in high and low protection can be explained by the uniquely challenging nature of defining the parameters of design protection. If words are at times challenging for courts, illustrations of designs are even more difficult to define precisely.<sup>200</sup> Because of the difficulty in defining what is embodied in a visual depiction, and therefore to what extent other designs can be excluded, nuanced analysis of design infringement is futile. Either anything slightly different does not infringe, or some differences in other designs still constitute infringement.<sup>201</sup> Moving from no differences to some differences results in wide discretion for "the eye of an ordinary observer" to determine the scope of rights.<sup>202</sup> Drawing parameters on scope, such as by dictating that a one component deviation is permissible and a two component deviation is not, requires a specific definition of a component. Even the U.S. Supreme Court in Egyptian Goddess v. Swisa recognized the futility of such a task.<sup>203</sup> Design is inherently resistant to being broken into discrete parts, so a measure must either be true to the exact image or feature some deviation.<sup>204</sup>

<sup>&</sup>lt;sup>200</sup> See generally Rebecca Tushnet, *The Eye Alone is the Judge: Images and Design Patents*, 19 J. INTELL. PROP. L. 409 (2012) (discussing the challenges of reducing visual images to IP rights).

<sup>&</sup>lt;sup>201</sup> Cf. Egyptian Goddess, 543 F.3d at 678 (allowing an infringement analysis "when the claimed and accused designs are not plainly dissimilar") with Procter & Gamble Co. v. Reckitt Benckiser Ltd., [2007] EWCA (Civ) 936 (Eng.).

<sup>&</sup>lt;sup>202</sup> Gorham Co. v. White, 81 U.S. (14 Wall.) 511, 528 (1871).

<sup>&</sup>lt;sup>203</sup> Egyptian Goddess, 543 F.3d at 679 (recognizing the challenges of defining design components because "a description would probably be intelligible without the illustration").

<sup>&</sup>lt;sup>204</sup> Tushnet, *supra* note 200.

#### 2015] INDUSTRIAL DESIGN RIGHTS IN THE UNITED STATES

# 3. Rationale for Broad U.S. Design Right

Deciding to grant design patents some deviations in enforcement instead of a more discrete range is the result of U.S. innovation objectives.<sup>205</sup> Similar to the incentive scheme for utility patents, which views the patent monopoly as a prize for significant advancements in function, design patents reward design innovation with an exclusive right. Design patent's statutory placement in the utility patent framework confers on design law the same underlying objectives.<sup>206</sup> Both patent schemes ensure large steps in innovation by employing high standards for patentability. Namely, the high obviousness standard requires that a design be sufficiently innovative beyond prior designs to receive protection. The requirement that a design be novel as compared to a combination of several prior designs makes it harder to gain a design patent than if the design were compared to just a single prior design.<sup>207</sup> The rationale for the U.S.'s higher obviousness requirement can be traced back to the nation's Founders. Thomas Jefferson, Founding Father and former Secretary of State,<sup>208</sup> rejected the natural rights justification for patent monopolies, partly due to the Revolution which was catalyzed by a tea monopoly.<sup>209</sup> Justice Clark explained that a patent monopoly "was a reward, an inducement, to bring forth new knowledge ... Jefferson did not believe in granting patents for small details [or] obvious improvements."<sup>210</sup> Congress, in implementing the Constitution and this underlying policy, has stuck to Jefferson's intent by requiring more than an obvious improvement.<sup>211</sup> Today there is empirical evidence to suggest that setting such high standards does result in a psychological drive to meet those higher standards, and thus in larger innovative steps.<sup>212</sup>

<sup>&</sup>lt;sup>205</sup> Though some may argue it is simply a historical accident that design rights require similarly high standards as utility patents. *See* text accompanying *supra* note 32.

<sup>&</sup>lt;sup>206</sup> See also In re Borden, 90 F.3d 1570, 1574 (Fed. Cir. 1996) (asserting design patents are subject to the same patentability conditions as utility patents).

<sup>&</sup>lt;sup>207</sup> The more prior art that is admissible, the more elements that can be combined, making it less likely any design will be novel in light of combinations.

<sup>&</sup>lt;sup>208</sup> As Secretary of State in 1789, Jefferson was on the first U.S. patent review board. ROBERT PATRICK MERGES & JOHN FITZGERALD DUFFY, PATENT LAW AND POLICY: CASES AND MATERIALS 610 (6th ed. 2013). His views on patent in particular are considered influential for this reason.

<sup>&</sup>lt;sup>209</sup> Graham v. John Deere Co., 383 U.S. 1, 9 (1966).

<sup>&</sup>lt;sup>210</sup> *Id*.

<sup>&</sup>lt;sup>211</sup> *Id.* 

<sup>&</sup>lt;sup>212</sup> See generally Christopher J. Buccafusco et al., *Experimental Tests of Intellectual Property Creativity Threshold*, 91 TEX. L. REV. 1922 (2014).

In contrast, the EU's "individual character" standard only requires an "informed user"<sup>213</sup> to form a different "overall impression" in light of just one previous design.<sup>214</sup> The individual character standard takes into account the designer's degree of freedom in developing the challenged design.<sup>215</sup> The greater the designer's freedom, the more impactful minor differences are on overall impression.<sup>216</sup> Because a designer's freedom is generally found to be great,<sup>217</sup> the individual character standard is so easy to pass that a slight variance in design, such as the angle of the seat on an otherwise identical chair renders a design eligible for the RCD right.<sup>218</sup> Likewise, a markedly similar cartoon character may be found to have individual character based on a different facial expression.<sup>219</sup> Such an easily achievable innovation standard results in many designs being eligible for protection, but each design only receives a minimal exclusionary right.

The suggestion that the U.S. adopt the EU's system would require the U.S. to provide less substantive rights to more designs. As it stands in the U.S., fewer designs receive a greater scope of protection. Requiring a greater showing of

<sup>&</sup>lt;sup>213</sup> An informed user is defined as more informed than an ordinary consumer used in trademark law, and less informed than the person having ordinary technical skills used in patent law. An informed user knows the various designs in the sector and show a "relatively high degree of attention when using them." David Stone, Ten Years of EU Design Law, WIPO MAGAZINE (Dec. 2013), http://www.wipo.int/wipo\_magazine/en/2013/06/article\_0006.html.

<sup>&</sup>lt;sup>214</sup> Karen Millen Fashions Ltd. v. Dunnes Stores, [2014] E.C.D.R. (17). But see generally ERIC VON HIPPEL, THE SOURCES OF INNOVATION 131-207 (1988) (finding technical advances are frequently in relatively small increments which provides an argument for a more narrow right conferral), quoted in ROBERT PATRICK MERGES & JOHN FITZGERALD DUFFY, PATENT LAW AND POLICY: CASES AND MATERIALS 610 (6th ed. 2013)).

<sup>&</sup>lt;sup>215</sup> Design Regulation, *supra* note 132, art. 6(2).

<sup>&</sup>lt;sup>216</sup> OHIM, Community Design Case Law, Regional Industrial Design Conference power point (2013), http://sztnh.gov.hu/hirek/kapcsolodo/TeophileMargellos.pdf.

<sup>&</sup>lt;sup>217</sup> See, e.g., Case R-2194/2010-3, Sinochem Ningbo Ltd. v. DELTA-SPORT Handelskontor, 2012 CURIA ¶ 25 (finding a wide degree of freedom in designing the size, seat shape, construction and materials of a rocking chair); Case R-12451/2009-3 & Case R-1452/2009-3, ANTRAX IT v. The Heating Co., 2010 CURIA ¶ 33 (finding the design of heating radiators to have a large degree of design freedom). But see Case R-979/2011-3, Heijan Yu v. Leina-Werke, 2012 CURIA ¶ 19 (finding traffic safety signs limited by Regulation No. 27 of the United Nations Agreement concerning the Adoption of Uniform Technical Prescriptions for Wheeled Vehicles, Equipment and Parts which can be Fitted and/or be Used on Wheeled Vehicles and the Conditions for Reciprocal Recognition of Approvals Granted on the Basis of these Prescriptions).

 <sup>&</sup>lt;sup>218</sup> Case T-339/12, Gandia Blasco, SA v. OHIM, 2014 CURIA.
<sup>219</sup> Case C-101/11 P, Neuman v. OHIM, 2012 CURIA ¶¶ 20–22; Case C-102/11 P, Neuman v. OHIM, 2012 CURIA ¶¶ 53-58.

innovation to obtain a design right ensures that only a segment of all designs receive protection. Those designs receiving the monopoly must surpass existing innovative designs, and presumably represent those designs that would not exist absent the monopoly right's inducement.<sup>220</sup> As a result, more designs are left unprotected and in the public domain. Designs that are taken from the public are justified by the need to incentivize their creation.<sup>221</sup> In combination with a high obviousness standard, a high tolerance for functional designs works to create a broad design right in the U.S.

The breadth of the design right is balanced against a strong public interest. Such balancing comes to us from Jefferson's reluctance to create a patent system. However, the EU and its members do not share this fundamental view of IP rights. Policy objectives of the EU do not take into account what the inventor must give to the public in order to enjoy the right. The EU's single-sided evaluation of rightholder's interests has a tendency to push rights too far. One recent example comes from Spain's updating of copyright principles in the online context. Spain adopted stringent licensing requirements for third party, partial reproductions of copyrighted material, which resulted in Google refusing to service the country.<sup>222</sup> Rightholders' interests were expanded by providing more copyright protection, but without considering the potential detriment to the public interest of losing online search engine access. By balancing rightholders interests against public interests, the U.S. refrains from overextending them.

Not only does the U.S. industrial design system offer a broader right through more uniform enforcement, it also provides a conceptually broader right. Criticisms of U.S. industrial design based on the narrowness of the right are unjustified from both a positive and a normative view.

# IV SUGGESTIONS TO ADVANCE PARITY AND PREVENT ABUSE

Although this note has addressed the criticisms on the scope of industrial design rights and incentives to innovate, the criticism regarding delay in and costs of protection still stands. Additionally, the *Apple v. Samsung* litigation has brought

<sup>&</sup>lt;sup>220</sup> MERGES & DUFFY, *supra* note 208, at 608-09 (describing the inducement standard and its support by the Supreme Court and within the law and economics literature).

 $<sup>^{221}</sup>$  *Id*.

<sup>&</sup>lt;sup>222</sup> Emily Greenhouse, *The Spanish War Against Google*, BLOOMBERG.COM (Dec. 12, 2014, 5:33 PM), http://www.bloomberg.com/politics/features/2014-12-12/the-spanish-war-against-google.

to the forefront a broad design right which was presumed extinct.<sup>223</sup> The breadth of this right is only justified by the rigorous examination of eligibility. As a result of the design patent's long tenure in the shadows of utility patent and trademarks, the obviousness standard has been untended. Current case law is undisciplined in applying the standard and leaves the right vulnerable to abuse. Rejecting a complete overhaul of the U.S. industrial design system, this part focuses on both of these issues.

#### A. International Obligations

In curating any IP right, one must first ensure compliance with international obligations. The U.S. is obligated to obey a series of international agreements on IP. Of those agreements, the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS Agreement) and the Hague Agreement Concerning the International Registrations of Industrial Designs (the Hague Agreement) are most relevant for this note's purposes.

The TRIPS Agreement, adopted by the U.S. in 1996, created substantive minimum requirements for industrial design protection.<sup>224</sup> Substantive minimums for industrial design protection require a design to be "independently created" and "new or original."<sup>225</sup> Discretionary parameters of "new or original" include designs which "do not significantly differ from known designs or combinations of known design features."<sup>226</sup> TRIPS article 25(1) also provides a discretionary functionality standard of "dictated essentially by technical or functional considerations."<sup>227</sup> The scope of protection granted in Article 26 is an exclusionary right to prevent others from "making, selling or importing articles bearing or embodying a design which is a copy, or substantially a copy, of the protected design."<sup>228</sup> The functionality standard and the scope of protection, including its extension to designs that are substantially a copy, appear to align with the scope of the U.S. design patent. President Clinton had a similar view when the U.S. adopted the TRIPS Agreement,

 <sup>&</sup>lt;sup>223</sup> See, e.g., Brean, supra note 14.
<sup>224</sup> See Agreement on Trade-Related Aspects of Intellectual Property Rights art. 25-26, Apr. 15, 1994 [hereinafter TRIPS] (adding industrial design rights).

<sup>&</sup>lt;sup>225</sup> *Id.*, art. 25(1).

<sup>&</sup>lt;sup>226</sup> *Id*.

<sup>&</sup>lt;sup>227</sup> Id.

<sup>&</sup>lt;sup>228</sup> *Id.*, art. 26(1).

stating that existing intellectual property laws fulfilled TRIPS obligations for industrial design.<sup>229</sup>

The Hague Agreement, created in 1925, is the most relevant obligation for addressing cost and time issues with U.S. design rights. The Hague Agreement does not include any substantive rights for industrial design, but creates a centralized international forum for industrial design registration.<sup>230</sup> Aiming to ease the burdens of registering internationally, the Hague Agreement allows a single application with an International Bureau of WIPO to secure registration in multiple countries.<sup>231</sup> Terms of the Hague Agreement include fifteen years of protection and application determinations within six-to-twelve months from filing.<sup>232</sup> As of May 13, 2015 the U.S. accession to the Hague Agreement took effect, extending eligible design patent terms to fifteen years.<sup>233</sup> However, the U.S. has yet to modify examination procedures, suggesting the State may be in non-compliance with the six-to-twelve month registration timeline.

#### B. Cost and Time Issues

There is no defense for an IP regime that knowingly ignores entire industries or systematically prejudices smaller designers. Whereas the TRIPS Agreement specifically prohibits protection requirements that "unreasonably impair the opportunity" to obtain protection for textile designs in Article 25(2), it does not contain a provision on general rights acquisition.<sup>234</sup> The most relevant obligation for considering cost and time prohibitions is the Hague Agreement. Fully acceding to the Hague Agreement triggers limits on examination periods, but the upper limit of twelve months is still too long. It is preferable that the U.S. target the lower limit of six months, which would allow a designer to file for a design patent at the time of design conception. Because design patent applications are not published in the

<sup>234</sup> TRIPS, art. 25(2).

<sup>&</sup>lt;sup>229</sup> Frenkel, *supra* note 9, at 533. *But see* DINWOODIE ET AL., INTERNATIONAL INTELLECTUAL PROPERTY LAW & POLICY 401 (2d ed. 2008) (citing sources which dispute U.S. compliance with TRIPS requirements).

<sup>&</sup>lt;sup>230</sup> WIPO, Summary of the Hague Agreement Concerning International Registration of Industrial Design, http://www.wipo.int/treaties/en/registration/hague/summary hague.html.  $^{231}$  *Id*.

<sup>&</sup>lt;sup>232</sup> *Id.*; The Hague Agreement Concerning the International Registration of Industrial Designs art. 17(3)(c), Jul. 2, 1999, 2279 U.N.T.S 156 [hereinafter Hague Agreement].

<sup>&</sup>lt;sup>233</sup> WIPO, HAGUE AGREEMENT CONCERNING THE INTERNATIONAL REGISTRATION OF INDUSTRIAL DESIGN 20 (Feb. 13, 2015), http://www.wipo.int/export/sites/www/treaties/en/ documents/pdf/hague.pdf; USPTO, HAGUE AGREEMENT CONCERNING THE INTERNATIONAL REGISTRATION OF INDUSTRIAL DESIGN (last visited May 15, 2015) http://www.uspto.gov/ patent/initiatives/hague-agreement-concerning-international-registration-industrial-designs.

U.S., designers concerned about competitors can apply before products hit the market without giving up a competitive advantage. The average product development life cycle is twelve months, with extremes of six months and twenty-four months.<sup>235</sup> A six month acquisition period allows a greater share of designers to enjoy the right. Guaranteeing that short-term industrial designs can receive equal benefits from a design patent helps ensure parity across industries.

To achieve six-month processing, the USPTO must modify examination procedures. The Hague Agreement allows full discretion for substantive revisions in each member state's reviewing office so that any modification to substantive examination procedures is permissible within international obligation.<sup>236</sup> In the interest of maintaining high standards for patentability, examination factors should not be diminished. Rather, examination efficiency should be increased. One option is to hire more examiners.<sup>237</sup> Additional examiners will increase the number of man-hours and thus increase the rate of processing, but it will not result in a total cost savings. Alternatively, shifting the burden to the applicant could reduce the most time-consuming portion of the examination, namely, prior art searches. Applicants are not currently incentivized to seek out or disclose all relevant prior art. This is because the burden is on the examiner to survey the prior art landscape.<sup>238</sup> If the burden was shifted to the applicant, the total period of examination would be reduced. Currently, the USPTO permits expedited examination procedures for design patents, given an applicant submits their own prior art search, pays an additional fee, and meets other requirements.<sup>239</sup> The current use of such procedures suggests a burden shift is a viable strategy that

<sup>&</sup>lt;sup>235</sup> Neil Oliver, *Batteries for Wearables—Not Good Enough Yet*, MDDIONLINE.COM (Feb. 3, 2015), http://www.mddionline.com/article/batteries-wearable-medical-device—not-good-enough -yet.

<sup>-</sup>yet. <sup>236</sup> WIPO, *The Hague Agreement Concerning the International Registration of Industrial Design: Main Feature and Advantages*, WIPO Pub. No. 911(e) at 9 (2012), *available at*, http://www.wipo.int/edocs/pubdocs/en/designs/911/wipo\_pub\_911.pdf. The Hague Agreement prohibits Member States from requiring any additional formal requirements. Because obviousness is a substantive standard of protection, parameters on who must establish the substantive standard should fall into the discretion of member states, not the formal requirements established in the Hague Agreement.

<sup>&</sup>lt;sup>237</sup> This option is often the first resort for the US Patent and Trademark Office. Between 1925 and 2013 the number of examiners has gone from about 500 examiners to 8000 with applications per patent examiner dropping from about 150 per examiner to 69 per examiner. USPTO, 1925 ANN. REP. OF THE COMM'R OF PATS. at iv (1925); USPTO, PERFORMANCE & ACCOUNTABILITY REP. FISCAL YEAR 2013 at 9 fig. 2 (2014).

<sup>&</sup>lt;sup>238</sup> MPEP § 1504.03.

<sup>&</sup>lt;sup>239</sup> MPEP § 1504.33; 37 C.F.R. 1.155 (2015).

could be quickly implemented. Under 37 C.F.R. § 1.155, design patent applicants can pay an additional \$900 and provide a pre-examination prior art search for a five-month processing time.<sup>240</sup> A five-month examination period better suits the needs of rapidly innovating industries, but such a larger sticker price disadvantages smaller players. Ideally, widespread adoption of applicants conducting pre-examination prior art searches would reduce costs across the board for PTO examiners. Compliance with the Hague Agreement should increase the number of design patent applications, allowing the PTO to lower prices if the fixed costs of design patent examination can be spread out amongst an increasing number of applications.

Through more efficient examining procedures, the costs of design patents should be reduced. This would place small designers and larger designers on an equal playing field in their ability to obtain design rights. It is important to note that both cost reduction and delay reduction can be accomplished without creating an automatic right that sacrifices high patentability standards.

#### C. Obviousness Standard

Design patent's obviousness standard, which asks if the design would have been "obvious to a designer of ordinary skill who designs articles of the type" in question,<sup>241</sup> allows multiple prior art references to be combined for the evaluation. There is no apparent limit on the number of prior art references combined, which ought to make passing the evaluation significantly harder than the one-to-one comparisons seen in the EU.

Despite the conceptual rigor of the U.S. obviousness standard, its application has been dilutive. Courts have been undisciplined in applying the obviousness standard, allowing protection for designs that an ordinary observer would find obvious.<sup>242</sup> In part, this is a result of design patent's two-step obviousness evaluation. In design patents, unlike utility patents, there must be a single primary reference which has "basically the same" design as the claimed design when the visual impression of the design as a whole is evaluated.<sup>243</sup> Once a primary reference is established, additional secondary references may then be used "to

<sup>&</sup>lt;sup>240</sup> *Id*.

<sup>&</sup>lt;sup>241</sup> 35 U.S.C. § 103 (2012).

<sup>&</sup>lt;sup>242</sup> See Janice M. Mueller & Daniel H. Brean, Overcoming the "Impossible Issue" of Nonobviousness in Design Patents, 99 Ky. L. J. 419 (2011) (arguing for a lower nonobviousness standard in design patents).

<sup>&</sup>lt;sup>243</sup> MRC Innovations, Inc. v. Hunter Mfg., LLP, 747 F.3d 1326, 1331 (Fed. Cir. 2014) (quoting *In re* Rosen, 673 F.2d 388, 391 (C.C.P.A. 1982)).

modify [the primary reference] to create a design that has the same overall visual appearance."<sup>244</sup> However, not just any prior art can be used as a secondary references. A reference must "suggest application" or suggest modifying the primary reference with its features.<sup>245</sup> The "suggests application" test essentially requires that the prior art references are related.<sup>246</sup>

The U.S. Court of Customs and Patent Appeal, the predecessor to the Court of Appeals for the Federal Circuit, first articulated the rationale for this two-step test. The court relied on the need for a prior art reference to be "something in existence," in order to invalidate a design.<sup>247</sup> The Court feared that allowing multiple references to be combined would result in a comparison of a something that might be, not something that is.<sup>248</sup> However, they gave no further explanation of why a design patent must be compared to something in existence, and made no mention of the underlying policy objectives for design patents or how this rule may further them.<sup>249</sup> If the Court of Customs and Patent Appeals had evaluated the underlying objective of the obviousness standard, which is to ensure that the patented design is sufficiently inventive enough to justify the monopoly granted, it would have found its standard illogical. A design should be more innovative than a combination of what currently exists ensures that sufficient innovation is being rewarded. A standard should also ensure that some designs are left to the public domain.

Now that the world has seen the strength of the design right and the design patent's substantial damage awards through *Apple v. Samsung*, inconsistencies in design patentability may be exploited.<sup>250</sup> The diluted obviousness standard that has resulted from undisciplined application undermines the trade-off that our Founders emphasized between innovation and patent monopoly. To return design patentability to its rigorous standards, the two-step test ought to be deserted, and a cap on combinations should take its place. The two-step test makes it hard to find a design unprotectable. Designs should have to overcome combinations of prior art similar to utility patents. This would ensure designs are sufficiently innovative and encourage larger steps in design innovation. However, a limitation should be put on the number of prior art references that can be combined. Limiting obviousness

<sup>246</sup> Id.

<sup>&</sup>lt;sup>244</sup> Id.

<sup>&</sup>lt;sup>245</sup> In re Borden, 90 F.3d 1570, 1575 (Fed. Cir. 1996).

<sup>&</sup>lt;sup>247</sup> In re Rosen, 673 F.2d at 391 (C.C.P.A. 1982).

<sup>&</sup>lt;sup>248</sup> Id. (quoting In re Jennings, 182 F.2d 207, 208 (C.C.P.A. 1950)).

<sup>&</sup>lt;sup>249</sup> *Id*.

<sup>&</sup>lt;sup>250</sup> Apple, Inc. v. Samsung Elecs. Co., Ltd., 786 F.3d 983, 990, 1002 (Fed. Cir. 2015).

analysis to three prior art references prevents obviousness analysis from becoming impossible to overcome and ensures protected designs are more innovative than mere combinations. Prior art from any context should also be permitted in obviousness analysis. Such a standard more accurately reflects design innovation, where designers draw inspiration from diverse fields. Requiring that prior art references come from a related field in order to combine them under the "suggests application" test allows designs which borrow ideas from other contexts to receive otherwise unjustified patent protection.

Such an alteration to the U.S. obviousness standards would be consistent with international obligations. TRIPS requires that "new or original" designs be given protection, where original is synonymous with non-obvious, but nowhere does TRIPS defines "original."<sup>251</sup> The result is large discretion in each member state's application of industrial design protection.<sup>252</sup>

#### CONCLUSION

Criticisms of U.S. industrial design, based on the narrowness of industrial design protection and corresponding limitations on incentives to innovate, are severely undermined in light of the broad exclusionary scope that the U.S. design patents grant and the limited functionality test within design patents. While the EU model of design protection appears to grant a right with a uniform scope across a large geographic area, pre-existing notions of design rights and concurrent jurisdiction over preliminary relief destabilize enforcement. The result is incongruent enforcement across the EU, thinning an already narrow right. The U.S. right is substantially broader and enjoys more uniform enforcement across the country. However, the U.S. cannot escape the criticism that the cost and time delay of acquiring a design right disproportionately affects some groups more than others. Rapidly innovating industries and small players are the most affected. To create parity across all designers, the U.S. ought to fully comply with the Hague Agreement's examination timeline and apply the obviousness standard more rigorously. A wholesale modification of U.S. industrial design protection to resemble the EU's Community design right is neither desirable nor necessary.

<sup>&</sup>lt;sup>251</sup> TRIPS art. 25(1).

<sup>&</sup>lt;sup>252</sup> Kur, *supra* note 183, at 397.

# NEW YORK UNIVERSITY JOURNAL OF INTELLECTUAL PROPERTY AND ENTERTAINMENT LAW

VOLUME 5	FALL 2015	NUMBER 1

# SOMEWHERE BEYOND THE ©: COPYRIGHT AND WEB DESIGN

# FLORINA YEZRIL\*

This note evaluates the applicability of copyright to web design. Web design affects the appearance and user experience of a website, but excludes content such as the text or images. Web designers have an incentive to standardize websites to ease the learning curve of users who are new to a given website, which is strongly counterbalanced by internal and external pressures to perform creatively. Copyright law has been ambiguously applied to web design. Problems with copyrightability stem from the hurdles to determining what design is original, as well as the exclusion of functional elements. Even if a web design is copyrightable subject matter, successfully proving infringement is difficult. In several contexts where copyright protection might be an issue, this note finds that copyright is unnecessary to resolve disputes. The copyright symbol in the footer of websites can serve as a notice that socially pressures and deters potential copiers, protecting website design and incentivizing innovation, even in the absence of legal certainty.

<sup>&</sup>lt;sup>\*</sup> J.D. Candidate, New York University School of Law, 2016; B.S.E. Electrical Engineering, Princeton University, 2011. The author thanks Professor Jeanne Fromer, NYU JIPEL Senior Notes Editor 2014–2015 Lin Weeks, and the 2015-2016 Editorial Board of the NYU Journal of Intellectual Property & Entertainment Law for their for their help throughout the editing process. Special thanks to web designers Jared Novack, John Kelleher, Michael Raybman, Dan Croak, Harriet Donnelly, Melinda Beck, and Jessica Watson for speaking about their views on the web design process and intellectual property protection.

INTR	ODUCTION	44
I.	BACKGROUND OF WEB DESIGN	45
II.	WEB DESIGNERS' CREATIVE INCENTIVES	49
III.	COPYRIGHT BACKGROUND	52
	A. Copyright Overview	52
	B. Copyright Law as Applied to Web Design Is Ambiguous	53
	1. Hurdles to Proving Copyrightability	54
	2. Hurdles to Proving Infringement	58
	C. Designers' Views on Copying Align with the Copyright Infringement	
	Standard	60
IV.	SCENARIOS OF POTENTIAL WEB DESIGN COPYRIGHT INFRINGEMENT	62
	A. Designer-Client Disputes	63
	B. Copying by the Client's Competitors	
	1. Copying by Competitors	65
	2. Copying in Bad Faith: Counterfeiters and Phishers	65
	C. "Pure" Design Copying	67
	1. Copyright Ownership by Non-Designers Misaligns the Incentive to	)
	Enforce	69
CON	CLUSION	

#### **INTRODUCTION**

"I think the ' $\bigcirc$  2015' at the bottom of websites means that people aren't allowed to reprint the content of the site (i.e. text and images) without permission. Honestly, I don't know the full extent of its legal power."<sup>1</sup>

Most websites, no matter the genre, source, or format, share a common element: if a user scrolls down far enough, a message will appear: " $\mathbb{C}$  2015." Despite its prevalence, few professional web designers know what the symbol means, even as they insert it into a web page. Web designers know that the " $\mathbb{C}$ " stands for "copyright," which covers the content of a website and might cover the source code; however, they are not sure whether it protects the value web designers add to a website's overall design.<sup>2</sup>

 $<sup>^1</sup>$  E-mail from Michael Raybman, Founder, Reactor Media (Mar. 9, 2015) (on file with author).

<sup>&</sup>lt;sup>2</sup> All web designers interviewed in preparation of this note did so in their personal capacity. For illustrative samples of their design, see their websites: Melinda Beck of melindabeck.com, Dan Croak of thoughtbot.com, Harriet Donnelly of e5marketing.com, John Kelleher of

Web design is an interesting lens through which to view innovation because the industry is so dynamic. It has a high rate of production, a low barrier to market entry, and is closely affected and constrained by changing technology.<sup>3</sup>

This note focuses on professional website designers because they are repeat players in the field of web design and understand the industry's norms. Part I describes what web design is and how web designers operate. Part II discusses the incentives of web designers to be creative. Part III describes the background of copyright law and its potential applicability to web design. This section demonstrates the ambiguity of copyright law as applied to web design. Part IV examines copyright protection for website design in several distinct contexts, including ownership disputes between web designers and their clients, copying by competitors, and design copying by unrelated websites. This section determines that copyright protection would not significantly alter creative incentives of web designers. This note concludes that the copyright symbol in the footer of websites can serve as a notice that socially pressures and deters potential copiers, protecting website design and incentivizing innovation, even in the absence of legal certainty.

#### Ι

#### **BACKGROUND OF WEB DESIGN**

"We generally review several websites for creative inspiration. We also follow some industry standard guides for layout and best practices for user interface design as well as information architecture. That's part of our initial brainstorm and creative research. Beyond that, we start to build on our own."<sup>4</sup>

Professional web designers view their work as a service, rather than a product.<sup>5</sup> As websites increase in complexity, the design process can take days or

openbay.com, Jared Novack of Upstatement.com, Michael Raybman of Reactor Media, and Jessica Watson of http://jwatsoncreative.com.

<sup>&</sup>lt;sup>3</sup> *E.g.*, Robert Mening, WEBSITE SETUP, http://websitesetup.org/ (last visited Oct. 26, 2015) (the website says that anyone can design a website, "I wrote this guide to help anyone – from bloggers to business owners – make their own website without having to learn code." but it relies on WordPress).

<sup>&</sup>lt;sup>4</sup> E-mail from Jessica Watson, CEO/Creative Director, JWatsonCreative (Mar. 6, 2015) (on file with author).

<sup>&</sup>lt;sup>5</sup> E.g., Ilya Posin, *How Much Does a Website Cost?*, Forbes (Aug. 7, 2013, 10:18 AM), http://www.forbes.com/sites/ilyapozin/2013/08/07/how-much-does-a-website-cost.

weeks,<sup>6</sup> and costs run in the thousands of dollars.<sup>7</sup> The web design process usually starts with a web designer asking the client to explain their goals and to identify websites that they like. The designer will then guide the client to determine what specific aspects of those websites the client hopes to see in their own website. The websites used for inspiration may be those of competitors, or they may be from an entirely unrelated field.<sup>8</sup> Designers will pull together elements of multiple sources, without taking too much inspiration from any one website.<sup>9</sup>

"I start with functionality, user flow diagrams, then wireframing, etc.. finally aesthetic design."<sup>10</sup>

Designers may use various tools in the process because the source code for the visual representation is not very important.<sup>11</sup> The source code behind a website design is only relevant to its visual result, but a designer can achieve the same effects in multiple ways. For example, one designer might write her own software while another might use "WYSIWYG" (what you see is what you get) editing software. The latter, a more visual approach, allows the designer to drag-and-drop items in a graphical user interface (GUI), such as Wix, to alter the web design. Even if working purely in source code, the same effect can be determined by moving settings between HTML and CSS sections. If only the source code mattered, a person would be able to obfuscate a given piece of code to make it look entirely different from copyrighted software.<sup>12</sup>

This note discusses the work of professional website designers as opposed to non-professional actors who use free or paid do-it-yourself tools. Such do-ityourself website builders, such as WordPress, Wix, Twitter Bootstrap, or

<sup>&</sup>lt;sup>6</sup> E.g., Heidi Cool, On Average, How Much Time Does It Take for a Designer to Build a Professional Website?, QUORA.COM (Aug. 13, 2013), http://www.quora.com/On-average-how-much-time-does-it-take-for-a-designer- to-build-a-professional-website.

<sup>&</sup>lt;sup>7</sup> See Richard Parr, *How Much Does a Small Business Website Cost in 2014?*, EXECUTIONISTS, http://www.executionists.com/blog/cost-to-build-websites-2014/; Posin, *supra* note 5.

<sup>&</sup>lt;sup>8</sup> See Hora Loranger, Redesigning Your Website? Don't Ditch Your Old Design So Soon, NIELSON NORMAN GROUP (Dec. 07, 2014), http://www.nngroup.com/articles/redesign-competitive-testing/.

<sup>&</sup>lt;sup>9</sup> E-mail from Jessica Watson, CEO/Creative Director, JWatsonCreative (Mar. 6, 2015) (on file with author).

<sup>&</sup>lt;sup>10</sup> E-mail from Michael Raybman, Founder, Reactor Media (Mar. 9, 2015) (on file with author).

<sup>&</sup>lt;sup>11</sup> See Playbook, Thoughtbot, http://playbook.thoughtbot.com/#product-design-sprint.

<sup>&</sup>lt;sup>12</sup> E-mail from John Kelleher, Web Developer, Openbay (Feb. 22, 2015) (on file with author).

[Vol. 5:1

SquareSpace,<sup>13</sup> offer users some control,<sup>14</sup> but their users have a significantly reduced expectation of innovation and uniqueness. Therefore, the appearance of similar websites does not need protection because it does not advance copyright's constitutionally stated purpose of "promot[ing] the progress of science and the useful arts."<sup>15</sup>

The clearest method of understanding a designer's end product is by observation. For example, compare the before and after screenshots of Harvard Law Review's website, which was redesigned by Upstatement,<sup>16</sup> below.

Harvard Law Review website before redesign, archived from January 5, 2014



<sup>&</sup>lt;sup>13</sup> Some builders offer more customization than others, such as WordPress, which is open source. *See, e.g.*, Jeremy Wong, *Wix vs WordPress – Our Detailed Comparison*, WEBSITE BUILDER EXPERT (Oct. 2, 2015), http://www.websitebuilderexpert.com/wix-vs-wordpress/.

<sup>15</sup> U.S. CONST. art. I, § 8, cl. 8.

<sup>&</sup>lt;sup>14</sup> While not the subject of this note, these services may provide an interesting jumping-off point and case study for a discussion of open sourced software and rights ownership.

<sup>&</sup>lt;sup>16</sup> For more discussion about redesigning Harvard Law Review's website, see *Responsive Redesign: Harvard Law Review*, UPSTATEMENT, http://upstatement.com/portfolio/harvard-law-review/.

	und Copyright
How copyright constrain	nts lead to greater creativity
Article by J	oseph P. Fishman
HLR ISSUES FORUM ORDERING SUBMISSIONS	ABOUT SEARCH Q
IARVARD LAW REVIEW FORUM	HARVARD LAW REVIEW FORUM
Adam Smith's First Amendment	Occupational Speech and the First
Main Shifti S First Amendment	
	Amendment
Commentary by Amanda Sbanor & Robert Post	Amendment
Commentary by Amanda Sbanor & Robert Post HARVARD LAW REVIEW FORUM	Amendment Commentary by Paul Sberman
Commentary by Amanda Sbanor & Robert Post HARVARD LAW REVIEW FORUM Children and Parents, Innocence and	Amendment Commentary by Paul Sberman HARVARD LAW REVIEW FORUM
Commentary by Amanda Shanor & Robert Post HARVARD LAW REVIEW FORUM Children and Parents, Innocence and Guilt A Reply to Professor Lee	Amendment Commentary by Paul Sberman HARVARD LAW REVIEW FORUM An Unapologetic Defense of the

Harvard Law Review website after redesign by Upstatement, from March 3, 2015

The website looks significantly different after its redesign. There is a new color scheme that transitioned from muted, dull colors to bright, jewel tones. The font has changed to be more readable on computer screens, as have heading sizes and placement. Additionally, the visual layout shifted from three columns with a menu in the far right column to two columns of articles with a menu in a horizontal bar, giving readers a smoother browsing experience than the cluttered initial design presented. If the client had a logo, that would probably have been incorporated as well. The overall impression of the website has become more modern, and the colored geometric patterns are more vibrant and inviting than a graphic of business people walking away from the user. Despite the visual differences, many of the important elements of the website remain unchanged: links still lead a user to other pages, such as clicking on an article title to visit a web page with the full article. The important information is still conveyed, such as the source of the website (Harvard Law Review), various recently-published articles and their authors, and a search box for users to find specific articles. For a given website, the web design includes everything that is not content, and does not include content such as the

text of blog posts or a client's images. Web design includes the colors,<sup>17</sup> layout, and navigation<sup>18</sup> decisions that affect a user's web browsing experience.

#### Π

# WEB DESIGNERS' CREATIVE INCENTIVES

In the web design community, there are competing incentives to standardize and to differentiate website design. This section explores this tension between standardization and the freedom to create original designs and finds that, ultimately, the two are not polar opposites because they are driven by mismatched purposes.

"I think trends and common practices of popular sites are important considerations to make sure your users are getting a good experience."<sup>19</sup>

The movement towards standardization is driven by a desire to improve user experiences across multiple websites. As computer screens grew in size and resolution increased, and as Internet bandwidth increased, websites transitioned from displaying only text to incorporating GUIs with menus and images.<sup>20</sup> Users increasingly demand to access websites from computer browsers, tablets, and cell phones. Because websites are increasingly accessed from mobile devices, the reduced screen space has led to smaller icons and collapsible menus to save real estate. As users approach the Internet from devices that have more variation in screen resolution than ever before, it is necessary for websites to adapt their layout

<sup>&</sup>lt;sup>17</sup> Color carries distinctiveness, for example Phil Edwards, How Well Do You Know the Most Famous Colors?. Vox (Feb. 2015. Internet's 10. 3:20 PM). http://www.vox.com/2015/2/10/8014365/internet-colors-brands-test, and meaning, for example Andy Cowles, And It Was All Yellow: What the Design of Vox and BuzzFeed Tells Us About **THEMEDIABRIEFING** (May 27. 2014. 12:30 **Trusting** Content, PM). http://www.themediabriefing.com/article/cowles -vox-buzzfeed-trust-yellow. And courts have recognized that color could be an important tool in determining whether a website was copied. Conference Archives, Inc. v. Sound Images, Inc., No. CIV. 3:2006-76, 2010 WL 1626072, at \*5 (W.D. Pa. Mar. 31, 2010) ("While some colors are more common than others, if two products utilize the same exact hex triplet, there is a likelihood that the color was copied").

<sup>&</sup>lt;sup>18</sup> See generally Web Navigation, WIKIPEDIA (Oct. 13, 2015, 7:15 AM), https://en.wikipedia.org/wiki/Web\_navigation.

<sup>&</sup>lt;sup>19</sup> E-mail from John Kelleher, Web Developer, Openbay (Feb. 22, 2015) (on file with author).

<sup>&</sup>lt;sup>20</sup> See History of the Internet, TECHOPEDIA, https://www.techopedia.com/6/27861/ internet/history-of-the-internet/8 (describing Mosaic browser).

and resolution to suit viewers' devices. The web design community now incorporates "responsive web design," a term coined to refer to websites that translate flexibly between various layouts and image sizes, as the screen size permits.<sup>21</sup> There is societal benefit to standardization because it allows users to easily navigate new websites,<sup>22</sup> as opposed to the disruption of being confused or having to learn how to navigate each individual website. Users have come to expect such features, so web designers' clients demand easily understandable navigation, and, in turn, designers are sensitive to this client need.<sup>23</sup>

"Copying parts of websites I think is fairly prevalent, but I don't really consider copying websites to be a problem. I almost view the ability to do this as a good thing, because it can allow scrappy, resource constrained startups to move faster, and encourage innovation."<sup>24</sup>

Standardization is also the logical result of building websites more efficiently. In the web design community, it is acceptable to start with pre-made templates. This is because there is a considerable amount of background work required to make a webpage render on a computer screen (such as an HTML framework) before the designer can add value with creative choices. Because those frameworks are often generic across different kinds of websites, there is little reason to spend time regenerating these basic elements. There are even guides online for "stealing" websites;<sup>25</sup> such guides are more often used as tutorials for learning purposes than as work product for paying clients.<sup>26</sup>

<sup>&</sup>lt;sup>21</sup> Ethan Marcotte, *Responsive Web Design*, A LIST APART (May 25, 2010), http://alistapart.com/article/responsive-web-design.

<sup>&</sup>lt;sup>22</sup> See, e.g., Conference Archives, Inc. v. Sound Images, Inc., No. CIV. 3:2006-76, 2010 WL 1626072, at \*21 ("[The "look and feel" of a website] offers a familiar interface, with recognizable elements. Similar colors, sizes, and layouts make navigation and interaction facile.").

<sup>&</sup>lt;sup>23</sup> That being said, there is some criticism of how "boring" web design has become. *See, e.g.*, Owen Williams, *Web Design Is Now Completely Boring*, THE NEXT WEB (Sept. 23, 2015, 3:15 PM), http://thenextweb.com/opinion/2015/09/23/zzzzzz/.

<sup>&</sup>lt;sup>24</sup> E-mail from John Kelleher, Web Developer, Openbay (Feb. 22, 2015) (on file with author).

<sup>&</sup>lt;sup>25</sup> E.g., Ilan Patao, *Tutorial - How to Copy / Duplicate Web Sites*, YOUTUBE (May 19, 2008), https://www.youtube.com/watch?v=cue\_uZWNfUY (note that the video is labeled "Category: Educational").

<sup>&</sup>lt;sup>26</sup> E.g., Mike Locke, *Copying vs. Stealing in Web Design*, YOUTUBE (May 5, 2011), https://www.youtube.com/watch?v=kKxtD2tWqDk (note in the video, the emphasis on taking the image directly).

"I think if you're paying a creative agency to produce an original website, that's exactly what you should get."<sup>27</sup>

I don't directly copy from other designers because "it seems wrong and out of fear that it would be noticed within the community... I would be more afraid of embarrassment but would also be worried a little bit about being sued."<sup>28</sup>

There are strong motivations, external and internal, that drive web designers to be creative within the technological constraints.

Clients exert external pressure on designers to adapt websites to the client's needs. For example, a blog should be navigable by users who want to read posts and also convenient for the client to add content, such as a post that is automatically labeled with its creation time and author. The design choices that would be useful for a blog are unlike those a designer might make for an online shopping website. Instead of arranging content chronologically, as is common on a default view of a blog, retail websites often need to be organized by different categories of goods that are searchable and sortable by different parameters, such as price or popularity. Retail sites need to allow visitors to order items, pay the shop owner, enter shipping information, resolve disputes, and display relevant information and product reviews. The shop owner may also want certain features, such as an automatic update to a product web page if the product is out of stock. Regardless of whether two websites share a color scheme, whether the designer starts with a basic template, or even whether one designer wants to directly copy the appearance of another website, a web design would need to make modifications to adapt the website to the client. These modifications could include posting the client's shop items or articles, searching the client's database of items for sale, and sending customer payments to the client.<sup>29</sup>

The internal pressures to create a new product are as strong as the external motivations to adapt to client uses. Designers are motivated by the need to maintain gainful employment. As web design has evolved from a product to a service based on open communication between a client and a designer, networking and reputation have become very important to designers in generating new

<sup>&</sup>lt;sup>27</sup> E-mail from Jessica Watson, CEO/Creative Director, JWatsonCreative (Mar. 6, 2015) (on file with author).

 $<sup>^{28}</sup>$  E-mail from John Kelleher, Web Developer, Openbay (May 17, 2015) (on file with author).

<sup>&</sup>lt;sup>29</sup> Telephone Interview with Harriet L. Donnelly, Principal, e5 Marketing (Feb. 20, 2015).

business.<sup>30</sup> Designers take pride in their work and prioritize creating original work from an internal motivation, as opposed to the external threat of legal ramifications. Some designers are upset when their work is copied because they are powerless to prevent another person from taking credit for their hard work.<sup>31</sup> The copyright symbol © derives its weight from reminding web designers about these internal pressures to deter blatant copying, even in the absence of legal backing.

### III Copyright Background

"There's not enough conversation happening around IP for creative work"<sup>32</sup>

The backdrop to web designers' motivations, even if not immediately discernable, is copyright. The legal landscape influences both the creative process of web design and how web designers can protect their work once it has been created. This section outlines the basics of copyright law and applies its principles to web design. However, the law is unclear as to whether web design is protectable by copyright, and courts have muddled the issue by adding the possibility of trade dress protection for website design. Remarkably, even though the application of copyright law to web design is muddled, web designers' views on copying hew closely to copyright theory. This reverberation suggests that incentives within the web design community should influence the perception of how copyright law is applied in this field.

# A. Copyright Overview

The Copyright Act protects "original works of authorship fixed in any tangible medium of expression, now known or later developed, from which they can be perceived, reproduced, or otherwise communicated, either directly or with the aid of a machine or device.... Works of authorship include ... pictorial, graphic, and sculptural works."<sup>33</sup> A copyright lasts for the author's life plus an

<sup>&</sup>lt;sup>30</sup> *Id*.

<sup>&</sup>lt;sup>31</sup> See generally id.; Telephone Interview with Jared Novack, Partner, Upstatement (Feb. 4, 2015); E-mail from Michael Raybman, Founder, Reactor Media (Mar. 9, 2015) (on file with author); E-mail from Jessica Watson, CEO/Creative Director, JWatsonCreative (Mar. 6, 2015) (on file with author).

<sup>&</sup>lt;sup>32</sup> E-mail from Jessica Watson, CEO/Creative Director, JWatsonCreative (Mar. 6, 2015) (on file with author).

<sup>&</sup>lt;sup>33</sup> 17 U.S.C. § 102(a).

additional seventy years.<sup>34</sup> The original rights holder may be, among others, the author's employer under the "work for hire" doctrine.<sup>35</sup>

The copyright holder's exclusive rights in the protected work are limited by what is copyrightable and what constitutes unexcused infringement. To qualify for a copyright, there is a low originality requirement that the work possesses "at least some minimal degree of creativity,"<sup>36</sup> and is an expression instead of a mere idea.<sup>37</sup> These constraints incentivize creative expression by preventing copyright holders from making overbroad claims of ownership of undeveloped or underdeveloped ideas. Copyright infringement is the unauthorized copying of a protected work. Proving infringement involves showing misappropriation by two steps: (1) proof of copying, which can be shown circumstantially with proof of access, and (2) a demonstration that the protected and accused works are substantially similar.<sup>38</sup> Even if a work qualifies for a copyright, there is an exception from a finding of infringement for fair use.<sup>39</sup> Four factors determine whether fair use was made of a work: "(1) the purpose and character of the use  $\dots$  (2) the nature of the copyrighted work, (3) the amount and substantiality of the portion used in relation to the copyrighted work as a whole; and (4) the effect of the use upon the potential market for or value of the copyrighted work."<sup>40</sup> That is to say, if a copyrighted work was used for nonprofit, educational purposes, or if only a small, inessential part of the work was used, then that would be a defense against literal infringement.

# B. Copyright Law as Applied to Web Design Is Ambiguous

The Copyright Office has issued some guidance for registering online works in the form of Circular 66, but the document is silent on the question of web design

 $<sup>^{34}</sup>$  Assuming that all relevant websites will have been created on or after January 1, 1978, see 17 U.S.C. § 302 . In the fast-paced Internet era, this seems like an extremely long period of exclusivity and protection, but that may not be too offensive if the protection is very narrow.

<sup>&</sup>lt;sup>35</sup> 17 U.S.C. § 201(b).

<sup>&</sup>lt;sup>36</sup> Feist Publications Inc. v. Rural Tel. Serv. Co., Inc., 499 U.S. 340, 345 (1991).

<sup>&</sup>lt;sup>37</sup> 17 U.S.C. § 102(b) (codifying Baker v. Selden, 101 U.S. 99 (1879)); *see also* Mazer v. Stein, 347 U.S. 201, 217 (1954).

<sup>&</sup>lt;sup>38</sup> Although the exact mechanics of determining copyright infringement require a nuanced analysis, this general two-step approach has been accepted by a majority of circuits. *See, e.g.*, Arnstein v. Porter, 154 F.2d 464 (2d Cir. 1946); Selle v. Gibb, 741 F.2d 896 (7th Cir. 1984); Swirsky v. Carey, 376 F.3d 941 (9th Cir. 2004).

<sup>&</sup>lt;sup>39</sup> 17 U.S.C. § 107.

 $<sup>^{40}</sup>$  Id.

protection.<sup>41</sup> As such, courts have attempted to address the ambiguity. As early as 1997, courts found that the "look and feel" of a website *could* infringe copyright.<sup>42</sup> However, because copyright infringement is a fact-specific inquiry and few, if any, cases reach even summary judgment stages, there have been no conclusive answers.

It is important to recognize that copyright of a website could possibly apply to (1) the visual website, (2) the underlying source code, and (3) the client's content that is on that website.<sup>43</sup> This note is primarily interested with the first of these points: the design of the website. As discussed above, protection of the underlying source code is too easy to circumvent,<sup>44</sup> and it is fairly undisputed that a client's content, such as original text or images, would be protected.<sup>45</sup> Although cases addressing the latter issues are not the focus of this paper, precedent on the topics illuminates the applicability of copyright to web design.

# 1. Hurdles to Proving Copyrightability

In *Apple Computer v. Microsoft*,<sup>46</sup> the Ninth Circuit evaluated Microsoft's use of GUI elements of which Apple claimed Microsoft infringed the "look and feel." The Court held that "works cannot be substantially similar where analytic dissection demonstrates that similarities in expression are either authorized, or arise from the use of common ideas or their logical extensions."<sup>47</sup>

The question of whether web design can be a copyrightable subject matter is still unanswered. In *BlueNile v. Ice.com*,<sup>48</sup> one online diamond retailer sued a competitor for copyright and trade dress infringement of its website. The case is

<sup>47</sup> *Id.* at 1439.

<sup>&</sup>lt;sup>41</sup> UNITED STATES COPYRIGHT OFFICE, CIRCULAR NO. 66, COPYRIGHT REGISTRATION FOR ONLINE WORKS (2012), http://copyright.gov/circs/circ66.pdf.

<sup>&</sup>lt;sup>42</sup> ConsulNet Computing, Inc. v. Moore, No. CIV.A. 04-3485, 2007 WL 2702446, at \*7 (E.D. Pa. Sept. 12, 2007).

<sup>&</sup>lt;sup>43</sup> This note assumes that professional web designers are not taking copyrighted images or other content without permission.

<sup>&</sup>lt;sup>44</sup> In a trademark infringement analysis, a court pointed out that "whether defendants (and plaintiff) utilized code available in the public domain or not in creating their website does not affect the fundamental similarities between the two websites, which is the relevant criterion in a likelihood of confusion analysis." Athleta, Inc. v. Pitbull Clothing Co., No. CV 12-10499-CAS FMOX, 2013 WL 142877, at \*7 (C.D. Cal. Jan. 7, 2013). This analysis should easily extend to the proposition that source code is not dispositive in the analysis of web design when analyzing the "look and feel" of two web sites.

<sup>&</sup>lt;sup>45</sup> See 17 USC § 102.

<sup>&</sup>lt;sup>46</sup> Apple Computer v. Microsoft Corp., 35 F.3d 1435 (9th Cir. 1994).

<sup>&</sup>lt;sup>48</sup> Blue Nile, Inc. v. Ice.com, Inc., 478 F. Supp. 2d 1240 (W.D. Wash. 2007).

best known for the proposition that the "look and feel" of a website might fall within the scope of trade dress protection. However, for copyright purposes, it is significant that the court found that more factual development was required to establish whether the "look and feel" of a website was within the subject matter of copyright, because it implies that a web design could also be protected by copyright.<sup>49</sup>

Thus, it is important to first determine which parts of a web design might not be protectable, and to remove those elements from a copyright analysis. There are several hurdles to proving copyrightability that remain open questions: how to plead, whether a web design is "original," whether navigation-related design elements are protectable, and whether web design is separable from its useful articles.

A 2010 case, *Salt Optics, Inc. v. Jand, Inc.*,<sup>50</sup> was brought on copyright and trade dress claims, but the copyright claims were dismissed because they were overbroad. The court stated that the "[p]laintiff needs to delineate more clearly which facts it alleges in support of its trade dress claim and which facts it alleges in support of its copyright claim."<sup>51</sup> This suggests that potential "look and feel" plaintiffs should be careful to delineate which website elements they seek to protect through copyright versus through trade dress, because the claims are not identical. However, courts tend to avoid applying the Lanham Act in a way that would conflict with the Copyright Act, so these two sets of claims are not mutually exclusive and could both be infringed by a given website.<sup>52</sup> It is unclear whether those statements conflict with *Conference Archives, Inc. v. Sound Images, Inc.,* a case from the same year, in which the Copyright Act but "individual elements of the ... web site may receive copyright protection."<sup>53</sup>

 $5^{2}$  *Id.* at \*7.

<sup>&</sup>lt;sup>49</sup> *Id.* at 1245.

<sup>&</sup>lt;sup>50</sup> Salt Optics, Inc. v. Jand, Inc., No. SACV 10-0828 DOC (RNBx), 2010 WL 4961702 (C.D. Cal. Nov. 19, 2010).

<sup>&</sup>lt;sup>51</sup> "The copyright registrations alleged by Plaintiff are broad, referring to all 'text(s), photograph(s), selection, arrangement and compilation' of the Salt Website and all rights related to the Salt Catalogs. Plaintiff makes no attempt to identify which portions of the website or catalog it accuses Defendants of infringing. . . . Plaintiff needs to delineate more clearly which facts it alleges in support of its trade dress claim and which facts it alleges in support of its copyright claim." *Id.* at \*6.

<sup>&</sup>lt;sup>53</sup> Conference Archives, Inc. v. Sound Images, Inc., Civil No. 3:2006–76, 2010 WL 1626072 (W.D. Pa. Mar. 31, 2010).

The year after *Apple Computer v. Microsoft*, the First Circuit decided *Lotus v. Borland* and explicitly stated that navigation menus were not protectable under copyright because they were methods of operation.<sup>54</sup> Twenty years later, this seems directly applicable to the navigation a designer may create for a website. However, even though a navigation bar may seem more akin to an idea than an expression of that idea, designers have more freedom than computer programmers of earlier computers. This is because a particular interpretation may no longer be the only way to express a user's options and therefore it may have fallen back into protectable scope.

Early plaintiffs claiming website copyright infringement have struggled with the originality requirement. In *Crown Awards, Inc. v. Trophy Depot*,<sup>55</sup> a district court found that the simple structure of a webpage failed to meet the copyright originality standard. A trophy sales company used a three-frame design, a small picture of the catalogue on the upper-right side, and certain promotional language on its website. The company alleged appropriation of those design elements by a competitor that had made similar modifications to their website within just six hours of plaintiff's website update. Despite the suspicious circumstances, the court found that the plaintiff could not demonstrate a substantial likelihood of success on the merits in its copyright action because the design elements in the main page of its website were insufficient to create an original compilation of elements as required.<sup>56</sup> It is particularly startling that the plaintiff failed to earn a preliminary injunction given the circumstantial evidence that the competitor was merely copying from the plaintiff, as opposed to reaching a similar layout organically.<sup>57</sup>

More recent plaintiffs continue to struggle with the originality requirement. In 2010, the decision in *Conference Archives, Inc. v. Sound Images, Inc.* indicated that proving the originality of the look and feel of a website could be difficult, as

<sup>56</sup> Id.

<sup>&</sup>lt;sup>54</sup> Lotus v. Borland, 49 F.3d 807 (1st Cir. 1995).

<sup>&</sup>lt;sup>55</sup> Crown Awards, Inc. v. Trophy Depot, No. 2:03-CV-02448-DRH, 2003 WL 22208409 (E.D.N.Y. Sept. 3, 2003).

<sup>&</sup>lt;sup>57</sup> Note that some authors claim that this case stands for the proposition that some courts have required a "virtually identical" standard for copied websites because the knockoff website avoided a finding of infringement entirely by slightly changing the color scheme and adding some text. *See* Kevin D. Hughes & David E. Rosen, *The Marketplace, More than the Courthouse, May Determine the Ultimate Winner in Web Site Infringement Battles*, L.A. LAWYER, June 2010 at 40, 40, available at http://www.lacba.org/Files/LAL/Vol33No4/2716.pdf. This is not accurate because the case failed on originality grounds before the two websites could be compared. The idea that merely changing colors could avoid copyright infringement is inconsistent with the view of website designer Jessica Watson, who opined in her interview that just changing some colors would still constitute "too close" a copying of a website.

Internet pages often present information in a straightforward or simplistic way. Such websites "may lack highly creative, visual graphics and, instead, contain mostly functional elements used for navigating through the information on the site."<sup>58</sup> They often just "arrange facts or information" and may lack the "originality required for copyright protection."<sup>59</sup> However, this decision did not indicate where the dividing line lies between "simplistic" and protectable websites.

In *Conference Archives*, the court also pointed to the potential problem of functionality with respect to websites.<sup>60</sup> In trade dress, an element or feature is considered functional if it is "essential to the use or purpose of the product" or if it affects the cost or quality of the product;<sup>61</sup> therefore, a web design would not be functional if it could be expressed in alternate ways.<sup>62</sup> In the context of trade dress, the court pointed out that website design can in fact serve useful functions, such as providing branding or facilitating use of the website (for example, the process of making online purchases). In this way, trade dress ties back into copyright's useful article doctrine,<sup>63</sup> which is evaluated under the conceptual severability test.<sup>64</sup> As

 $^{59}$  *Id.* at \*13.

<sup>60</sup> *Id.* at \*17.

<sup>&</sup>lt;sup>58</sup> Before commenting on the court's findings, it is interesting to note that the approach to "look and feel" of a website design was well explained and creatively bifurcated: "A web site is conceptually different from traditional print media. It is useful to visualize a web site user interface not as a static presentation, but rather as a series of overlapping layers aimed at accomplishing specific tasks. At the most concrete level is the 'visual design,' which is the graphic treatment or interface elements. This layer represents the 'look' in the 'look and feel.' Below the 'visual design' is the 'interface design,' which facilitates user interaction with functionality. The information in this layer facilitates the user's understanding and interaction with the page. This would represent the 'feel' in the 'look and feel.' The 'feel' corresponds to certain dynamic navigation elements, including buttons, boxes, menus, and hyperlinks. These intangible and interactive elements contribute to the feel. The feel can also consist of the 'information design of a web site, including the ... location of common elements such as navigation elements.' According to this model, the two critical layers to consider when defining the 'look and feel' are the 'visual design' and the 'interface design.' These two elements combined 'encompass not only static elements such as particular photos, colors, borders or frames, but also interactive elements and the overall mood, style or impression of the site.' Conference Archives, Inc. v. Sound Images, Inc., Civil No. 3:2006-76, 2010 WL 1626072, at \*14 (W.D. Pa. Mar. 31, 2010)(internal citations omitted).

<sup>&</sup>lt;sup>61</sup> TrafFix Devices, Inc. v. Marketing Displays, Inc., 532 U.S. 23 (2001)

<sup>&</sup>lt;sup>62</sup> Lisa M. Byerly, Look and Feel Protection of Web Site User Interfaces: Copyright or Trade Dress?, 14 SANTA CLARA COMPUTER & HIGH TECH. L.J. 221, 260 (1998)

<sup>&</sup>lt;sup>63</sup> 17 U.S.C. § 101, "the design of a useful article, as defined in this section, shall be considered a pictorial, graphic, or sculptural work only if, and only to the extent that, such design

applied to web designs, this doctrine would require that any design decision not purely dictated by function should be protectable. Given that modern websites have a significant amount of design freedom, having come a long way since a three-column layout could be considered special, this should cover any work that a designer performs. Although the number of alternatives is concededly not infinite and the process of web design is not arbitrary, each website does not have only one possible configuration, even under "industry standards."

The clearest way to conceptualize the higher-level non-functionality of web design is through the understanding that a web designer's career is built by presenting the same information in a new way. For example, changing a website that updates news stories in a list chronologically to an "infinite scrolling" version, modifying the color scheme, and adding a large image to accompany each article.<sup>65</sup> The underlying content presented has not changed, but the "look and feel" has been altered. Instead, the functionality doctrine would only exclude those industry-standard features, such as the idea of using buttons and hyperlinks in organization and navigation, which would allow anticompetitive effects if a party could exclude others from use. Being able to present the same content in a different way demonstrates that a website's features are not purely functional.

#### 2. Hurdles to Proving Infringement

If a plaintiff could prove that she had a copyright in a protectable work, proving infringement would collapse into a fact-intensive inquiry for substantial similarity. The first step in analyzing copyright infringement, proving actual copying, is usually difficult. Plaintiffs may show it circumstantially, pointing to a defendant's access to a plaintiff's website, and then pointing to the probative similarity between the two websites to imply that only copying could lead to the convergence of appearance. The access is easy to show in a website infringement case because both parties necessarily have Internet access if they have created

incorporates pictorial, graphic, or sculptural features that can be identified separately from, and are capable of existing independently of, the utilitarian aspects of the article."

<sup>&</sup>lt;sup>64</sup> The conceptual severability test is set out in *Brandir:* "if design elements reflect a merger of aesthetic and functional considerations, the artistic aspects of a work cannot be said to be conceptually separable from the utilitarian elements. Conversely, where design elements can be identified as reflecting the designer's artistic judgment exercised independently of functional influences, conceptual separability exists." Brandir Int'l, Inc. v. Cascade Pac. Lumber Co., 834 F.2d 1142, 1145 (2d Cir. 1987).

<sup>&</sup>lt;sup>65</sup> This was a hypothetical, but plenty of real examples exist online. *See, e.g.*, Sana Bakshi, *Before & After: 6 Beautiful Website Redesigns [SlideShare]*, HUBSPOT, (Jan. 29, 2014, 11:00 AM), http://blog.hubspot.com/marketing/best-website-redesigns-list.

similar websites that the public can visit.<sup>66</sup> Proving similarity for the first step is similar to the second step of proving substantial similarity for the purposes of establishing misappropriation by the defendant. As *Blue Nile*, supra, established, analyzing the copyright infringement of nonliteral elements is a very fact-intensive inquiry.<sup>67</sup>

In the computer software case Computer Assocs. Int'l, Inc. v. Altai,<sup>68</sup> the Second Circuit adopted a three-step Abstraction-Filtration-Comparison procedure to evaluate substantial similarity between computer programs, "draw[ing] on such familiar copyright doctrines as merger, scenes a faire, and public domain."69 This decision extends nicely to websites because both computer programs and website design involve "nonliteral elements," which refer to a work's organization beyond its creative scope. Websites and computer programs are both run on computers, and the similarities continue because both require significant amounts of code or other background information in order to run effectively. One difference is that a program is purely source code, but as already demonstrated, web design is not equivalent to source code. As such, web designs may not need application of the abstraction step because the visual representation has achieved that step. In both computer programing and website design, the elements essential to functioning would not be protectable by copyright, and this protection should not extend to stock elements, either. The most important step will be systematically filtering out non-protected elements before comparing the two web designs for substantial similarities. For websites, the three categories set out in Altai hold up remarkably well: elements made for efficiency alludes to the elements that fail under the ideaexpression distinction, elements dictated by external factors would include industry standard techniques (perhaps such as using responsive design), and design elements taken from the public domain would include the use of known navigation organization and layouts. Any of these non-protected elements are thrown out, and the remaining elements are compared with the allegedly infringing program's elements to determine substantial similarity. The application of this process is supported by the court in Conference Archives, which pointed out that under the merger doctrine, if "there are only a few alternatives available for creating the

<sup>&</sup>lt;sup>66</sup> Gary Franklin & Kevin Henry, Protecting Your Company's Website: The Application of Intellectual Property to the Digital Marketplace, 37 VT. B.J. 26 (2012).

<sup>&</sup>lt;sup>67</sup> Blue Nile, Inc. v. Ice.com, Inc., 478 F. Supp. 2d 1240, 1245 (W.D. Wash. 2007).

<sup>&</sup>lt;sup>68</sup> Computer Assocs. Int'l, Inc. v. Altai, 982 F.2d 693 (2d Cir. 1992).

<sup>&</sup>lt;sup>69</sup> *Id.* at 706.

design of a Web site, such that the idea merges with the expression, copyright protection will not be extended to that expression."<sup>70</sup>

C. Designers' Views on Copying Align with the Copyright Infringement Standard

"Designers in particular are very sensitive to copying. There's always a tweet/blog post/blowup from someone in the designer community feeling like another person took their ideas. Sometimes it's blatant but a lot of times there's just common patterns that people use (headers stuck to the top of the screen, etc.)."<sup>71</sup>

The fact that the views of professional website designers on offensive design copying closely parallel ideas under copyright law supports applying copyrights to the industry. Several designers have alluded to the ideas underlying the merger doctrine and scènes à faire in relation to their work, pointing out that common layouts or ideas, such as headings located at the top of a screen, could be freely copied.<sup>72</sup>

"Too close would be a direct copy of the site's layout and design, perhaps with a couple style changes or color changes. That being said, there's nothing new under the sun. There are standard layouts for website design, so there's going to be some overlap out there, no matter how original your intention is."<sup>73</sup>

Because designers regularly take inspiration from collections of other websites, and there are common trends in the industry (such as the adoption of responsive web design), there has evolved an implicit code of ethics, in which copying of elements is permissible, but only in moderation. This closely echoes the distinction between "close copying" and trends that are found in academic papers analyzing copying in the fashion industry.<sup>74</sup> Web design and clothing design share elements that make them uniquely similar: the fast rate of innovation within the

<sup>&</sup>lt;sup>70</sup> Conference Archives, Inc. v. Sound Images, Inc., Civ. No. 3:2006-76, 2010 WL 1626072 (W.D. Pa. Mar. 31, 2010).

<sup>&</sup>lt;sup>71</sup> E-mail from Dan Croak, Chief Marketing Officer, Thoughtbot (Feb. 23, 2015) (on file with author).

<sup>&</sup>lt;sup>72</sup> E.g., *id.*; E-mail from Jessica Watson, CEO/Creative Director, JWatsonCreative (Mar. 6, 2015) (on file with author).

<sup>&</sup>lt;sup>73</sup> E-mail from Jessica Watson, CEO/Creative Director, JWatsonCreative (Mar. 6, 2015) (on file with author).

<sup>&</sup>lt;sup>74</sup> See, e.g., C. Scott Hemphill & Jeannie Suk, *The Law, Culture, and Economics of Fashion*, 61 STANFORD L. REV. 1147 (2009) (discussing whether intellectual property protections should extend to fashion).

industry is coupled with, and harnessed by, the necessity for designs to coalesce. In fashion, that effect might look like a trend emerging through differentiation and flocking, which signals purchasers to buy trending clothing.<sup>75</sup> In website design, this leads to standardization, such as how three stacked horizontal bars represent "menu," which saves space on small screens,<sup>76</sup> but which would not be obvious to a first-time user unless they had experience in other websites or applications that used the convention. Unlike fashion, web design trends change more slowly and tend to persist until they are disrupted (such as by a shift in technology to variable sized screen). Unlike clothing, websites may fall farther from the "useful articles" that are unprotected by copyright, thus website designs should have the possibility of copyright protection.

Overlapping theories of copyright protection may justify the law's support for industry norms. The utilitarian function of copyright, to "promote the progress of the sciences and useful arts,"<sup>77</sup> may seem to be achievable even without copyright protection because the internal and external motivations for making creative web designs are present even when a designer does not have the reward of the power to exclude others from copying their design. However, even in the absence of legal ownership (such as when a work is made for hire), designers still feel ownership in their work. They view their creations as part of their identity, something they labored on, and as a personhood interest in the reputation attached to the finished design as they send it into the public. This may be why web designers are so sensitive to copying.<sup>78</sup> By amplifying the moral-rights perspective of intellectual property protection and incorporating the norms of the web design community, the law would better emulate criminal law and deter undesirable conduct, such as blatant copying of website designs.<sup>79</sup>

"I have no idea what trade dress protection is... I would guess that it sounds related to trademark protection, and therefore might apply to

<sup>&</sup>lt;sup>75</sup> Kal Raustiala & Christopher Jon Sprigman, *The Piracy Paradox Revisited*, 61 STANFORD L. REV. 1201, 1205 (2009) (describing how differentiation and flocking creates trends in fashion).

<sup>&</sup>lt;sup>76</sup> Antonio, A Brief History of the Hamburger Icon, PLACEIT (Oct. 29, 2014), http://blog.placeit.net/ history-of-the-hamburger-icon/.

<sup>&</sup>lt;sup>77</sup> U.S. CONST. art. I, § 8, cl. 8.

<sup>&</sup>lt;sup>78</sup> Jeanne Fromer, *Expressive Incentives in Intellectual Property*, 98 VA. L. REV. 1745, 1768-69 (2012) (discussing why creators do not like to see their works altered).

<sup>&</sup>lt;sup>79</sup> Id. at 1783-84.

certain things you put on a website but not generally to how you design the website."<sup>80</sup>

As an aside, trade dress protection may not be the panacea that some hope can protect website design. The Lanham Act extends protection to trade dress, and therefore, like trademark, excludes elements that are functional or descriptive and lacking source identification.<sup>81</sup> Trade dress is essentially the "total image and overall appearance" of a business or product.<sup>82</sup> It may include features such as the "size, shape, color or color combinations, texture, graphics, or even particular sales techniques."<sup>83</sup>

This sounds like it applies well to a website design, in which design elements combine to produce a (hopefully) cohesive user experience; however, it fails to alert designers, is unneeded to protect consumers, and is vague enough to be overbroad. Designers are not aware of this doctrine or that it could potentially apply to their work,<sup>84</sup> negating any deterrent effect. Because trade dress seeks to protect consumers, an unambiguously stolen design applied to a website with unrelated or dissimilar content probably would not confuse users, and therefore the work would not be protected by trade dress. Finally, "mere cataloguing of a website's features is not sufficient to describe protectable trade dress."85 What remains is likely to be a navigable modern website with some general style that is probably common among many modern websites. This template of sorts should not be removed from web designers' arsenals because it would significantly inhibit the possible designs web pages could take, which is contrary to the goals of trade dress. Because of the shortcomings of trade dress protection, it is natural for copyright to be the primary intellectual property regime to protect and reinforce industry norms.

# IV

# SCENARIOS OF POTENTIAL WEB DESIGN COPYRIGHT INFRINGEMENT

Previous articles on the topic of copyright protection for website design have focused on finding the best fitting intellectual property regime to protect the "look

<sup>&</sup>lt;sup>80</sup> E-mail from John Kelleher, Web Developer, Openbay (Apr. 3, 2015) (on file with author).

<sup>&</sup>lt;sup>81</sup> 15 U.S.C. § 1125 (2012).

<sup>&</sup>lt;sup>82</sup> Two Pesos, Inc. v. Taco Cabana, Inc., 505 U.S. 763, 764 n.1 (1992) (quoting Blue Bell Bio-Medical v. Cin-Bad, Inc., 864 F.2d 1253, 1256 (5th Cir. 1989)).

<sup>&</sup>lt;sup>83</sup> *Id.* (quoting John H. Harland Co. v. Clarke Checks, Inc., 711 F.2d 966, 980 (11th Cir. 1983)).

<sup>&</sup>lt;sup>84</sup> E-mail from John Kelleher, Web Developer, Openbay (Apr. 3, 2015) (on file with author).

<sup>&</sup>lt;sup>85</sup> Lepton Labs, LLC v. Walker, 55 F. Supp. 3d 1230, 1239 (C.D. Cal. 2014).

and feel" of a website, paying special attention to trade dress following the *Blue Nile* decision.<sup>86</sup> In doing so, there has not been enough attention paid to the realities of the website design process. There are several factual situations which may lead to an accusation of website design infringement: first, and most frequent, are disputes arising from nonpayment of the designer's fees. Next, competitors or imitators may strategically copy websites. Last, there is the catchall situation in which websites may be copied for non-competitive reasons. These scenarios are treated differently by the industry, and so they should not be considered as a cohesive unit.

# A. Designer-Client Disputes

"Most people in my field do not go after other artists but after corporations who use their work without paying them."<sup>87</sup>

Copyright raises ownership and work-for-hire questions,<sup>88</sup> which largely depend on the express or implied design contract. In most web design contracts, the intellectual property rights are transferred to the client only after the designer has been paid in full.<sup>89</sup> In a typical case, such as *Smith v. Mikki More, LLC*,<sup>90</sup> a designer might bring several claims against a corporate client who failed to pay a design fee, including claims of copyright infringement, breach of contract, unjust enrichment, and quantum meruit. The court held that the designs for a line of hair care products and corresponding website were not works made for hire because the designer was largely independent of the client and not treated like an employee. Thus, the client was not considered the author of the website and did not own the copyright. Because the client did not hold the copyright, the designer did have standing to sue

<sup>&</sup>lt;sup>86</sup> See, e.g., Elizabeth Brown, Bridging the Gap: Improving Intellectual Property Protection for the Look and Feel of Websites, 3 N.Y.U. J. INTELL. PROP. & ENT. L. 310, 314 (2014); Amber R. Cohen, A Square Peg into a Round Hole: Trade Dress Protection of Websites, the Perspective of the Consumer and the Dilemma for the Courts, 3 U. MASS. L. REV. (2008); Matt Mikels, Surfing for Protection: Why Websites Should Be Categorically Excluded from Trade Dress Protection, 23 COMMLAW CONSPECTUS: J. COMM. L. & TECH. 158 (2014).

<sup>&</sup>lt;sup>87</sup> E-mail from Melinda Beck, Independent Illustrator, Animator, and Graphic Designer (Mar. 2, 2015) (on file with author).

<sup>&</sup>lt;sup>88</sup> Franklin & Henry, *supra* note 66.

<sup>&</sup>lt;sup>89</sup> There are many web design contract templates available online, some of which differentiate between the client owning the rights at the outset, the designer assigning rights only after payment (in full, as protection), or the client as licensee of the designed site. *See, e.g.*, Grace Smith, *10 Free Contract Templates for Web Designers*, MASHABLE (June 30, 2014), http://mashable.com/2014/06/30/free-contract-templates/.

<sup>&</sup>lt;sup>90</sup> Smith v. Mikki More, LLC, 59 F. Supp. 3d 595 (S.D.N.Y. 2014).

for infringing uses. The court found that even if there were an implied license for the client to use the designs, that license was revoked when the web designer was not paid in full for his work, no later than when the designer filed a complaint against his client asserting a claim for copyright infringement.<sup>91</sup>

Cases like *Smith v. Mikki More* are the simplest to analyze: as long as the design had at least a modicum of creativity, it would be copyrightable material. Because companies rarely staff web designers as employees, the designer is almost always an independent contractor.<sup>92</sup> Thus, if the client does not pay the designer, then the ownership and authorship of the copyright remains vested in the designer.<sup>93</sup> The designer then would have a relatively easy time proving copyright infringement because the client had access to the designer's work as part of the relationship before it broke down, and the client usually continues to use the identical web design even after refusing to pay the designer.

Thus, while copyright could protect web design, it may not be necessary given this context. Copyright protection in these situations would bolster the ability of a designer in seeking payment owed to him or her from a client, but they are likely to have other legal avenues, such as suing for breach of contract. Designers also have practical methods of ensuring payment, such as retaining control of the website at issue until the client pays in full.

# B. Copying by the Client's Competitors

The vast majority of web design cases are brought on multiple grounds, with IP protection such as copyright, trademark, and trade dress generally used to bolster allegations of fraud,<sup>94</sup> unfair competition, violation of nondisclosure agreements,<sup>95</sup> cybersquatting, and states' Uniform Deceptive Trade Practices Act.<sup>96</sup>

<sup>&</sup>lt;sup>91</sup> *Id.* at 610.

<sup>92</sup> The copyright office has issued Circular 9. available at http://copyright.gov/circs/circ09.pdf, interpreting the Supreme Court's decision in Community for Creative Non-Violence v. Reid, 490 U.S. 730 (1989), which addressed the definition of "work made for hire." The definition depends on 3 factors, influenced by agency law: (1) control by the employer over the work, (2) control by employer over the employee, and (3) the status and conduct of employer. UNITED STATES COPYRIGHT OFFICE, CIRCULAR NO. 9, WORKS MADE FOR HIRE (2012).

<sup>&</sup>lt;sup>93</sup> Rinaldo Del Gallo, Who Owns the Web Site?: The Ultimate Question When a Hiring Party Has a Falling-Out with the Web Site Designer, 16 J. MARSHALL J. COMPUTER & INFO. L. 857 (1998).

<sup>&</sup>lt;sup>94</sup> *E.g.*, Lepton Labs, LLC v. Walker, 55 F. Supp. 3d. 1230 (C.D. Cal. 2014).

<sup>&</sup>lt;sup>95</sup> E.g., Conference Archives, Inc. v. Sound Images, Inc., No. 3:2006-76, 2010 WL 1626072 (W.D. Pa. Mar. 31, 2010).

Copyright of web design (as opposed to copyright in images of products, for example) should be minimized in these situations because the right to exclude is being wielded against competitors instead of promoting copyright's goal of encouraging innovation.

#### 1. Copying by Competitors

In the context of competitor's websites, copyright protection may be less appropriate than a trade dress regime. *Blue Nile* supported the idea of trade dress protection for the "look and feel" of websites. In that case, a portion of Blue Nile's jewelry website allowed consumers to search for diamonds based on the cost, quality, and size of the stones. Blue Nile wanted to use copyright to prevent their competitor from providing customers with the good user experience that Blue Nile was offering on their website. There, it was understandable why the court was amenable to a trade dress claim: Blue Nile's claim was principally directed at the consumer experience rather than towards copyright's constitutional objective of incentivizing innovation.

Often, as in *Crown Awards*,<sup>97</sup> competitors may have innocent reasons for the convergence of their website designs, such as the fulfilling the same underlying functional objectives. In *Blue Nile*, the diamond search pages described are largely functional; if the case had progressed to the merits, the concept of searching for diamonds online may have been found not protectable by copyright for that reason. In competitor cases, the plaintiff will have recourse to multiple causes of actions in addition to copyright infringement, such as claims of trade dress infringement under Lanham Act, violation of various consumer protection acts, unfair competition, and unjust enrichment.<sup>98</sup> The competitor scenario should not affect the evaluation of the copyrightability of web designs because copyright is likely to be neutralized by functionality.

#### 2. Copying in Bad Faith: Counterfeiters and Phishers

There is a special subset of competitor websites that are created in bad faith. There are at least two types: the websites that are selling counterfeit goods, and phishing websites.

<sup>&</sup>lt;sup>96</sup> E.g., Coach v. The Partnerships and Unincorporated Associations Identified on Schedule "A", No. 13 C 6618, 2013 WL 5477573 (N.D. Ill. Oct. 1, 2013).

<sup>&</sup>lt;sup>97</sup> Crown Awards, Inc. v. Trophy Depot, No. 2:03–CV–02448–DRH, 2003 WL 22208409 (E.D.N.Y. Sept. 3, 2003).

<sup>&</sup>lt;sup>98</sup> Blue Nile, Inc. v. Ice.com, Inc., 478 F. Supp. 2d 1240, 1242 (W.D. Wash. 2007).

An example of a plaintiff in the anti-counterfeiting space is Coach, a luxury fashion company specializing in leather and handbags, which has been aggressively pursuing counterfeiters in court since at least 2009. As part of Coach's anti-counterfeiting program, "Operation Turnlock," they have been seizing and taking down domain names selling counterfeit goods. Once Coach possesses the domain, it posts an image notifying potential users that the website was shut down for selling counterfeit merchandise. <sup>99</sup> The websites have not been substantially similar to Coach's official website; rather, counterfeiters intended to lure consumers with low prices.<sup>100</sup> Notably, Coach did not bring trade dress or copyright infringement claims against owners of the websites, even when the counterfeit websites displayed images of the bags. The decision by Coach not to bring copyright claims is indicative that companies battling counterfeit websites would probably not bring copyright claims based on website design.

The entire webpage of one former counterfeiter now consists entirely of the following image:<sup>101</sup>



THE WEBSITE WAS SHUT DOWN FOR SELLING COUNTERFEIT MERCHANDISE. PLEASE VISIT <u>COACH.COM</u> TO PURCHASE AUTHENTIC COACH PRODUCTS, OR REGISTER AT <u>COACHFACTORY.COM</u> FOR A CHANCE TO BE INCLUDED IN OUR MEMBERSHIP ONLY SALE SITE.

<sup>&</sup>lt;sup>99</sup> For more, see Lindsay Goldwert, *Coach Awarded \$257 million in Counterfeiting Suit; Coach Can Also Seize 573 Domain Names Linked to Knocking Off the Popular Brand*, N.Y. DAILY NEWS (Nov. 5, 2012, 2:58 PM), http://www.nydailynews.com/life-style/fashion/coachawarded-257-million-counterfeiting-suit-article-1.1196902; Shishana Evans, *Coach Is Winning the War on Internet Counterfeiting (Seizing Names and Taking Assets)*, STYLEBLAZER (Nov. 3, 2012), http://styleblazer.com/98032/coach-is-winning-the-war-on-internet-counterfeitingseizing-names-and-taking-assets/.

<sup>&</sup>lt;sup>100</sup> See Kurt Bayer, Nigerian Scam Letters Intentionally Unbelievable - Study, N.Z. HERALD (June 22, 2012),

http://www.nzherald.co.nz/business/news/article.cfm?c\_id=3&objectid=10814893.

<sup>&</sup>lt;sup>101</sup> Websites that Coach defeated in Operation Turnlock, such as www.mycheapcoach.com, redirects to http://204.232.149.59/shutdown.htm which display the notification pictured above.
Though copyrightability of web design might be neutral for websites selling counterfeit items, it could be very useful in combating phishing scams. Phishing scammers closely emulate the emails and websites of reliable businesses in order to trick users into divulging passwords, which the scammers use to access their victims' bank accounts or other important personal information.<sup>102</sup> Because the malfeasors intentionally reproduce the look and feel of a website, banks and other hosts whose users fall victim may have good standing to bring trade dress and copyright cases for the use of their web designs. However, these incidents involve intentional violation of identity theft and fraud laws, which carry severe penalties,<sup>103</sup> so there is little reason to believe that the threat of copyright infringement would effectively deter scammers.

# C. "Pure" Design Copying

Sometimes, a website design will be copied without any regard for the website's content, such as the design complained about in the following images.<sup>104</sup>

Hey, You Design!	Stole M	ly Websi	ite	
Published by Matt Everson on Ma	ar 18, 2009			MY ICONS
ASTUTEO	OVERVIEW	THE FREE ADVICE BLOG	GET IN YOUCH	* * 0
		Search	<u>a</u>	AND THEIRS.
Ser a	Specialists in Digital Marketing Solutions to Creators of Digital Marketing Solutions, Sales Motor Videos, CMS Websites, and the Reach Marketing Pr	n Videos, eMussage	Search	
Th!nkCreative	Digital Marketing Solutions Sales Mo	otion Video eMessage Video Websile (	CMS REACH Marketing	
		SERION	USLY, DUDE?	

<sup>102</sup> Jennifer Lynch, Identity Theft in Cyberspace: Crime Control Methods and Their Effectiveness in Combating Phishing Attacks, 20 BERKELEY TECH. L.J. 259, 259 (2005).

<sup>&</sup>lt;sup>103</sup> See State Laws Addressing "Phishing", NAT'L CONFERENCE OF STATE LEGISLATURES (Jan. 9, 2015), http://www.ncsl.org/research/telecommunications-and-information-technology/ state-phishing-laws.aspx; N.Y. GEN. BUS. LAW § 390-b (McKinney 2006).

<sup>&</sup>lt;sup>104</sup> E.g., Matt Everson, *Hey, You Stole My Website Design!*, ASTUTEO (Mar. 18, 2009), https://www.astuteo.com/desktop/articles/stolen-website-design.

Without copyright protection for web design, website owners have no legal recourse if a design is copied by a non-competitor with whom they do not have a relationship.<sup>105</sup> This could manifest as a copying of website design elements, or as a second web designer posting images of another designer's work as their own in a portfolio.<sup>106</sup> This is the scenario that should receive copyright protection because it would protect the work of the original designer, and the deterrent effect created by the threat of copyright infringement lawsuits may incentivize the second web designer to be more creative.

Specific instances of copying are likely to be fact-intensive inquiries.<sup>107</sup> However, the indefiniteness of "how close is too close?" is dwarfed by the question of whether or not clarity on the protectability of web design would have a significant effect.

<sup>106</sup> Telephone Interview with Jared Novack, Partner, Upstatement (Feb. 4, 2015). However, Jared added that the web design community is fairly tightly knit, so a designer who passed someone else's work off as his or her own would be caught and publicly reprimanded.

<sup>&</sup>lt;sup>105</sup> As far as intellectual property protection goes, a patent is inapplicable to a given design, which is probably not patented, not useful, and even if it is novel, it is probably obvious. Design patents would likely fail to protect most designs for the same reasons. Trademark would not apply in most cases. Similarly, trade dress may not apply if the websites are unrelated because the website content would differ, so consumers would not be confused. In any event, those intellectual property regimes do not offer notice to a potential infringer at or before the point when infringement is occurring, so they are unlikely to deter copying. In this hypothetical, the websites are unrelated so fraud and unfair competition claims are inapplicable. One academic suggested that website owners might resort to private law remedies instead of IP protection, such as breach of contract for violations of the terms of service found on websites. Brown, supra note 86; Telephone Interview with Jared Novack, Partner, Upstatement (Feb. 4, 2015). For the vast majority of websites, this will be a nonstarter because although there is often a "Terms" link on every page of a website, it is not binding because the mere link fails to serve as legal notice for users unless they are required to perform some affirmative action confirming their assent, which they might only do if required to create an account, for example. (That is, clickwrap is binding but browsewrap isn't, and the terms are especially not binding if the imitating designer never sees them). See Specht v. Netscape Communications Corp., 306 F.3d 17 (2d Cir. 2002).

<sup>&</sup>lt;sup>107</sup> It is not even clear whether the pictured example from Astuteo deserves protection. Although the colors are similar, the second heading is thicker and stacked, with the search bar integrated into the heading, and only one out of three icons looks like it has been copied. Note that specific elements should be analyzed in copyright analysis, as compared to a trade dress analysis which would look at the overall "look and feel." One can only imagine the headache this would cause judges and juries.

#### 1. Copyright Ownership by Non-Designers Misaligns the Incentive to Enforce

Enforcement of infringement largely depends on ownership.<sup>108</sup> Although a designer may feel upset if a website has been duplicated or closely copied, they may have no right to pursue a copyright claim in court if the client owns the rights to the website. This situation is inversely related to the ownership question raised by designer-client disputes.

The dichotomy that splits creativity from ownership exacerbates the disincentive to protect the work. In the absence of an effect on competition, only designers are likely to be upset by close copying of the design, but once ownership is transferred, they will not have the requisite standing to bring an action against the offending website's owner. Even if the designer was upset or angered by seeing her copied web design on another website, it is unlikely that she would have standing to litigate against the imitator because the ownership would likely be in the hands of her client.

The client, who will own the site after it is paid for, is unlikely to fight to protect the design for several reasons. First, the client is less likely to discover copying because they are not in touch with the design community, as evidenced by their need to hire an outside party to develop their website. Second, even if the client finds that another website copied their design, the client will be more invested in the content that they control, and not the finished product of the website design, so the client will have little incentive to engage in expensive litigation over a design that does not have an effect on their users.

In each of the different situations discussed, copyright protection for web design is unnecessary. A designer does not need copyright to extract overdue fees from a client; in competitive situations, parties would likely have other legal recourse that renders copyright excessive and inappropriate. In scenarios not covered by those two situations, the divergence in interests between design creators who see their work used without attribution and the design owners who have standing would probably mean that web design copyright claims will not be pursued.

#### CONCLUSION

Professional website designers do not need the protection of copyright law as an incentive to innovate – the need to earn a paycheck, the internal rewards of

<sup>&</sup>lt;sup>108</sup> See Del Gallo, supra note 93.

their work, and the desire to build a good reputation are more than sufficient to motivate them. Designers have relatively little interest beyond client payment and the reputational attraction of future clients. If another website takes inspiration from a website designer's work, the designer generally feels more flattered than devastated; little or no actual harm has been done, and in fact the imitation serves to reaffirm the wisdom of the designer's choices.<sup>109</sup> Even if the designer were to be upset, it is unlikely that he or she would have standing to litigate against the imitator, as the ownership usually transfers to the client, who has less of an incentive to engage in expensive litigation over a design.

"I think the  $\mathbb{C}$  means that we've publicly stated that we are the owner of the copyright. So, if we ever went to court, we could point to the web page at the time of theft and say 'we had publicly declared that we owned this stuff, it was clear, the thief knew.""<sup>110</sup>

There are other legal avenues to protect a website design, such as laws on topics of contract or unfair competition, so perhaps the question should be whether it is worth bothering with intellectual property protection for web design at all. Sharing elements among different websites allows for faster standardization of navigation, which helps users understand how to use any individual website. It also helps businesses communicate with their consumers, and permits the faster iteration and evolution of design, which is especially important as technology changes. Limiting copyright protection for website designs is in the interest of most website owners, designers, and users because it permits and encourages borrowing of elements without necessarily condoning close copying.<sup>111</sup>

Perhaps the optimal solution, which balances the freedom to take inspiration and the desire to protect creative website design, lies in the © symbol itself, which derives significance not in legal strength, but rather in the cultural expectations of the web design community. In the absence of viable legal alternatives, the © works in a notice and deterrent role. The insignificance of the legal function of the © at the bottom websites is demonstrated by its failure to channel more parties to court when conflicts occur. This notice is a signal that self-respecting designers taking inspiration from a given site should not copy directly. For direct competitors, it is likely that a company established to sell counterfeit goods will have to hire a web

<sup>&</sup>lt;sup>109</sup> Telephone Interview with Jared Novack, Partner, Upstatement (Feb. 4, 2015).

<sup>&</sup>lt;sup>110</sup> E-mail from Dan Croak, Chief Marketing Officer, Thoughtbot (Feb. 23, 2015) (on file with author).

<sup>&</sup>lt;sup>111</sup> That is not to say that a court should conclusively hold that copyright protection does not apply to web design, because a well-publicized case could negate this notice function.

designer to create their online presence, and the notice served by the legitimate website, combined with the difficulty in synchronizing the competitor's preexisting content to a newly duplicated website, may deter designers from copying or make it more expensive for the counterfeiter to hire such a designer. Ultimately, the notice function served by marking a page as copyrighted shows an investment in the website that could deter potential copiers more effectively than an invisible trade dress protection could, despite the potentially greater legal strength of trade dress compared to copyright protection.

# NEW YORK UNIVERSITY JOURNAL OF INTELLECTUAL PROPERTY AND ENTERTAINMENT LAW

VOLUME 5	Fall 2015	NUMBER 1

# MORALS CLAUSES: PAST, PRESENT AND FUTURE

# CAROLINE EPSTEIN<sup>\*</sup>

This note argues that morals clauses remain important in talent contracts, despite the liberalization of the modern moral climate. Morals clauses, express and implied, are employed to terminate a contract when talent misbehaves. These clauses have a storied history, but are still relevant despite the considerable changes in social norms since they were first implemented. These clauses are applicable to various sectors of the entertainment industry, including motion picture, television, athletics, and advertising. Their popularity has also led to the implementation of reverse morals clauses, which protect the employee from improprieties of the employer. The outgrowth of Internet and social media has only made such clauses more important, by providing more opportunities for talent misbehavior and public embarrassment. This note finds that morals clauses remain relevant, effectual, nuanced, and flexible, well suited to adapt to a changing legal and cultural landscape.

<sup>&</sup>lt;sup>\*</sup> J.D. Candidate, New York University School of Law, 2016; B.A. English & Government, magna cum laude, Georgetown University, 2013. The author would like to thank the 2015-16 Editorial Board of the Journal of Intellectual Property & Entertainment Law, as well as Professor Day Krolik, for their invaluable assistance in the editing process.

INTRODUCTION		73
I.	HISTORY OF MORALS CLAUSES	75
II.	TYPES OF MORALS CLAUSES	78
	A. Express Morals Clauses	78
	B. Implied Morals Clauses	80
III.	APPLICATION OF MORALS CLAUSES IN ENTERTAINMENT INDUSTRIES	
	A. Morals Clauses in the Television Industry	82
	1. Television Actors	83
	2. Newscasters	85
	3. Reality Television Stars	87
	B. Morals Clauses in the Motion Picture Industry	89
	C. Morals Clauses in Sports Contracts	90
	D. Morals Clauses in Advertising	92
IV.	TALENT'S RESPONSE: REVERSE MORALS CLAUSES	
	A. History of Reverse Morals Clauses	96
V.	DRAFTING MORALS CLAUSES	
VI.	IMPLICATIONS FOR MORALS CLAUSES IN CONTEMPORARY SOCIETY	99
	A. The State of Morals Today	100
	B. Morals Clauses and Social Media	102
	1. Case Study: Twitter	103
CON	CLUSION	105

#### INTRODUCTION

Imagine you are the chief executive of a major news network. You have just signed a multi-million dollar contract with your top news anchor, Fred Fabricate. Just as you are congratulating yourself on your shrewd negotiations, you notice a troubling headline trending on Facebook, Twitter, and your Daily Beast Cheat Sheet: "Fred Fabricate's Web of Lies!" According to the articles, your golden boy has falsified details of past news reports. You call your lawyers in distress, and thankfully they have a solution. Fabricate has a morals clause in his contract with the network, and his conduct is grounds for termination of the agreement. You sigh in relief, thankful that this disaster can be resolved with minimal financial liability.

This example is adapted from the recent fallout surrounding Brian Williams and NBC News. Unfortunately for NBC, the separation was not as seamless as the hypothetical above. Williams has been a presence on the Network since 1993, and was a rare bright spot in the struggling network news industry.<sup>1</sup> Since the revelations of Williams' exaggerations of his experiences in Iraq, NBC has scrambled to perform damage control for their popular Nightly News program.<sup>2</sup> Initially, Williams issued a public apology and stepped away from the show for several days.<sup>3</sup> Then, rumors began to swirl that Williams' embellishments went beyond this singular occurrence. A six-month suspension without pay quickly followed.<sup>4</sup> Ultimately, Williams was jettisoned to MSNBC, NBC's ratings-challenged cable analogue.<sup>5</sup> Concerns remain whether Williams can "win back the trust of both his colleagues and his viewers . . . [and] abide by the normal checks and balances that exist" for those in the news industry.<sup>6</sup> The incident "set off a debate about the level of trustworthiness required from someone who explained the world to nearly 10 million people a night"; however, NBC's primary concern was "protecting the integrity of its news operation, once called the crown jewel of the company."<sup>7</sup> NBC made clear that the incident provided a right to terminate Williams pursuant to the morals clause in his personal services contract.

The Fabricate hypothetical and its real-life counterpart are merely illustrations of how a morals clause might be activated in a talent contract. A morals clause is:

A contractual provision that gives one contracting party (usually a company) the unilateral right to terminate the agreement, or take punitive action against the other party (usually an individual whose endorsement or image is sought) in the event that such other party engages in reprehensible behavior or conduct that may negatively impact his or her public image and, by association, the public image of the contracting company.<sup>8</sup>

<sup>&</sup>lt;sup>1</sup> See Emily Steel, Brian Williams Scandal Prompts Frantic Efforts at NBC to Curb Rising Damage, N.Y. TIMES (Feb. 11, 2015), http://www.nytimes.com/2015/02/12/business/media/frantic-efforts-at-nbc-to-curb-rising-damage-caused-by-brian-williams.html.

 $<sup>^{2}</sup>$  Id.

 $<sup>^{3}</sup>$  Id.

 $<sup>^{4}</sup>$  Id.

<sup>&</sup>lt;sup>5</sup> Emily Steel, *Brian Williams Return is Part of Revamp at MSNBC*, N.Y. TIMES (Sept. 21, 2015), http://www.nytimes.com/2015/09/22/business/media/williams-return-is-part-of-revamp-at-msnbc.html.

<sup>&</sup>lt;sup>6</sup> *Id.* (internal quotation marks omitted).

<sup>&</sup>lt;sup>7</sup> Steel, *supra* note 1.

<sup>&</sup>lt;sup>8</sup> Fernando M. Pinguelo & Timothy D. Cedrone, *Morals? Who Cares About Morals? An Examination of Morals Clauses in Talent Contracts and What Talent Needs to Know*, 19 SETON HALL J. SPORTS & ENT. L. 347, 351 (2009).

The television, motion picture, athletic, and advertising industries all include morals clauses in talent agreements.<sup>9</sup>

The value of a morals clause lies in the protection it provides to the contracting company.<sup>10</sup> Companies employ talent to achieve "meaning transference"; they aim to use a "celebrity's established familiarity and credibility' to make a product [or] project 'similarly familiar and credible' to consumers."<sup>11</sup> Unfortunately, meaning transference cannot be limited to only positive associations with talent; incidental transfers of negative meanings may also occur when talent misbehaves in a professional or personal context.<sup>12</sup> Businesses spend considerable sums of money to cultivate the ideal image, and negative associations can wreak havoc upon their efforts.<sup>13</sup> Because a morals clause allows the contracting company to swiftly sever its relationship with troublesome talent,<sup>14</sup> it is an excellent form of corporate protection.<sup>15</sup>

This note will argue that morals clauses remain essential and influential in entertainment contracts of all kinds, despite the considerable changes in social norms since they were first implemented, and the obstacles such changes represent. Part I will begin with a discussion of the history of morals clauses. Part II will examine the two categories of morals clauses: express and implied. Part III will address the use of morals clauses in various sectors of the entertainment industry: motion picture, television, athletics, and advertising. Part IV will discuss the outgrowth of reverse morals clauses, which protect the employee from improprieties of the employer. Part V will address drafting concerns, and Part VI will explore the implications of social media and the current moral climate.

#### T

# **HISTORY OF MORALS CLAUSES**

Despite the increasing prevalence of cases involving morals clauses in the public consciousness, the clauses themselves are not new and history provides

<sup>&</sup>lt;sup>9</sup> Noah B. Kressler, Using The Morals Clause in Talent Agreements: A Historical, Legal and Practical Guide, 29 COLUM. J.L. & ARTS 235, 239 (2005).

<sup>&</sup>lt;sup>10</sup> See Sarah D. Katz, "Reputations....A Lifetime to Build, Seconds to Destroy": Maximizing Mutually Protective Value of Morals Clauses in Talent Agreements, 20 CARDOZO J. INT'L & Сомр. L. 185, 187 (2011).

<sup>&</sup>lt;sup>11</sup> *Id.* at 190.

<sup>&</sup>lt;sup>12</sup> *Id.* at 191.

<sup>&</sup>lt;sup>13</sup> See Margaret DiBianca, Bad Boys, Bad Boys: Whatcha Gonna Do When They Work for You?, 13 No. 2 DEL. EMP. L. LETTER 1 (2008).

<sup>&</sup>lt;sup>14</sup> Katz, *supra* note 10, at 192.

<sup>&</sup>lt;sup>15</sup> See Pinguelo & Cedrone, supra note 8, at 366–67.

important context in understanding them. Morals clauses were successful and unabashed contract mechanisms used not only to sever contracts due to moral misconduct, but also to censor political activity.

The seminal case that triggered the use of morals clauses in talent contracts, was the moral impropriety of Fatty Arbuckle.<sup>16</sup> In 1921, Comedian Roscoe "Fatty" Arbuckle had just signed a three-year, three-million-dollar contract with Paramount Pictures when a female guest at his party was found severely injured in his hotel suite.<sup>17</sup> After the guest died from her injuries,<sup>18</sup> Arbuckle was arrested on rape and murder charges, turning public opinion against the previously beloved performer.<sup>19</sup> Although he was ultimately acquitted at trial, the court of public opinion had already made its damning judgment.<sup>20</sup> Universal Studios was not involved with the Arbuckle case, but the fallout from the incident inspired Universal to begin including morals clauses in all of their talent contracts.<sup>21</sup>

During the late 1940s and 1950s, movie studios more frequently used the clauses to challenge political expression than immoral conduct.<sup>22</sup> For example, morals clauses were used as grounds for dismissal of controversial talent known as the Hollywood Ten.<sup>23</sup> These ten influential actors and screenwriters were jailed and blacklisted by big movie studios for publicly denouncing the activities of the House Committee on Un-American Activities (HUAC) during its investigation of Communist influence in Hollywood at the height of the McCarthy Era.<sup>24</sup> "Fearing

<sup>19</sup> Pinguelo & Cedrone, *supra* note 8, at 354.

<sup>23</sup> *Id*.

<sup>&</sup>lt;sup>16</sup> See Pinguelo & Cedrone, supra note 8, at 354.

 $<sup>^{17}</sup>$  *Id*.

<sup>&</sup>lt;sup>18</sup> The guest, Virginia Rappe, died of a ruptured bladder. It was speculated that the 266 pound Arbuckle had crushed her bladder while sexually assaulting her. Gilbert King, *The Skinny on the Fatty Arbuckle Trial*, SMITHSONIAN MAG. (Nov. 8, 2011), http://www.smithsonianmag.com/history/the-skinny-on-the-fatty-arbuckle-trial-131228859/.

<sup>&</sup>lt;sup>20</sup> See King, supra note 18.

<sup>&</sup>lt;sup>21</sup> "As a direct result of the Arbuckle case in San Francisco, Stanchfield & Levy, attorneys for the Universal Film Manufacturing Company, have drawn up a protective clause . . . to [be] inserted in all existing and future actors', actresses', and directors' contracts with the company." Pinguelo & Cedrone, *supra* note 8, at 354; *see also Morality Clause for Films*, N.Y. TIMES, Sept. 22, 1921, at 8, *available at* http://timesmachine.nytimes.com/timesmachine/1921/09/22/ 98743776.html?pageNumber=8.

<sup>&</sup>lt;sup>22</sup> Pinguelo & Cedrone, *supra* note 8, at 355.

<sup>&</sup>lt;sup>24</sup> "During the investigative hearings, members of HUAC grilled the witnesses about their past and present associations with the Communist Party . . . [M]ost individuals either sought leniency by cooperating with investigators or cited their Fifth Amendment right against self-incrimination. . . [T]he Hollywood Ten[] not only refused to cooperate with the investigation but denounced the HUAC anti-communist hearings as an outrageous violation of their civil rights, as

widespread boycotts amid a shrinking market share of consumer leisure spending, studios used the morals clause, a customary clause in talent agreements for twentyfive years, to terminate and disassociate themselves from the scandalized Hollywood Ten."<sup>25</sup> The controversial activity and its perceived impact on the studio's image were cited as grounds for their dismissal.<sup>26</sup>

The three most notorious of the Hollywood Ten cases were litigated before the Ninth Circuit Court of Appeals between 1947 and 1957 and are referred to as the "Hollywood Ten Trilogy."<sup>27</sup> In Loew's, Inc. v. Cole,<sup>28</sup> MGM<sup>29</sup> dismissed a member of the Hollywood Ten, Lester Cole, more than a month after he testified before HUAC.<sup>30</sup> Cole sued MGM based on the suspicious delay between his testimony and firing, but the Ninth Circuit ruled that the damage dealt to the studio's image was sufficient grounds for his dismissal.<sup>31</sup> The parties eventually settled the case.<sup>32</sup> The other two cases in the trilogy, Twentieth Century-Fox Film Corp. v. Lardner<sup>33</sup> and Scott v. RKO Radio Pictures, Inc.,<sup>34</sup> relied on similar reasoning, finding in favor of the studios at the expense of Fox writer, Lardner, and RKO producer and director, Scott. In both cases, the courts relied on Cole's rationale that "the natural result of the artist's refusal to answer the committee's

<sup>26</sup> For example, RKO's letters of dismissal to Adrian Scott and Edward Dmytryk, two members of the Hollywood Ten, stated: "By your conduct . . . and by your actions, attitude, public statements and general conduct . . . you have brought yourself into disrepute with large sections of the public, have offended the community, have prejudiced this corporation as your employer and the motion picture industry in general, have lessened your capacity fully to comply with your employment agreement and have otherwise violated your employment agreement with US." THOMAS D. SELZ ET AL., ENTERTAINMENT LAW: LEGAL CONCEPTS AND BUSINESS PRACTICES § 9:107 (3d ed. 2014).

<sup>27</sup> Pinguelo & Cedrone, *supra* note 8, at 358.

<sup>28</sup> Loew's, Inc. v. Cole, 185 F.2d 641, 645 (9th Cir. 1950).

<sup>29</sup> MGM was the trade name for Loew's at the time. Pinguelo & Cedorone, *supra* note 8, at 358. <sup>30</sup> SELZ ET AL., *supra* note 26, at § 9:107.

<sup>31</sup> Pinguelo & Cedrone, *supra* note 8, at 359. The court opined, "[a] film company might well continue indefinitely the employment of an actor whose private personal immorality is known to his employer, and yet be fully justified in discharging him when he so conducts himself as to make the same misconduct notorious." Cole, 185 F.2d at 658.

<sup>32</sup> Pinguelo & Cedrone, *supra* note 8, at 359.

<sup>33</sup> Twentieth Century-Fox Film Corp. v. Lardner, 216 F.2d 844 (9th Cir. 1954).

<sup>34</sup> Scott v. RKO Radio Pictures. Inc., 240 F.2d 87 (9th Cir, 1957).

the First Amendment to the U.S. Constitution gave them the right to belong to any political organization they chose." Hollywood Ten, A+E NETWORKS (2009), http://www.history.com/ topics/cold-war/hollywood-ten.

<sup>&</sup>lt;sup>25</sup> Kressler, *supra* note 9, at 238.

questions was that the public would believe he was a Communist."<sup>35</sup> Because much of the population was opposed to communism, this was considered a violation of the express morals clause, and constituted grounds for termination.<sup>36</sup>

In recent decades, morals clauses have become even more common in talent contracts, but the changing moral landscape has posed challenges to their efficacy and legality. Nonetheless, the growth of social media, the greater publicity given to once private information, and the speed with which private information is disseminated have augmented the need for morals clauses.<sup>37</sup>

# II Types of Morals Clauses

There are two basic types of morals clauses, express and implied. Each represents different considerations on the part of the talent and the contracting company and each poses unique interpretative challenges.

# A. Express Morals Clauses

Express morals clauses are drafted as part of the employment agreement. A typical express morals clause reads as follows:

The spokesperson agrees to conduct herself with due regard to public conventions and morals, and agrees that she will not do or commit any act or thing that will tend to degrade her in society or bring her into public hatred, contempt, scorn or ridicule, or that will tend to shock, insult or offend the community or ridicule public morals or decency, or prejudice the [contracting company] in general. [Contracting company] shall have the right to terminate this Agreement if spokesperson breaches the foregoing.<sup>38</sup>

Clauses can range widely based on the talent and contracting company involved, as well as the context of the agreement.<sup>39</sup> The standard punishment for violation of a clause under New York and California Law, where the clauses are frequently invoked, is termination of the agreement.<sup>40</sup>

<sup>&</sup>lt;sup>35</sup> Kressler, *supra* note 9, at 245.

<sup>&</sup>lt;sup>36</sup> Id.

<sup>&</sup>lt;sup>37</sup> See discussion *infra* Part VI.

<sup>&</sup>lt;sup>38</sup> Sarah Osborn Hill, How to Protect Your Brand When Your Spokesperson Is Behaving Badly: Morals Clauses in Spokesperson Agreements, 57 FED. LAW 14, 14 (2010).

<sup>&</sup>lt;sup>39</sup> See Kressler, supra note 9, at 251–54.

<sup>&</sup>lt;sup>40</sup> *Id.* at 244.

New York and California case law define the scope of behavior prohibited by morals clauses, which goes beyond a mere requirement to obey the law, and includes a duty "to refrain from behavior that tends to 'shock, insult, and offend the community and public morals and decency," bring the artist into "public disrepute, contempt, scorn and ridicule," or hurt or prejudice the interests of, lower the public prestige of, or reflect unfavorably upon, the artist's employer or the industry in general."<sup>41</sup> *Loew's, Inc. v. Cole, Twentieth Century-Fox Film Corp. v. Lardner, Scott v. RKO Radio Pictures, Inc.*,<sup>42</sup> and *Nader v. ABC Television Inc.*<sup>43</sup> are the primary cases exploring morals clauses in talent contracts under contract law principles<sup>44</sup> and help illustrate how an express morals clause operates.<sup>45</sup>

Compliance with express morals clauses is difficult because their requirements can be unpredictable, a problem that is further exasperated by the tremendous consequence of violating the clause. When talent knows an express morals clause is included in their contract, it is in their interests to moderate their actions to minimize the possibility of breach. However, moderation is not always easy. For instance, the members of the Hollywood Ten probably would have risked termination based on the slightest opposition to HUAC, because of the political tenor of the times.<sup>46</sup> In *Nader*, violation of the "disrepute" trigger would be impossible to predict ex-ante because the reviewing court only found it enforceable after external review, based upon an inherently unpredictable reasonableness standard.<sup>47</sup> Therefore, this lack of predictability can present distinct challenges to talents' compliance with an express morals clause.

Because of the cost and unpredictability of morals clauses, they can be a point of contention between artists and employers in contract negotiations. Given

<sup>45</sup> Lardner, Scott, and Cole each had contracts containing a similar morals clause. Kressler, *supra* note 9, at 245.

<sup>46</sup> See Pinguelo & Cedrone, *supra* note 8, at 361-62.

<sup>47</sup> Katz, *supra* note 10, at 214. Sometimes it is unclear to talent whether they are violating a morals clause. For example, Nader had previously maintained his job despite arrests, making him believe this case would not be handled differently. *See id.* 

<sup>&</sup>lt;sup>41</sup> *Id.* at 244–45.

<sup>&</sup>lt;sup>42</sup> See discussion supra Part I.

<sup>&</sup>lt;sup>43</sup> Nader v. ABC Television Inc., 150 F. App'x. 54; see discussion infra Section III(i).

<sup>&</sup>lt;sup>44</sup> Pinguelo & Cedrone, *supra* note 8, at 358. Although some other cases have involved morals clauses in contracts, they were not resolved on these grounds. *Id.* at 358 n. 57; *see, e.g.*, Marilyn Manson, Inc. v. New Jersey Sports & Exposition Auth., 971 F. Supp. 875, 887 (D.N.J. 1977) (deciding the case primarily on First Amendment grounds); Vaughn v. Am. Basketball Assoc., 419 F. Supp. 1274, 1278-79 (S.D.N.Y. 1976) (deciding the case based on jurisdictional issues), and Revels v. Miss N.C. Pageant Org., 627 S.E.2d 280, 284 (N.C. Ct. App. 2006) (ordering the case to be resolved in arbitration).

2015]

that the current moral climate is more socially liberal than eras past,<sup>48</sup> many employers no longer require them and will delete them if necessary in a negotiation.<sup>49</sup> However, if a morals clause is necessary, there are several ways for companies to reduce the impact of a morals clause.<sup>50</sup> Lawyers can draft morals clauses to require plaintiffs to show evidence of a negative reaction before the court will find a violation.<sup>51</sup>

In addition to contractual limitations on morals clauses, state law can also impact their enforceability. New York and California provide the broadest protections for employees and do not allow employers to make decisions based on an employee's lifestyle.<sup>52</sup> In contrast, Delaware does not have any laws of this nature, meaning that unless the basis of termination is a protected characteristic such as race, religion, gender or age, the employer can be the judge of conduct warranting termination.<sup>53</sup> In all states, clauses that improperly infringe on a performer's rights, such as First Amendment rights guaranteed by the United States Constitution, are not permitted.<sup>54</sup>

Although express morals clauses remove some of the ambiguity associated with permissible employee behavior, lack of predictability as to when they might be triggered undoubtedly persists. As social norms continue to shift and evolve, this issue will only become more acute.

# B. Implied Morals Clauses

Morals clauses can also be implied from principles of common law, which impose a duty upon talent to refrain from activities that are detrimental to the employer or that might devalue the talent's performance.<sup>55</sup> Whether a morals clause should be implied is a question of fact, and requires an evaluation of the

<sup>&</sup>lt;sup>48</sup> See discussion *infra* Section VI(A).

<sup>&</sup>lt;sup>49</sup> SELZ ET AL., *supra* note 26, at § 9:107.

<sup>&</sup>lt;sup>50</sup> Id.

<sup>&</sup>lt;sup>51</sup> For example, "the words 'tend to' and 'may' [can] [be] removed, so that a demonstrably negative reaction is required before the clause can be triggered," and "most companies will agree to remove the right to terminate employment so that the only remedy is the right to remove a credit." *Id.* 

<sup>&</sup>lt;sup>52</sup> DiBianca, *supra* note 13.

<sup>&</sup>lt;sup>53</sup> *Id*.

<sup>&</sup>lt;sup>54</sup> See, e.g., Marilyn Manson, Inc. v. New Jersey Sports & Exposition Auth., 971 F. Supp. 875, 887 (D.N.J. 1977) (holding New Jersey Sports and Exhibition Authority's requirement that performers agree to a morals clause problematic from a constitutional First Amendment standpoint); see also Pinguelo & Cedrone, supra note 8, at 377.

<sup>&</sup>lt;sup>55</sup> Kressler, *supra* note 9, at 246.

circumstances of the employment and conduct at issue.<sup>56</sup> Under both New York and California law this obligation of good conduct is considered an implied morals clause and is recognized as grounds to terminate an employment agreement.<sup>57</sup> Importantly, an implied moral obligation does not arise solely in the absence of an express provision; rather, these common law duties exist alongside any provisions in an employment agreement.<sup>58</sup>

There are hurdles to establishing this implied duty. Principally, an implied morals clause requires a common law employment relationship, which is more difficult to establish in the current film industry than it was in the past for several reasons. One reason for this is the shift from the "star system," which engendered exclusive contracts between talent and studios, to the "free agency system," where actors work with many studios and function more like independent contractors than common law employees.<sup>59</sup> Another reason is that the tax-motivated system of creating "loan out" corporations challenges the employment relationship. "Loan outs" contract directly with studios to provide the personal services of the actor. This arrangement potentially destroys privity between the studio and actor by making the actor the common law employees of employment law, actors are traditionally considered common law employees, rather than independent contractors in New York and California courts.<sup>61</sup> Furthermore, both jurisdictions disregard the "loan out" when determining if there is an employment relationship.<sup>62</sup>

<sup>&</sup>lt;sup>56</sup> Id.

<sup>&</sup>lt;sup>57</sup> *Id.* at 246-47; *see, e.g.*, Drayton v. Reid, 5 Daly's Rep. 442, 444 (N.Y. Ct. Com. Pl. 1874) (holding that an actress's public scandal resulting from immoral conduct was just cause for termination of her employment contract); Scott v. RKO Radio Pictures, Inc., 240 F.2d 87, 89 (9th Cir. 1957) (finding that an employee's conduct before a congressional committee breached "an implied covenant . . . not to do anything which would prejudice or injure his employer").

<sup>&</sup>lt;sup>58</sup> Kressler, *supra* note 9, at 250; *see also* Twentieth Century-Fox Film Corp. v. Lardner, 216 F.2d 844, 850 (9th Cir. 1954) (finding that, despite the application of expressio unius, the parties intended to bolster potential remedies, not waive given common law rights, and Fox retained the right to discharge its employee for an unspecified cause).

<sup>&</sup>lt;sup>59</sup> Kressler, *supra* note 9, at 247-48.

<sup>&</sup>lt;sup>60</sup> Id. at 248; see generally Mary LaFrance, The Separate Tax Status of Loan-Out Corporations, 48 VAND. L. REV. 879 (1995) (discussing the tax considerations of loan-out corporations).

<sup>&</sup>lt;sup>61</sup> See Kressler, supra note 9, at 249-50. This is a multi-factor analysis, the most significant factor being the degree of control the employer maintains over the alleged employee. See, e.g., Makarova v. United States, 201 F.3d 110, 114 (2d Cir. 2000) (finding that a performer was an employee because her producer maintained artistic control over her performance); Johnson v. Berkofsky-Barret Prods., Inc., 260 Cal. Rptr. 1067, 1073 (Cal. Ct. App. 1989) (finding an actor

#### III

#### **APPLICATION OF MORALS CLAUSES IN ENTERTAINMENT INDUSTRIES**

Morals clauses are common in many sectors of the entertainment industry. This section will explore the application of morals clauses to the television, motion picture, sports, and advertising industries.

#### A. Morals Clauses in the Television Industry

Historically, branding has dominated the television industry. Television programming was once entirely dominated by advertisers, who bought time from a network and then created programming.<sup>63</sup> Because the sponsor held a franchise on his time period, network consent was considered pro-forma and"[m]any programs were ad agency creations, designed to fulfill specific sponsor objectives."<sup>64</sup> In the mid-1950s, numerous factors converged to bring an end to sponsor-franchised programming, and control shifted to the networks. Advertisers nonetheless provide the primary support for the medium, and when their support falters, the programming will often change to accommodate them and maintain their backing.<sup>65</sup>

Because of the historical importance of advertising in the television industry, morals clauses are essential to protect advertising relationships, the brand of productions, and company image.<sup>66</sup> "[N]etworks have adopted a conservative bias [toward programming], with no risks and no controversy that would exclude, alienate, or miss parts of the audience."<sup>67</sup> The talent, program, and sponsors are still closely related, and morals clauses are used to quickly sever the connection with talent that poses a threat to public image.<sup>68</sup>

<sup>63</sup> Kressler, *supra* note 9, at 241.

to be an employee because the production company "directed and supervised the manner in which he performed . . . ").

<sup>&</sup>lt;sup>62</sup> Kressler, *supra* note 9, at 249; *see, e.g.*, Welch v. Metro-Goldwyn-Mayer Film Co., 254 Cal. Rptr. 645, 655 (Ct. App. 1988) (finding a talent agreement that contained specific obligations between an actor and studio as forming an employment relationship), *rev'd on other grounds*, 769 P.2d 932 (Cal. 1989); *Berkofsky-Barret Prods.*, *Inc.*, 260 Cal. Rptr. at 1072 (holding that the court "need not focus on . . . [that] link in the employment chain").

<sup>&</sup>lt;sup>64</sup> WILLIAM LEISS ET AL., SOCIAL COMMUNICATION IN ADVERTISING 108-09, (2d ed. 1997) (quoting ERIK BARNOUW, THE SPONSOR: NOTES ON A MODERN POTENTATE 33 (1978)).

<sup>&</sup>lt;sup>65</sup> Kressler, *supra* note 9, at 241-42.

<sup>&</sup>lt;sup>66</sup> Pinguelo & Cedrone, *supra* note 8, at 368.

<sup>&</sup>lt;sup>67</sup> Katz, *supra* note 10, at 222.

<sup>&</sup>lt;sup>68</sup> Kressler, *supra* note 9, at 243.

Morals clauses have remained important in the television industry. The effect of these clauses has been shown in high profile terminations of television actors, newscasters, and reality television stars.

#### 1. Television Actors

The Southern District of New York addressed the issue of morals clauses in television actors' contracts in *Nader v. ABC Television.*<sup>69</sup> Michael Nader portrayed Dimitri Marick on "All my Children" from 1991 to 1999. When ABC asked Nader to return to the show in 2000, his agreement contained the network's standard "morals" clause, allowing ABC "to immediately terminate the contract if Nader engaged in conduct that 'might bring [him] into public disrepute, contempt, scandal or ridicule, or which might tend to reflect unfavorably on ABC."<sup>70</sup> During the contract Nader was arrested and charged with criminal sale of cocaine and resisting arrest. ABC immediately suspended Nader and he entered rehab.<sup>71</sup> When ABC informed Nader that they were terminating his employment contract for his violation of the morals clause, Nader filed a lawsuit challenging this decision.<sup>72</sup> The court found the morals clause valid, and held that Nader had breached it due to the media coverage of his arrest.<sup>73</sup>

Several other high profile disputes involving television stars' contractual morals clauses have dominated the news in recent years. Most prominent is that of Charlie Sheen, who WBTV fired from its television show "Two and a Half Men" after he exhibited erratic behavior and publicly ridiculed the show's executive producer Chuck Lorre.<sup>74</sup> He challenged his termination in a \$100 million lawsuit.<sup>75</sup> This conduct is a classic example of what might fall within a traditional morals clause violation; however, Sheen's contract did not have a traditionally worded

<sup>&</sup>lt;sup>69</sup> Nader v. ABC Television, 150 F. App'x 54 (2d Cir. 2005).

<sup>&</sup>lt;sup>70</sup> Morals Clause, Not Drug Addiction, Reason for Soap Star's Termination, 19 No. 4 ANDREWS EMP. LITIG. REP. 12 (2004).

<sup>&</sup>lt;sup>71</sup> Id.

<sup>&</sup>lt;sup>72</sup> James G. Murphy, *Soap Star Slips Up on Morals Clause in Contract*, 11 No. 10 N.Y. EMP. L. LETTER 7 (2004).

<sup>&</sup>lt;sup>73</sup> Kressler, *supra* note 9, at 245-46; *see also* Murphy, *supra* note 72 ("The court held, among other things, that the provisions of the morals clause weren't so vague, overly broad, and ambiguous as to render it void.").

<sup>&</sup>lt;sup>74</sup> Sheen's antics included drug abuse, hospitalization, domestic abuse, rehab, and a series of bizarre interviews and tweets. Emily Yahr, *Let's All Remember the Infamous Charlie Sheen 'Two and a Half Men' Meltdown*, WASHINGTON POST STYLE BLOG (Feb. 19, 2015), https://www.washingtonpost.com/news/style-blog/wp/2015/02/19/lets-all-remember-the-infamous-charlie-sheen-two-and-a-half-men-meltdown/

<sup>&</sup>lt;sup>75</sup> Id.

morals clause.<sup>76</sup> The "moral turpitude clause" in his contract essentially required a felony conviction before termination could be triggered, making the process more complicated.<sup>77</sup> As a result, WBTV relied upon the "force majeure" clause in the contract instead, citing Sheen's incapacitated state as grounds for his termination.<sup>78</sup> The parties eventually settled the case.<sup>79</sup> Another example of a high profile dispute occurred when Mel Gibson made anti-Semitic remarks during an arrest for drunk driving, and ABC subsequently cancelled his contract for their miniseries on the Holocaust.<sup>80</sup> A recent and ongoing example is the mounting allegations of sexual misconduct Bill Cosby is facing, and the considerable media attention it has received, which led NBC and Netflix to shelve planned collaborations with him.<sup>81</sup> Although the Cosby situation does not appear to be a case involving a morals clause, it raises interesting implications for the value and image of Cosby's legacy as America's favorite dad, Heathcliff Huxtable.<sup>82</sup>

Overall, morality clauses in television actors' contracts illustrate the contracting company's concerns with public opinion and most importantly, the talent's ability to work. Because television is dependent on a regimented production schedule and good ratings, factors that might derail filming or sour

<sup>&</sup>lt;sup>76</sup> Eriq Gardner, *Charlie Sheen's Contract: Was There Actually a Morals Clause?*, HOLLYWOOD REPORTER (Mar. 8, 2011, 9:13 AM), http://www.hollywoodreporter.com/thr-esq/charlie-sheens-contract-was-actually-165309.

<sup>&</sup>lt;sup>77</sup> Id.

<sup>&</sup>lt;sup>78</sup> Id.

<sup>&</sup>lt;sup>79</sup> Nellie Andreeva, *Charlie Sheen, Warner Bros TV & Chuck Lorre Announce Settlement*, DEADLINE HOLLYWOOD (Sept. 26, 2011, 3:12 PM), http://deadline.com/2011/09/charlie-sheen-warner-bros-tv-chuck-lorre-announce-settlement-176345/ (official statement of Warner Bros. studio) ("Warner Bros. Television, Chuck Lorre and Charlie Sheen have resolved their dispute to the parties' mutual satisfaction. The pending lawsuit and arbitration will be dismissed as to all parties. The parties have agreed to maintain confidentiality over the terms of the settlement.").

<sup>&</sup>lt;sup>80</sup> Pinguelo & Cedrone, *supra* note 8, at 349.

<sup>&</sup>lt;sup>81</sup> Dorothy Pomerantz, *Netflix and NBC Back Away from Bill Cosby*, FORBES (Nov. 19, 2014, 2:35 PM), http://www.forbes.com/sites/dorothypomerantz/2014/11/19/netflix-and-nbc-back-away-from-bill-cosby/.

<sup>&</sup>lt;sup>82</sup> See Nellie Andreeva, Bill Cosby Controversy is NBC Conundrum: Will America Accept Him Playing a Family Man Again?, DEADLINE HOLLYWOOD (Nov. 17, 2014, 8:30 AM), http://deadline.com/2014/11/bill-cosby-controversy-nbc-series-plan-1201285605/. Given that cast members of The Cosby Show were made to sign morality clauses, widely speculated to be the basis of Lisa Bonet's abrupt departure, it is possible that the publicity surrounding Cosby's misdeeds has implications for his prior body of work. See Kara Kovalchik, 10 Actors' Dramatic Departures from Popular Shows, MENTAL FLOSS (Sept. 12, 2011, 5:30 AM), http://mental floss.com/article/28735/10-actors-dramatic-departures-popular-shows.

public opinion could prove fatal.<sup>83</sup> For example, although Charlie Sheen's remarks were alarming, the public seemed to revel in the entertainment value of his outlandish public persona.<sup>84</sup> The bigger concern seemed to be Sheen's questionable lifestyle habits affecting his performance, and the producer's general desire to eliminate him from the cast.<sup>85</sup> The *Nader* case involved similar concerns, given the incapacitating nature of Nader's cocaine addiction and the bad press it engendered.<sup>86</sup> On the other hand, the cases of Mel Gibson and Bill Cosby represent different concerns because the morally offensive allegations turned public opinion against them. Cosby has suffered widespread shaming in the media, especially given his towering cultural presence beforehand.<sup>87</sup> To this day, it appears Gibson's career has yet to recover.

#### 2. Newscasters

Morals clauses have also been an issue for television newscasters. These clauses are key for news broadcasters, because newscasters must maintain credibility in order for viewers to trust them. Understandably, the public seems to have less tolerance for the controversial antics of those they trust to relay the news.

<sup>&</sup>lt;sup>83</sup> This challenge has also paved the way for the success of streaming platforms like Netflix. Todd Spangler, *TV Ratings Have Hurt Creative Side of Television, Says Netflix Content Boss Sarandos,* VARIETY (Dec. 8, 2014, 12:46 PM), http://variety.com/2014/digital/news/tv-ratings-have-hurt-creative-side-of-television-says-netflix-content-boss-sarandos-1201373908/.

<sup>&</sup>lt;sup>84</sup> Media sources still revel in the entertainment value of Sheen's "meltdown." *See, e.g.*, Yahr, *supra* note 74.

<sup>&</sup>lt;sup>85</sup> See id. Although, it does not appear his antics were unforgivable; as it was widely Sheen would return for the finale of Two and a Half Men. Lynette Rice, *It's Official: Charlie Sheen Will Have a Presence on the Two and a Half Men Finale – But There's a Catch*, PEOPLE (Feb. 6, 2015, 7:30 AM), http://www.people.com/article/charlie-sheen-two-and-a-half-men-finale.

<sup>&</sup>lt;sup>86</sup> See Katz, supra note 10, at 213-14. His argument that he had been fired based on a disability, his cocaine addiction, was rejected by the court. ANDREWS EMP. LITIG. REP. 12, supra note 70.

<sup>&</sup>lt;sup>87</sup> Cosby has lost millions of dollars, had several honorary degrees revoked, and has been accused of tarnishing the Cosby show legacy. *See e.g.*, Daniel Bukszpan, *How Bill Cosby's Fortune and Legacy Collapsed*, FORTUNE (Jul. 15, 2015, 10:18 AM), http://fortune.com/2015/07/15/bill-cosby-fortune-collapse/; Sydney Ember & Colin Moynihan, *Honorary Degrees in Unwanted Spotlight*, N.Y. TIMES, Oct. 7, 2015, at C1, *available at* http://www.nytimes.com/2015/10/07/arts/television/to-revoke-or-not-colleges-that-gave-cosby-honors-face-a-tough-

question.html?\_r=0; Nancy Dillon & Corky Siemaszko, *Actor Who Played Bill Cosby's Son on 'The Cosby Show' Says Rape Allegations Have 'Tarnished' Show's Legacy*, N.Y. DAILY NEWS (Oct. 10, 2015, 12:06 AM), http://www.nydailynews.com/entertainment/gossip/bill-cosby-questioned-alleged-1974-molestation-article-1.2391569.

Bad publicity that might undermine their credibility can wreak havoc on their popularity and the network's viewership.

For example, Alycia Lane, a popular Philadelphia anchorwoman on a CBS subsidiary, attracted considerable negative public attention when she was arrested and charged with assault in New York City.<sup>88</sup> Lane allegedly hit a female police officer and called her a homophobic slur.<sup>89</sup> Although she pled not guilty and contested the charges, the incident activated the morals clause in her contract, and CBS terminated her employment.<sup>90</sup> Lane's alleged reprehensible statements proved to be the downfall of her career as an anchorwoman.

Another incident involved Virginia Galaviz, a reporter covering the "Crime Beat" for a TV station in San Antonio who was similarly terminated based on a morals clause in her contract.<sup>91</sup> Galaviz was involved in three incidents that garnered negative media attention. She had a confrontation with a city councilman whom she was dating, she had an interaction with another woman whom her boyfriend was dating, and an altercation with her fiancée in which both of them were arrested.<sup>92</sup> Although she challenged her termination and argued that the language of her morals clause was ambiguous, the trial and appeals court both held that her conduct was covered and her termination was justified.<sup>93</sup> Understandably, an arrestee with a violent record is no longer considered a credible crime reporter.

Brian Williams, discussed in the introduction, is the most recent example of a morals clause affecting a newscaster. Williams' contract contained the standard NBC News morals clause:

If artist commits any act or becomes involved in any situation, or occurrence, which brings artist into public disrepute, contempt, scandal or ridicule, or which justifiably shocks, insults or offends a

<sup>&</sup>lt;sup>88</sup> DiBianca, *supra* note 13.

<sup>&</sup>lt;sup>89</sup> Id.

<sup>&</sup>lt;sup>90</sup> Id.

<sup>&</sup>lt;sup>91</sup> Morals Clause Forecloses Claim of San Antonio TV Reporter, 21 No. 8 TEX. EMP. L. LETTER 2 (2010).

<sup>&</sup>lt;sup>92</sup> Id.

<sup>&</sup>lt;sup>93</sup> Galaviz v. Post-Newsweek Stations, 380 F. App'x 457, 459-60 (5th Cir. 2010); see also TV Reporter Fired Due to Morals Clause Violation, Not Sex Bias, EMP. PRAC. GUIDE, 2013 WL 422203 (2009).

significant portion of the community, or if publicity is given to any such conduct . . . company shall have the right to terminate.<sup>94</sup>

NBC executive Stephen Burke and Comcast CEO Brian Roberts had the ultimate responsibility of determining whether Williams breached his duties under the clause.<sup>95</sup> The fallout surrounding Williams has led to a major loss of credibility for both himself and NBC. His trustworthiness ranking has tumbled,<sup>96</sup> and the network has turned against their former star.<sup>97</sup> NBC lost nearly 700,000 viewers in the wake of the scandal, and it is still unclear if the scandal has permanently damaged the network's image and ratings.<sup>98</sup> Due to Williams' presence as a major news anchor with his own show, it is curious that his contract would contain the same morals clause as all other NBC News employees. Because of this clause, even if producers preapproved his comments and his lies, any resultant public disrepute would still activate the clause. Given his relative youth and success, it will be interesting to see if his reputation can be rehabilitated. His ultimate fate will be telling for the implications of bad press and the loss of credibility for television newscasters.

## 3. Reality Television Stars

Finally, morals clauses have become a huge issue within the burgeoning reality TV industry. Americans delight in the misbehavior of these stars and live vicariously through their transgressions. Catering to this public demand, while censoring the more outlandish actions and outbursts of talent, has posed a legitimate challenge to TV networks. Networks have been using morals clauses in an attempt to constrain the more controversial reality stars.

<sup>&</sup>lt;sup>94</sup> Emily Smith, *Contract 'Morality Clause' Could Determine Brian Williams' Future*, N.Y. POST: PAGE SIX (Feb. 15, 2015, 10:33 PM), http://pagesix.com/2015/02/15/brian-williams-future-hangs-on-morality-clause-in-contract.

<sup>&</sup>lt;sup>95</sup> Id.

<sup>&</sup>lt;sup>96</sup> Lloyd Grove, *Peacock Panic: NBC Suspends Brian Williams for Six Months*, DAILY BEAST (Feb. 10, 2015, 5:55 AM), http://www.thedailybeast.com/articles/2015/02/10/fear-and-loathing-at-nbc.html.

<sup>&</sup>lt;sup>97</sup> It is alleged that NBC seriously considered firing Williams before his 6-month unpaid suspension. Aaron Feis, *NBC Considered Firing Brian Williams Before Suspending Him*, N.Y. POST: PAGE SIX (Feb. 12, 2015, 12:04 PM), http://pagesix.com/2015/02/12/nbc-considered-firing-brian-williams-before-suspending-him/.

<sup>&</sup>lt;sup>98</sup> "The viewer hemorrhage was magnified by the fact it happened in the winter — traditionally the most competitive season for network newscasts." Michael Starr, '*NBC Nightly News' Loses 700K Viewers After Brian Williams Scandal*, N.Y. POST (Feb. 18, 2015, 12:17 PM), http://nypost.com/2015/02/18/nbc-nightly-news-loses-700k-viewers-after-brian-williams-scandal/.

This phenomenon is aptly illustrated by the recent examples of controversies surrounding reality shows "Duck Dynasty" and "Here Comes Honey Boo Boo." Phil Robertson, the patriarch of Duck Dynasty's starring family was suspended by A&E after making anti-gay remarks in GQ magazine.<sup>99</sup> Although specifics of his agreement were not revealed, it was widely speculated that his suspension was based upon a morals clause in his contract with the network.<sup>100</sup> When A&E ended his suspension amidst fan protestation, they "saw ratings plummet nearly 50 percent from the show's heights."<sup>101</sup> Similarly, after revelations that "Here Comes Honey Boo Boo" star "Mama June" Shannon was dating Mark McDaniel, a convicted sex offender who had recently been released from prison after a decade behind bars, TLC cancelled the show.<sup>102</sup> Shannon lost payment for the early termination of the contract based upon the morality clause in her agreement with the network.<sup>103</sup> Because the other cast members did not violate their morals clauses, they still received the full benefit of their contracts.<sup>104</sup>

These examples demonstrate the ever-present risks facing reality TV producers: "handing worldwide platforms to dubious people in questionable circumstances" and hoping those people will not implode until the show's popularity is already in decline.<sup>105</sup> The consistent popularity of reality shows, built upon the misbehavior of their stars, demonstrates that the American public is far less concerned with the good morals of reality stars. However, morality clauses are

<sup>&</sup>lt;sup>99</sup> Tim Kennealley, 'Duck Dynasty' Star Phil Robertson: What Are His Legal Options?, THEWRAP (Dec. 19, 2013, 6:06 PM), http://www.thewrap.com/phil-robertson-duck-dynasty-free-speech-religious-discrimination/

<sup>&</sup>lt;sup>100</sup> *Id.*; see also Scott Collins, 'Duck Dynasty': A&E Warned Phil Robertson About Speaking Out Too Much, L.A. TIMES (Dec. 20, 2013, 4:55 PM), http://www.latimes.com/entertainment/ tv/showtracker/la-et-st-duck-dynasty-ae-warned-phil-robertson-about-speaking-out-too-much-20131220-story.html ("Phil and other family members also probably signed contracts containing 'morals clauses' in which they promised to, among other things, avoid anything that would embarrass or bring shame to A&E or the brand.").

<sup>&</sup>lt;sup>101</sup> Eric Deggans, *TLC's 'Honey Boo Boo' Cancellation Shows Dangers Of Exploitative TV*, NAT'L PUB. RADIO (Oct. 24, 2014, 4:08 PM), http://www.npr.org/2014/10/24/358567472/tlcs-honey-boo-boo-cancellation-shows-dangers-of-exploitative-tv.

<sup>102</sup> *Id*.

<sup>&</sup>lt;sup>103</sup> Ryan Arciero, 'Honey Boo Boo': Mama June Is Losing Salary, New Child Molestation Interview, EXAMINER (Nov. 1, 2014, 4:26 PM), http://www.examiner.com/article/honey-boo-boo-mama-june-is-losing-payment-child-molestation-safety-risks.

<sup>&</sup>lt;sup>104</sup> *Id.*; *see also* Karen Butler, *'Mama' June Shannon Won't Be Fully Paid for Final 'Honey Boo Boo' Season*, UNITED PRESS INT'L (Nov. 1, 2014, 2:50 PM), http://www.upi.com/ Entertainment\_News/TV/2014/11/01/Mama-June-Shannon-wont-be-fully-paid-for-final-Honey-Boo-Boo-season/6121414845458/.

<sup>&</sup>lt;sup>105</sup> Deggans, *supra* note 101.

essential to protect the network's interests in the event that a talent's antics polarize public sentiment and destroy ratings.<sup>106</sup>

#### B. Morals Clauses in the Motion Picture Industry

Movie studios also use morals clauses in contracts with talent. While the motion picture industry also faces the branding and advertising concerns of the television industry, these concerns are mitigated because motion pictures developed more independently from advertising than television did.<sup>107</sup> Although movie executives use product placement and co-marketing to "close the gap on budgets,"<sup>108</sup> advertisements are not as essential as they are to television networks. Motion pictures lack dependence on advertisers, but that does not render morals clauses irrelevant. The industry employs morals clauses to protect the value of a film's brand. Studios and their marketing partners have an economic interest in keeping a movie's brand value high, and morals clauses insure that talent does not compromise this value.<sup>109</sup> As brand value increases, actors or actresses that become a liability to maintaining this value are eliminated.<sup>110</sup> The protective value of a morals clause in the motion picture context is therefore largely dependent on the specific parties and projects at issue.<sup>111</sup> Illustrative examples include the high profile cases Loew's, Inc. v. Cole,<sup>112</sup> Twentieth Century-Fox Film Corp. v. Lardner,<sup>113</sup> and Scott v. RKO Radio Pictures, Inc.,<sup>114</sup> discussed in Part I.

Additionally, the movie industry has several noteworthy prohibitions on express morals clauses. Both the Director's Guild of America and the Writer's Guild of America expressly prohibit morals clauses in any agreements signed by guild members as a response to the removal of screen credit for violators.<sup>115</sup> Although the Screen Actors Guild does not have such a blanket prohibition, many contracts between studios and major talent do not contain a morals clause because

<sup>&</sup>lt;sup>106</sup> As illustrated by the cases summarized, morals clauses can help minimize damaging fallout for networks. *See, e.g., id.* 

<sup>&</sup>lt;sup>107</sup> Kressler, *supra* note 9, at 243.

<sup>&</sup>lt;sup>108</sup> *Id*.

<sup>&</sup>lt;sup>109</sup> *Id.* at 244.

<sup>&</sup>lt;sup>110</sup> For example, they made the third American Pie movie without troubled and headline prone actress Tara Reid. *See id.* 

<sup>&</sup>lt;sup>111</sup> Katz, *supra* note 10, at 223.

<sup>&</sup>lt;sup>112</sup> Loew's, Inc. v. Cole, 185 F.2d 641, 658 (9th Cir. 1950).

<sup>&</sup>lt;sup>113</sup> Twentieth Century-Fox Film Corp. v. Lardner, 216 F.2d 844 (9th Cir. 1954).

<sup>&</sup>lt;sup>114</sup> Scott v. RKO Radio Pictures, Inc., 240 F.2d 87 (9th Cir. 1957).

<sup>&</sup>lt;sup>115</sup> Credit is the lifeblood of writers and directors, who do not enjoy the same level of notoriety and recognition as on screen talent. SAG and AFTRA do not include such prohibitions. Katz, *supra* note 10, at 198-99.

these famous actors are influential enough to eliminate this contractual language.<sup>116</sup> As a result, a morals clause is often the first thing stricken from a contract.<sup>117</sup> However, studios may attempt other methods to coerce talent into behaving properly, such as threatening liability for monetary damages to a production or distancing a production from the studio.<sup>118</sup>

Movie studios have concerns similar to those of television networks when it comes to morals of the talents. Due to huge production budgets and the importance of ticket sales, incapacitated talent or bad press can derail the success of a movie. Therefore, studios consider morals clauses important to protecting their bottom line.

#### C. Morals Clauses in Sports Contracts

Morals clauses have also existed throughout the history of professional sports. Given the "tough guy" image cultivated by many professional athletes, morals clauses have different implications in the context of sports. The harbinger of the modern sports' morals clause was that of Babe Ruth, who had a provision in his contract requiring him to abstain from alcohol and to be in bed by 1:00 am during the baseball season.<sup>119</sup> Although his clause differed from modern morals clauses because violation did not result in termination of his contract, it did allow legal action upon breach, laying the foundation for the modern usage of morals clauses in professional sports.<sup>120</sup>

Morals clauses have become routine in national league contracts. "As of 2008, the collective bargaining agreements in the National Football League,<sup>121</sup>

<sup>&</sup>lt;sup>116</sup> For example, "[w]hen Tom Cruise entered the 'danger zone[,] with public tirades about psychiatry, Scientology, and postpartum depression,' Paramount Pictures was still obligated by contract to release Mission: Impossible III," and "when Mel Gibson was arrested for drunk driving in 2006, Disney had no right to terminate its distribution agreement for Gibson's movie *Apocalypto*." Katz, *supra* note 10, at 199-200.

<sup>&</sup>lt;sup>117</sup> *Id*.

<sup>&</sup>lt;sup>118</sup> Morgan Creek productions threatened to do as much when Lindsay Lohan misbehaved consistently on the set of Georgia Rule. *Id.* at 200 & n.84.

<sup>&</sup>lt;sup>119</sup> Porcher L. Taylor III, Fernando M. Pinguelo & Timothy D. Cedrone, *The Reverse-Morals Clause: The Unique Way to Save Talent's Reputation and Money in a New Era of Corporate Crimes and Scandals*, 28 CARDOZO ARTS & ENT. L. J. 65, 75–76 (2010).

<sup>&</sup>lt;sup>120</sup> See id.

<sup>&</sup>lt;sup>121</sup> Under § 11 of the NFL Player Contract, a football club may terminate the player contract "[i]f at any time, in the sole judgment of Club, . . . [the] Player has engaged in personal conduct reasonably judged by Club to adversely affect or reflect on Club." NATIONAL FOOTBALL LEAGUE COLLECTIVE BARGAINING AGREEMENT 2006-2012, at 252 (2006), *available at* http://www.docslide.us/documents/nfl-collective-bargaining-agreement-2006-2012.html.

National Basketball Association,<sup>122</sup> National Hockey League,<sup>123</sup> and Major League Baseball<sup>124</sup> each contained a standard player agreement that included a morals clause. <sup>125</sup> Collective bargaining agreements leave little room for negotiation between individual players and teams on the subject of morals clauses because they are negotiated for the league as a whole.<sup>126</sup>

Morals clauses in athletes' league contracts are employed by teams and leagues in an attempt to moderate the athletes' off-duty behavior. For example, the NFL suspended Adam "Pacman" Jones for the entire 2007 season after being arrested five times in less than two years. "Despite being reinstated by the NFL with clearly delineated requirements for avoiding subsequent suspensions, Jones became involved in an alcohol-related fight with a member of his security team during the 2008 season," resulting in another suspension.<sup>127</sup>

Morals clauses are not always effective in this context. In an effort to circumvent these clauses, the leagues have been lenient in their interpretation of immoral conduct. For example, when Jayson Williams was indicted on manslaughter charges in 2002, his agent argued that the morals clause in his contract did not apply because the clause required intentional moral impropriety, and there was no allegation that his conduct was intentional.<sup>128</sup> Similarly, an NBA

<sup>127</sup> *Id.* at 373.

<sup>&</sup>lt;sup>122</sup> Under § 16 of the NBA's Uniform Player Contract, a basketball team may terminate a player contract "if the Player shall . . . at any time, fail, refuse, or neglect to conform his personal conduct to standards of good citizenship, good moral character (defined here to mean not engaging in acts of moral turpitude, whether or not such acts would constitute a crime), and good sportsmanship." NATIONAL BASKETBALL ASSOCIATION COLLECTIVE BARGAINING AGREEMENT, at A-16 (2011), *available at* http://www.ipmall.info/hosted\_resources/SportsEntLaw\_Institute/NBA\_CBA(2011)\_(newversion\_reflectsJeremyLinRuling)May30\_2013.pdf.

<sup>&</sup>lt;sup>123</sup> Under the NHL Standard Player's Contract, § 2(e), each NHL player agrees "to conduct himself on and off the rink according to the highest standards of honesty, morality, fair play and sportsmanship, and to refrain from conduct detrimental to the best interest of the Club, the League or professional hockey generally." COLLECTIVE BARGAINING AGREEMENT BETWEEN NATIONAL HOCKEY LEAGUE AND NATIONAL HOCKEY LEAGUE PLAYER'S ASSOCIATION, at 245 (2005), *available at* http://www.nhl.com/cba/2005-CBA.pdf.

<sup>&</sup>lt;sup>124</sup> Under § 7(b) of the Major League Baseball Uniform Player's Contract, a baseball club "may terminate [a player contract] . . . if the Player shall at any time . . . fail, refuse or neglect to conform his personal conduct to the standards of good citizenship and good sportsmanship." 2012-2016 BASIC AGREEMENT, at 284 (2011), *available at* http://mlbplayers.mlb.com/pa/pdf/cba\_english.pdf. *Id.* at 284.

<sup>&</sup>lt;sup>125</sup> Pinguelo & Cedrone, *supra* note 8, at 364.

<sup>&</sup>lt;sup>126</sup> *Id*.

<sup>&</sup>lt;sup>128</sup> Tom Canavan, Williams Will Still Be Paid from Nets Deal, Agent Says: Morals Clause Does Not Apply to Remaining \$24 Million, RECORD (Newark), Feb. 28, 2002, at A04.

Grievance Arbitrator reinstated player Latrell Spreewell's contract with the Golden State Warriors after finding that choking one's coach does not meet the NBA's "moral turpitude" standard.<sup>129</sup> When videos surfaced of Baltimore Ravens running back Ray Rice knocking unconscious his now-wife Janay in an Atlantic City elevator, he was initially suspended indefinitely, but won his appeal and was reinstated.<sup>130</sup> After public sentiment turned against Rice, the Ravens, and the NFL for how they handled the incident, the NFL strengthened its domestic violence policy.<sup>131</sup> As these examples illustrate, although national sports leagues attempt to control their athletes' behavior through morality clauses, they have not been entirely effective.

## D. Morals Clauses in Advertising

Morals clauses are prevalent in advertising contracts between brands and spokespeople. Many companies use celebrity spokespeople to distinguish their brands from other similar products.<sup>132</sup> In choosing celebrity endorsers, advertisers emphasize "trustworthiness, values, image, reputation and publicity risk."<sup>133</sup> Studies illustrate that celebrity endorsements affect consumers favorably and commingle the public perception of the celebrity and the product .<sup>134</sup> However, this so called "meaning transference" can be a double-edged sword. When the celebrity offends the public, this negative perception can transfer from the person to the product.<sup>135</sup> "Advertisers worry that once a celebrity's image is connected with a product, it may become an albatross if it is besmirched by allegations of impropriety."<sup>136</sup> Therefore, companies often include morals clauses within endorsement contracts that allow them to protect themselves from these risks by quickly severing ties and disassociating the connection between offensive talent and products.<sup>137</sup>

A typical morals clause in an endorsement contract is similar to a standard express morals clause, but the talent can negotiate for narrower clauses.<sup>138</sup> Courts

<sup>&</sup>lt;sup>129</sup> Katz, *supra* note 10, at 208–09.

<sup>&</sup>lt;sup>130</sup> Jill Martin & Steve Almasy, *Ray Rice Wins Suspension Appeal*, CNN (Nov. 30, 2014, 12:59 AM), http://www.cnn.com/2014/11/28/us/ray-rice-reinstated/.

<sup>&</sup>lt;sup>131</sup> Josh Levs, *NFL Toughens Policy Addressing Assault and Domestic Violence*, CNN (Dec. 10, 2014, 10:45 PM), http://www.cnn.com/2014/12/10/us/nfl-conduct/index.html.

<sup>&</sup>lt;sup>132</sup> Hill, *supra* note 38, at 14.

<sup>&</sup>lt;sup>133</sup> Kressler, *supra* note 9, at 240–41.

<sup>&</sup>lt;sup>134</sup> *Id*.

<sup>&</sup>lt;sup>135</sup> *Id*.

<sup>&</sup>lt;sup>136</sup> *Id*.

<sup>&</sup>lt;sup>137</sup> *Id*.

<sup>&</sup>lt;sup>138</sup> Success will depend on the talent's leverage. Pinguelo & Cedrone, *supra* note 8, at 364.

have held that an express morals clause gives the brand owner a reasonable amount of time to determine the public perception of a clause violation and decide if they want to terminate the endorsement arrangement.<sup>139</sup> Although these clauses provide an exit opportunity for brand owners, endorsement agreements are still risky. Even if the fallout is minimized, there is potential for damage based on existing products featuring the celebrity's likeness, or the previously established association between the celebrity and the brand.<sup>140</sup>

A striking example of the drawbacks of meaning transference is illustrated by the misstep of the "creator of branding," P&G. After choosing spokeswoman Marilyn Briggs, P&G suffered fallout when an adult film she starred in was released the same week as millions of Ivory soap boxes featuring her likeness.<sup>141</sup> Numerous reviews of the film mentioned the association, and "Ivory's association with 'purity,' 'mildness' and 'home-and-hearth values' was fiercely bruised."<sup>142</sup>

Many other similar mishaps have occurred with companies and their spokespeople in recent years.<sup>143</sup> For instance, when pictures surfaced of Kate Moss doing cocaine, retailer H&M and designers Chanel and Burberry dropped her from their advertising campaigns.<sup>144</sup> Less famous spokespeople are not immune from the effects of morals clauses either. Benjamin Curtis, most famous for being the "Dell Dude," was dismissed from his contract with Dell Inc. after being arrested for marijuana possession in 2003.<sup>145</sup>

<sup>143</sup> "Other such deals include . . . Seven-Up with Flip Wilson (later arrested for trafficking cocaine), Mazda with Ben Johnson (later implicated in an Olympic steroid scandal), Gillette with Vanessa Williams (later appearing nude in Penthouse magazine), Beef Industry Council with Cybil Shepherd (later telling a journalist she did not like to eat beef), Pepsi-Cola with Michael Jackson (later canceling his world tour amid charges of child molestation and admitting that he was addicted to painkillers), Pepsi-Cola with Madonna (later releasing her controversial video for "Like a Prayer"), Pepsi-Cola with Britney Spears (later appearing in numerous magazines drinking Diet Coke), O.J. Simpson with Hertz (later arrested for two murders), and National Fluid Milk Processors Board ("Got Milk?") with Mary- Kate and Ashley Olsen (the former later checked into a treatment facility for an eating disorder)." *Id.* at 241 n.43.

<sup>144</sup> Id. at 235; see also Pinguelo & Cedrone, supra note 8, at 347; Kate Moss: Sorry I Let People Down, CNN (Sept. 22, 2005, 3:13 PM), http://www.cnn.com/2005/WORLD/ europe/09/22/kate.moss/.

<sup>145</sup> Pinguelo & Cedrone, *supra* note 8, at 372; *see also* Anthony Ramirez, "Desperate Housewives" Actor Arrested on Marijuana Charge, N.Y. TIMES, May 19, 2005, at B2, available

<sup>&</sup>lt;sup>139</sup> Hill, *supra* note 38, at 14–15.

<sup>&</sup>lt;sup>140</sup> See id. at 15.

<sup>&</sup>lt;sup>141</sup> Kressler, *supra* note 9, at 239.

<sup>&</sup>lt;sup>142</sup> *Id*.

The most prominent morals clause mishaps have been violations of athletes' endorsement contracts. OJ Simpson, who led the way for sports stars to become spokespeople, also illustrated the importance of morals clauses when he was indicted for a double murder while serving as the spokesman for Hertz, among other brands.<sup>146</sup> Since then, these clauses have become more prevalent in sports endorsement contracts. While a 1997 survey found that less than half of all sports endorsement contracts had morals clauses, by 2003 that number had grown to at least seventy-five percent.<sup>147</sup> Commentators suggest that the growing use of morals clauses in endorsement contracts is due to a combination of factors: the significant amounts of money at stake, the increasing youth of athletes and the concerns posed by an athlete's potential volatility.<sup>148</sup>

There are many other examples of athletes falling victim to morals clauses in endorsement contracts. In 1999, former Sacramento King's player Chris Webber successfully challenged the termination of his endorsement agreement with sportswear brand Fila pursuant to the morals clause.<sup>149</sup> Furthermore, after Kobe Bryant was charged with sexual assault in 2003, he lost endorsement deals with McDonald's, Nutella, Spalding, and Coke, altogether totaling \$4 million.<sup>150</sup> When

<sup>147</sup> Daniel Auerbach, Morals Clauses as Corporate Protection in Athlete Endorsement Contracts, 3 DEPAUL J. SPORTS L. & CONTEMP. PROBS. 1, 4 (2005).

<sup>148</sup> See *id.*; see also Pinguelo & Cedrone, supra note 8, at 369 (stating that in the sports industry alone, "as of May 31, 2008, Nike, Inc., owed more than \$3.8 billion in endorsement deals" and the "aggregate of sponsorship deals for the 2008 Beijing Olympics was approximately \$2.5 billion").

<sup>149</sup> Webber argued that paying an administrative fine did not constitute the conviction necessary to trigger the clause, winning a \$2.61 million judgment in arbitration. Pinguelo & Cedrone, *supra* note 8, at 377–78; *see also 'Prematurely Terminated' - Kings' Webber Wins Ruling Against Fila*, CNN/SPORTS ILLUSTRATED (July 8, 1999, 4:07 PM) https://web.archive.org/web/20040503065604/http://sportsillustrated.cnn.com/basketball/nba/ne ws/1999/07/08/webber\_fila\_ap/.

<sup>150</sup> In "the greatest marketing comeback in the history of sports marketing," less than six years later, Bryant was re-engaged by Nike and Coke's Vitaminwater, put at number 10 on the Forbes Celebrity 100 list, and his jersey outsold all others in the NBA for the second time in the three years. Bryant's success at making the public and endorsing corporations "forget" his crimes is nothing short of astounding. Taylor, Pinguelo & Cedrone, *supra* note 119, at 101–02; *see also* 

*at* http://www.nytimes.com/2005/05/19/nyregion/desperate-housewives-actor-arrested-on-marij uana-charge.html?\_r=0.

<sup>&</sup>lt;sup>146</sup> See Bruce Horovitz, Simpson Ads Opened Door to Endorsements by Athletes Marketing: Sponsors Are Leery of Controversy. Hertz is Expected to at Least Temporarily Suspend Its Use of Ex-Football Star, L.A. TIMES, June 15, 1994, at 18, available at http://articles. latimes.com/1994-06-15/news/mn-4395\_1\_sports-marketing. Morals clauses in these contracts allowed the brands to sever the relationship, but the damage was already done, specifically in the case of Hertz.

Atlanta Falcons quarterback Michael Vick was indicted on dogfighting charges in 2007, Nike, Reebok and Donruss dropped him from endorsement deals.<sup>151</sup> After the adultery scandal that surrounded Tiger Woods in 2009, he lost \$22 million in endorsement deals with companies including Gatorade, Accenture, and AT&T.<sup>152</sup>Finally, aided by a broadly-worded morals clause, Nike ended its endorsement deal with seven-time Tour de France winner, Lance Armstrong, in 2012 following mounting allegations that he abused performance enhancing drugs over the course of his career.<sup>153</sup>As all of these examples illustrate, morals clause violations in sports endorsement contracts are widespread.

Because advertisers try to appeal to a wide audience and sell products to the public, they are likely to have lower tolerance for controversies and any bad press about a spokesperson. Any desirable attention that talents' misbehavior might offer to a movie studio or television network is undercut by the risks of meaning transference: a spokesperson's controversial persona becoming irrevocably intertwined with the contracting company's image.

<sup>152</sup> Nike, Woods' biggest endorser since he went pro in 1996, stood by the golfer. Will Wei, *Tiger Woods Lost \$22 Million in Endorsements in 2010*, BUSINESS INSIDER (July 21, 2010, 1:19 PM). http://www.businessinsider.com/tiger-woods-lost-22-million-in-2010-endorsements-2010-7. Despite the fallout suffered by Woods in the wake of the scandal, he seems to have recovered, signing his biggest deal since with Hero Motorcorp in December 2014. Bob Harig, *Tiger's New Deal Biggest in Years*, ESPN (Dec. 3, 2014, 6:55 PM), http://abcnews.go.com/Sports/tigers-deal-biggest-years/story?id=27349217.

<sup>153</sup> "The termination of Armstrong as an endorser of the Nike brand was likely simplified by the inclusion of a broadly worded 'morals clause' within the cyclist's endorsement contract with Nike. Morals clauses are typically worded in such a way as to allow a brand to immediately terminate an endorsement contract, without any penalty, should the athlete endorser act in a certain manner that would tarnish the reputation of the brand." Darren Heitner, *Nike's Disassociation from Lance Armstrong Makes Nike a Stronger Brand*, FORBES (Oct. 17, 2012, 10:22 AM), http://www.forbes.com/sites/darrenheitner/2012/10/17/nikes-disassociation-from-lance-armstrong-makes-nike-a-stronger-brand/.

Darren Rovell, Bryant Is NBA's Most Marketable Again, CNBC (June 15, 2009, 9:34 AM), http://www.cnbc.com/id/31367376.

<sup>&</sup>lt;sup>151</sup> Pinguelo & Cedrone, *supra* note 8, at 375. Although Vick suffered a "catastrophic and very public fall' from sports stardom," and had to "climb a steep hill to repair his tarnished image," he has appeared to have fully recovered. *See* Taylor, Pinguelo & Cedrone, *supra* note 120, at 103. In 2011, nearly four years after they cancelled his contract, Nike signed him to a new deal. *See Nike Re-signs Vick*, N.Y. TIMES, July. 2, 2011, at D3, *available at* http://www.nytimes.com/2011/07/02/sports/football/nike-re-signs-vick.html.

# IV TALENT'S RESPONSE: REVERSE MORALS CLAUSES

Recent developments in the corporate realm have encouraged performers to seek the protection afforded by a morals clause for themselves by using reverse morals clauses. This "reciprocal contractual warranty . . . [is] intended to protect the reputation of talent from the negative, unethical, immoral, and/or criminal behavior of the endorsee-company or purchaser of talent's endorsement," and give talent, "the reciprocal right to terminate an endorsement contract based on such defined negative conduct."<sup>154</sup> Such a clause seeks to protect talent from vulnerability they would otherwise have, even if they are aware of the company's misconduct prior to any public scandal.<sup>155</sup> The history and drafting considerations of reverse morals clauses are essential to understanding their function.

# A. History of Reverse Morals Clauses

The first example of a reverse morals clause was between Pat Boone and Bill Cosby's record label, Tetragrammaton Records, in 1968.<sup>156</sup> Boone was a religious man with a clean image, and he was concerned about signing a deal with Tetragrammaton due to the provocative cover art featured on the label's new release "Two Virgins," which depicted John Lennon and Yoko Ono nude. Tetragrammaton was "sympathetic to his religious concerns and agreed to a 'reverse morals clause – Boone's contract would lapse if the record company . . . did something unseemly." Ultimately, no formal contract was drawn up.<sup>157</sup> Boone's "novel advocacy of a reverse-morals clause was most likely achievable due to his iconic stature in the entertainment world and his integrity aura in arguably a more conservative era in American history."<sup>158</sup>

Although reverse morals clauses originated with Boone in the 1960s, they have become more relevant due to the financial instability of recent years. The Enron case provides a compelling example of the need for reverse morals clauses in certain cases.<sup>159</sup> In 1999, Enron signed a \$100 million, 30-year deal, with the

<sup>&</sup>lt;sup>154</sup> Taylor, Pinguelo & Cedrone, *supra* note 119, at 66–67.

<sup>&</sup>lt;sup>155</sup> Mark Kesten, *Reputation Insurance: Why Negotiating for Moral Reciprocity Should Emerge as a Much Needed Source of Protection for the Employee*, CORNELL HUM. RESOURCE REVIEW, Nov. 23, 2012, http://www.cornellhrreview.org/reputation-insurance-why-negotiating-for-moral-reciprocity-should-emerge-as-a-much-needed-source-of-protection-for-the-employee/.

<sup>&</sup>lt;sup>156</sup> Taylor, Pinguelo & Cedrone, *supra* note 119, at 80.

<sup>&</sup>lt;sup>157</sup> See id. at 80; see also Joseph Reiner, Pat Boone, ENCYCLOPEDIA.COM (1995), http://www.encyclopedia.com/topic/Pat\_Boone.aspx - 2-1G2:3493100014-full.

<sup>&</sup>lt;sup>158</sup> Taylor, Pinguelo & Cedrone, *supra* note 119, at 80.

<sup>&</sup>lt;sup>159</sup> *Id*. at 66.

Houston Astros to name the team's new ballpark Enron Field.<sup>160</sup> Two years later, "Enron filed what was then the largest bankruptcy in American history [and] . . . [s]ince then, the word 'Enron' has been embedded in the national psyche and lexicon as being the icon of corporate avarice and the perpetuation of a Ponzi-type scheme on the public."<sup>161</sup> Because many Astros fans had lost their jobs as a result of the Enron scandal, the Astros spent the next two months trying to buy the balance of the contract for over \$2 million to remove Enron's name from the stadium.<sup>162</sup> Even though the Astros secured a new naming rights sponsor, Minute Maid, this change caused it further pecuniary damages because naming rights decrease with rebranding.<sup>163</sup>

Although Enron is a landmark example of the need for a reverse morals clause, it was certainly not the last.<sup>164</sup> In 2009, professional golfer Vijay Singh signed a five-year \$8 million endorsement deal with Stanford Financial Group, just one month before allegations that Stanford had participated in a large scale Ponzi scheme surfaced.<sup>165</sup> In 2011, Dior terminated its creative director John Galliano after he was videotaped while shouting anti-Semitic slurs, angering the public and Israeli-born Dior spokesmodel Natalie Portman.<sup>166</sup> These examples illustrate the importance of endorsees protecting themselves with reverse morals clauses.

Because reverse morals clauses are a relatively new development, there is little scholarship and no case law regarding their use, and parties who have drafted them have not released them to the public.<sup>167</sup> However, these clauses are increasingly requested by talent in their contracts, and they serve an important

<sup>165</sup> Oliver Herzfeld, *Why Jay-Z and Other Talent Should Seek Morals Clause Mutuality*, FORBES (Jan. 2, 2014, 9:24 AM), http://www.forbes.com/sites/oliverherzfeld/2014/01/02/why-jay-z-and-other-talent-should-seek-morals-clause-mutuality.

<sup>&</sup>lt;sup>160</sup> *Id.* at 68.

<sup>&</sup>lt;sup>161</sup> *Id*.

<sup>&</sup>lt;sup>162</sup> *Id.* at 68–69.

<sup>&</sup>lt;sup>163</sup> Id. at 69; see also Ric Jensen & Bryan Butler, Is Sport Becoming Too Commercialised? The Houston Astros Public Relations Crisis, 9 INT'L J. SPORTS MARKETING & SPONSORSHIP 23, 27, 29-30 (2007).

<sup>&</sup>lt;sup>164</sup> Additionally, "in less scandalous cases, where companies that bought the rights for the stadia of the Baltimore Ravens (PSI Net), St. Louis Rams (Trans-World Airlines), St. Louis Blues (Savvis), and Carolina Panthers (National Car Rental) went bankrupt or out of business, the teams were compelled to buy back the naming rights, which can be costly, as reflected in the Baltimore Ravens having to pay \$5.9 million to the bankrupt PSI Net in 2002." Taylor, Pinguelo & Cedrone, *supra* note 119, at 70.

<sup>&</sup>lt;sup>166</sup> Id.

<sup>&</sup>lt;sup>167</sup> See Taylor, Pinguelo & Cedrone, supra note 119, at 71.

function in times of financial uncertainty.<sup>168</sup> Given that talent have been subject to traditional morals clauses for so long, it seems appropriate they are afforded mutuality.

#### V

#### **DRAFTING MORALS CLAUSES**

In order to ensure that a morals clause is enforceable and inclusive, it is essential that it is properly drafted. Because of the obstacles posed by the modern and evolving moral climate, phrasing is key in both express and reverse morals clauses.

There are several important elements to an effective morals clause. First, the term of the clause must be stipulated. Some clauses only apply to future conduct, while others apply to past conduct.<sup>169</sup> Second, clauses may include acts that have the mere potential to bring harm to the employer, in addition to acts that cause actual injury.<sup>170</sup> If potential injury language is included, the fact finder must examine the facts objectively and subjectively, and stipulate termination if this future injury can be proved.<sup>171</sup> Third, a clause can protect related parties, as opposed to just the employer.<sup>172</sup> Fourth, employers should consider language that both reserves rights not expressed in the contract, and also does not give talent a right to cure.<sup>173</sup> Fifth, the scope of the language of the clause is essential; employers prefer expansive language, while talent prefers narrow language, creating a potential sticking point in contract negotiations.<sup>174</sup> Finally, and most importantly, ambiguity must be minimized to the greatest extent possible.<sup>175</sup>

Even given proper care in drafting, clauses vary widely in breadth. The major issue is the type of transgression covered by the clause. While some clauses protect against only crimes, felonies, or convictions, others are comprehensive enough to encompass any conduct breeding adverse moral sentiment. Charlie Sheen's weak "moral turpitude" clause is an example of the former and the strong

<sup>&</sup>lt;sup>168</sup> "Citigroup, the largest government bailout recipient in November 2008, precipitated a scandal of sorts, when it announced that it would charge ahead with the costliest naming-rights deal in sports history with the New York Mets, even though the financial giant had just laid off 52,000 employees and was treading water with almost \$20 billion in losses for 2008." *Id.* at 89.

<sup>&</sup>lt;sup>169</sup> Kressler, *supra* note 9, at 254.

 $<sup>^{170}</sup>$  *Id.* at 255.

<sup>&</sup>lt;sup>171</sup> *Id*.

 $<sup>^{172}</sup>_{172}$  Id.

 $<sup>^{173}</sup>_{174}$  Id.

 $<sup>^{174}</sup>$  *Id.* at 255–56.

<sup>&</sup>lt;sup>175</sup> Katz, *supra* note 10, at 212.

clause in Williams' contract represents the latter. Some agreements are so broad that even alleged violations that turn out to be false,<sup>176</sup> or conduct that "may be considered" a violation, can trigger the clause.<sup>177</sup> If a person has done something in the past that might fall into the categories of conduct included in the clause, the morals clause can be triggered if the past conduct is publicized during the contract term.<sup>178</sup> Remedies can also vary, and can include termination of the agreement and/or the right to remove or withhold credit.<sup>179</sup> Therefore, based on variations in drafting, clauses can differ greatly in their force.

The drafting process for reverse morals clauses differs slightly from that of express morals clauses. As an initial matter, talent must determine the necessity of a reverse morals clause by searching the corporate history of the contracting company.<sup>180</sup> However, not all talent has the leverage to bargain for inclusion of a reverse morals clause, and companies may resist the imposition of moral reciprocity.<sup>181</sup> In addition, drafting concerns are reversed: talent will want a broadly-phrased reverse morals clause, while the employer will desire a narrowly-phrased clause.<sup>182</sup> Finally, talent is concerned with limiting who can invoke the clause and stipulating which corporate entities are bound by it.<sup>183</sup> This will prevent contracting companies from purposely engaging in the proscribed conduct to activate the clause or escaping unscathed when entities violate the agreement.

# VI

#### IMPLICATIONS FOR MORALS CLAUSES IN CONTEMPORARY SOCIETY

The rise of the Internet and development of social media has made morals clauses more important in today's society. "Due to the proliferation of new forms of media, which has greatly increased the speed with which information is disseminated to the public, talented individuals are now significantly more

<sup>&</sup>lt;sup>176</sup> Nicolas Cage was accused of being arrested twice for drunk driving and stealing a dog, allegations that turned out to be false, but that could have triggered a morals clause. Pinguelo & Cedrone, *supra* note 8, at 353; *see also* Fox News, *Kathleen Turner Apologizes to Nicolas Cage Over Dog Theft Allegation*, Fox NEWS (Apr. 4, 2008), http://www.foxnews.com/story/2008/04/04/kathleen-turner-apologizes-to-nicolas-cage-over-dog-theft-allegation.html.

<sup>&</sup>lt;sup>177</sup> SELZ ET AL., *supra* note 26, at § 9:107.

<sup>&</sup>lt;sup>178</sup> Id.

 $<sup>^{179}</sup>$ *Id.* 

<sup>&</sup>lt;sup>180</sup> Taylor, Pinguelo, & Cedrone, *supra* note 119, at 92.

<sup>&</sup>lt;sup>181</sup> *Id.* at 99, 105.

<sup>&</sup>lt;sup>182</sup> *Id.* at 105.

<sup>&</sup>lt;sup>183</sup> *Id.* at 105-06.

scrutinized than they have been in the past."<sup>184</sup> An examination of the current moral climate and social media restrictions demonstrate this phenomenon.

# A. The State of Morals Today

What constitutes "morality" can be hard to define. "The concept of moral behavior, insofar as it relates to the law, is constantly in a state of flux as it reacts to changes in community standards and incorporating natural evolutionary advancements associated with the growth and development of a society."<sup>185</sup>

American culture has become significantly less concerned with morality. Not only has talent gotten away with misbehavior in the court of public opinion, but contracting companies have also expressed less concern about the moral missteps of talent. Employer leniency can be attributed to the recognition that in the current moral climate, nearly any publicity is good publicity.<sup>186</sup> Christian Slater, Robert Downey Jr., and Charlie Sheen are just a few stars whose misconduct has been tolerated by the industry.<sup>187</sup> Robert Downey Jr. exacted a stunning recovery, going from felon and drug addict to star of one of Hollywood's most lucrative franchises, Ironman.<sup>188</sup>

Different industries have diverse views on morality, which accounts for the discrepancies in morals clause enforcement. Although a newscaster's reputation hinges upon his or her intellectual credibility, a rap artist's depends only on his street credibility, or "street cred."<sup>189</sup> While the former entails avoiding damaging public actions and statements, the latter demands the precise opposite. In the sports and radio industries, morality of the individual athletes and on-air talent seems less of a concern. In radio, provocative statements can be the key to success. Howard

<sup>&</sup>lt;sup>184</sup> Pinguelo & Cedrone, *supra* note 8, at 367.

<sup>&</sup>lt;sup>185</sup> Id. at 352; see generally Calvin Woodard, Thoughts on the Interplay Between Morality and Law in Modern Legal Thought, 64 NOTRE DAME L. REV. 784 (1989) (examining the circumstances that have contributed to attitudes regarding the relationship between law and morality); Robert P. Burns, On the Foundations and Nature of Morality, 31 HARV. J. L. & PUB. POL'Y 7 (2008) (discussing historical observations and arguments relevant to contemporary moral debates).

<sup>&</sup>lt;sup>186</sup> SELZ ET AL., *supra* note 26, at § 9:107.

<sup>&</sup>lt;sup>187</sup> See id. Each of the stars has had highly-publicized brushes with the law involving drugs and violence. See, e.g., Actor Christian Slater Gets Jail for Drunk Driving, L.A. TIMES, Apr. 3, 1990, at B2; Charlie Sheen Hospitalized in Fair Condition After Overdose, L.A. TIMES, May 22, 1998, at B4; Drug Charges Filed Against Robert Downey Jr., L.A. TIMES, July 17, 1996, at B4.

<sup>&</sup>lt;sup>188</sup> Lacey Rose, *Will Charlie Sheen Ever Work Again?*, HOLLYWOOD REPORTER (Feb. 28, 2011, 6:38 PM), http://www.hollywoodreporter.com/news/will-charlie-sheen-ever-work-162554.

<sup>&</sup>lt;sup>189</sup> See Ronn Torossian & Karen Kelly, For Immediate Release: Shape Minds, Build Brands, and Deliver Results with Game-Changing Public Relations 219 (2011).

Stern made a career out of his outlandish radio behavior, until the FCC imposed formidable fines on the "shock jock," and Stern announced he would leave traditional radio for Sirius Satellite Radio, a medium free of FCC regulation.<sup>190</sup> In sports, being violent is occasionally part of the job description, but athletes struggle to sequester this behavior to the playing field. Players' violent off-field antics have resulted in public criticism of the NFL in recent years. Because each industry has unique concerns, each has a different conception of morality.

Despite the diverse views on morality across industries, public opinion has placed more emphasis on comments than actions. Comments that are homophobic, racist, anti-Semitic, or sympathetic to terrorism have elicited substantial public backlash. For instance, after admitting past use of racial slurs in a deposition, The Food Network dropped celebrity chef Paula Deen and a slew of sponsors.<sup>191</sup> Deen's image has yet to recover from the incident, and she has recently incited controversy again for a racist social media post.<sup>192</sup> Meanwhile, offensive public actions seem to have far less impact. Lindsay Lohan, notorious for her drug use, car accidents, and arrests for driving under the influence, cashed in on her controversial image by advertising car insurance during the Superbowl.<sup>193</sup> Similarly, the public has been largely ambivalent toward Florida State Quarterback Jameis Winston, despite public rape allegations against him. In fact, most of the news surrounding the NFL hopeful centers upon the "risk" of drafting him, rather than disapproval of his actions.<sup>194</sup>

<sup>&</sup>lt;sup>190</sup> Sheila Marikar, *Howard Stern's Five Most Outrageous Offenses*, ABC NEWS (May 14, 2012), http://www.abcnews.go.com/Entertainment/howard-sterns-outrageous-offenses/story?id= 16327309.

<sup>&</sup>lt;sup>191</sup> "The Food Network, owned by Scripps Networks Interactive (SNI), let Deen's contract run out, and she was dumped by a slew of sponsors and business partners, including pork producer Smithfield Foods, the casino chain Caesars (CZR), the diabetes drugmaker Novo Nordisk (NVO) and retailers Wal-Mart (WMT), Target (TGT), Home Depot (HD), Sears (SHLD) and JCPenney (JCP)." Aaron Smith, *Paula Deen's Coming Back*, CNN MONEY (Feb. 12, 2014, 3:13PM) http://money.cnn.com/2014/02/12/news/companies/paula-deen-najafi/.

<sup>&</sup>lt;sup>192</sup> Deen posted a photo of her son in brownface. She later blamed her "Social Media Manager" who was fired after the incident. Emanuella Grinberg, *Paula Deen Under Fire for Photo of Son in Brownface*, CNN (July 7, 2015, 4:05 PM), http://www.cnn.com/2015/07/07/living/paula-deen-brownface-feat/.

<sup>&</sup>lt;sup>193</sup> Lindsay Lohan -- I'm the Queen of Car Crashes ... So I'm Selling Insurance!, TMZ (Jan. 18, 2015, 12:55 AM), http://www.tmz.com/2015/01/18/lindsay-lohan-esurance-commercial/ - ixzz3QnNcOAQd.

<sup>&</sup>lt;sup>194</sup> E.g., Bill Pennington, *The Tricky Calculus of Picking Jameis Winston*, NY TIMES, Jan. 30, 2015, at D1, available at http://www.nytimes.com/2015/01/31/sports/football/no-1-debate-in-tampa-whether-to-draft-jameis-winston.html?\_r=0.

#### **MORALS CLAUSES**

#### B. Morals Clauses and Social Media

There are a growing number of contractual provisions aimed at promoting confidentiality and prohibiting disparaging remarks on social media platforms, which might fall within the purview of a morals clause. "The virtually instantaneous exposure and, in some cases, embarrassment that can accompany a celebrity's missteps thanks to social networking tools is yet another reason to address and manage that individual's activity through a contractual provision."<sup>195</sup>

Due to this trend, social media restrictions will likely be an increasing presence in morals clauses.<sup>196</sup> For example, ABC guidelines encourage "tweeting", but list seven specific prohibited practices surrounding this activity, including "making disparaging remarks about the show."<sup>197</sup> These restrictions and guidelines are not intended to ban social media, but instead to make talent more mindful of their expression and statements on these platforms.<sup>198</sup> The proliferation of such clauses, and the important role they play in a technologically advancing society has led an industry expert to say, "[e]very celebrity endorsement contract of any kind in the future must have a Twitter/Social Media clause . . . I will be so bold as to state that the failure to not have such a clause would be tantamount to endorsement contract drafting malpractice."<sup>199</sup>

The relationship between morals clauses and social media is complex.<sup>200</sup> First of all, "[e]mployer restrictions on off-duty speech and conduct are troubling in that they squelch expression and individual autonomy and may compromise the employee's right to a private life, especially when restrictions are unilaterally imposed after employment commences."<sup>201</sup> Although there has not been an obvious backlash against these restrictions yet, this is likely due to their novelty. Furthermore, clauses limiting social media expression are in direct tension with

<sup>&</sup>lt;sup>195</sup> John G. Browning, *The Tweet Smell of Success: Social Media Clauses in Sports & Entertainment Contracts*, 22 TEX. ENT. AND SPORTS LAW J. 5, 6 (2013).

<sup>&</sup>lt;sup>196</sup> See Taylor, Pinguelo & Cedrone, *supra* note 119, at 111.

<sup>&</sup>lt;sup>197</sup> Andrew Wallenstein & Matthew Belloni, *Hey, Showbiz Folks: Check Your Contract Before Your Next Tweet,* HOLLYWOOD REPORTER (Oct. 15, 2009, 1:19 PM), http://www.reporter. blogs.com/thresq/2009/10/check-your-contract-before-your-next-tweet.html.

<sup>&</sup>lt;sup>198</sup> *Id*.

<sup>&</sup>lt;sup>199</sup> Browning, *supra* note 195, at 20–21.

<sup>&</sup>lt;sup>200</sup> Katz, *supra* note 10, at 226.

<sup>&</sup>lt;sup>201</sup> Patricia Sánchez Abril, Avner Levin & Alissa Del Riego, *Blurred Boundaries: Social Media Privacy and the Twenty-First-Century Employee*, 49 AM. BUS. L. J. 63, 90 (2012) ("Some organizations have restricted their employees' off-duty use of social networking sites or have prohibited using them altogether. For example, the National Football League has prohibited players' access to social media immediately before, during, and after football games.").
another studio practice, leveraging the social media popularity of talent to promote a project.<sup>202</sup> In fact, social media postings have replaced traditional advertising in some talent contract negotiations.<sup>203</sup>

Ensuring that the parties specify what mediums of communication are covered is essential to promoting the proper operation of morals clauses without unfairly trammeling talents' freedom of expression.<sup>204</sup> As social media becomes more prominent and varied in today's society, platforms such as Facebook, Twitter, and Instagram have significantly expanded the scope of what parties must address in talent contracts. Celebrities use these mediums to express themselves, and it is unlikely that they would respond favorably to contractual social media censorship. However, these platforms offer increased, direct contact between celebrities and the public, and create more opportunities for talent to get into trouble.

An offensive post on Instagram takes only moments to complete but could take years to live down. James Franco learned this the hard way when he faced public embarrassment after trying to seduce an underage girl on Instagram.<sup>205</sup> This contrasts starkly with times past, when contact talent had with the public was limited to pre-scripted television and radio appearances or transient personal encounters. Restrictions seem necessary given the dangers these platforms engender; a misstep on any one of them could mean the instantaneous destruction of an entire project, employment relationship, or public persona if the conduct rouses the public enough.

#### 1. Case Study: Twitter

Twitter provides a useful case study of the risks of social media usage and the value of such restrictive clauses. Twitter has become a popular way for celebrities to communicate with fans, but the instantaneous nature of the site begets

<sup>&</sup>lt;sup>202</sup> For example, Rihanna was cast in "Battleship" partially because of the exposure she offered through her extensive fan base on social media, including 26 million twitter followers. Browning, *supra* note 195, at 21; *see also* Wallenstein & Belloni, *supra* note 197.

<sup>&</sup>lt;sup>203</sup> Peter Hess, the co-head of commercial endorsements for Creative Artists Agency said, "We're starting to have in negotiations, 'We'd like to include X number of tweets or Facebook postings.' It's similar to traditional advertising – instead of two commercials, now we want two tweets." Browning, *supra* note 195, at 21.

<sup>&</sup>lt;sup>204</sup> See Katz, supra note 13, at 225.

<sup>&</sup>lt;sup>205</sup> Jay Hathaway, James Franco Apparently Tried to Hook Up with a Teenager on Instagram, GAWKER (Apr. 3, 2014, 9:29 AM), http://gawker.com/james-franco-tried-to-hook-up-with-a-17-year-old-on-ins-1557491436.

significant risks of misuse and reputational damage.<sup>206</sup> "Armed with Twitter, talent are just possibly one tweet away from scandal or a morals clause violation."<sup>207</sup>

There are numerous examples of the destructive effects of Twitter use, specifically with regard to its potential to terminate talents' endorsement deals. For example, after the voice of the AFLAC duck, Gilbert Gottfried, tweeted insensitive jokes about a tsunami in Japan, the insurance company terminated his contract.<sup>208</sup> Olympic swimmer Stephanie Rice was dropped from her endorsement deal with Jaguar after she tweeted a homophobic comment.<sup>209</sup> Hanesbrands terminated Rashard Mendenhall, Steelers running back and Champion brands spokesman, for violating his morals clause after he tweeted controversial commentary relating to 9/11.<sup>210</sup> Mendenhall brought a \$1 million suit against Hanesbrands for breach of the implied covenant of good faith and fair dealing.<sup>211</sup> "Mendenhall's attorneys began building what will henceforth be known here as the 'Charlie Sheen defense': pointing to another celebrity who has said outrageous things and putting the onus on the other party to explain why one endorsement deal was terminated and another wasn't."212 Although the suit survived a motion to dismiss, the parties eventually settled.<sup>213</sup> Thus, Twitter presents a compelling example of the destructive effects of social media upon morals clauses.

<sup>&</sup>lt;sup>206</sup> Courtney Love, Alice Hoffman, Mark Cuban, and Michael Beasley are among the many celebrities who have experienced backlash from comments made on the social media site. Taylor, Pinguelo & Cedrone, *supra* note 119, at 109–10.

<sup>&</sup>lt;sup>207</sup> *Id.* at 110–11.

<sup>&</sup>lt;sup>208</sup> Browning, *supra* note 195, at 20.

<sup>&</sup>lt;sup>209</sup> Id.

<sup>&</sup>lt;sup>210</sup> Mendenhall tweeted about Osama Bin Laden, "[w]hat kind of person celebrates death? It's amazing how people can HATE a man they never even heard speak. We've only heard one side . . . "And of the 9/11 attacks, the player tweeted, "[w]e'll never know what really happened. I just have a hard time believing a plane could take a skyscraper down demolition style." Browning, *supra* note 195, at 20. Hanesbrands claimed that these tweets fell within the purview of the morals clause within Mendenhall's endorsement agreement, because they "concluded that his actions meet the standards set forth in the Agreement of bringing Mr. Mendenhall 'into public disrepute, contempt scandal or ridicule, or tending to shock, insult or offend a majority of the consuming public or any protected class or group thereof . . . . "" Because of these actions, he was considered no longer an effective spokesperson for Champion. Katz, *supra* note 10, at 227.

<sup>&</sup>lt;sup>211</sup> Id.; see also Mendenhall v. Hanesbrands, Inc., 856 F. Supp. 2d 717 (M.D. N.C. 2012).

<sup>&</sup>lt;sup>212</sup> Eriq Gardner, Settlement Reached in Lawsuit Filed by NFL Star Fired as Pitchman for 9/11 Conspiracy Tweets, HOLLYWOOD REPORTER (Jan. 15, 2013, 3:20 PM), http://www. hollywoodreporter.com/thr-esq/settlement-reached-lawsuit-filed-by-412750.

<sup>&</sup>lt;sup>213</sup> Id.; Marc Edelman, Rashard Mendenhall Settles Lawsuit with Hanesbrands over Morals Clause, FORBES (Jan. 17, 2013, 12:02 PM), http://www.forbes.com/sites/marcedelman/2013/01/17/rashard-mendenhall-settles-lawsuit-with-hanesbrands-over-morals-clause/.

#### CONCLUSION

You breathe a sigh of relief. Fred Fabricate has been released from his contract based on his morals clause violation. Unfortunately, your enthusiasm is short lived; Fabricate's replacement is not as popular, and the network experiences marked drops in ratings. Were you too hasty in your decision to invoke the morals clause? Is this decline in popularity due to the bad press from the incident, or does America just want their favorite anchor back? You have minimized your financial liability, but at what expense? Will Fabricate's image ever recover, and if so, will you lose out on the profit?

This hypothetical presents many of the same concerns surrounding morals clauses today. Companies use the clauses to temper the link between themselves and talent, controlling their unpredictable behavior and protecting themselves from their potential missteps. Nonetheless, it is often unclear when these clauses have been triggered, when they should be invoked, and the potential repercussions that may occur.

Diverse conceptions of morality and opposition to inhibiting freedom of expression present distinct obstacles to morals clauses today. Although morals clauses have played an important role in motion picture, television, athletics, and advertising contracts for over a century, it is unclear what effect they will have in the future.

On the one hand, morals clauses may lose their relevance entirely due to the increasingly lax moral climate. Under this view, morals matter far less, and there is no sense in attempting to censor them. An initial criticism of this argument is that although cosmopolitan regions of the country have relaxed views on morality, there are still many sectors of the population with a strong religious consciousness and correspondingly rigorous conception of moral conduct. Because these individuals also form a captive audience for the industries in question, their attitudes must also be considered by both courts and employers in enforcing morals clauses. The deeply imbedded cultural opposition to stigmatized concepts of racism, homophobia, anti-Semitism, terrorism and violence also contradict this trend.

In the alternative, morals clauses may only become more important as social media and the speed with which information is disseminated increases public awareness of and contact with talent. The consistent scandal surrounding celebrity expression on social media and the upswing of contractual clauses addressing these issues evidences this inclination. Despite the merits of the argument that the morals clause is in decline, the clauses remain relevant, effectual, nuanced, and flexible. Even in the case of Brian Williams, a context in which a morals clause is not the most obvious recourse, the provision has demonstrated its pervasive power. Given the proliferation of social media and the backlash of talent through reverse morals clauses, this dynamic area of contract law shows no sign of fading into obscurity.

# NEW YORK UNIVERSITY JOURNAL OF INTELLECTUAL PROPERTY AND ENTERTAINMENT LAW

VOLUME 5	Fall 2015	NUMBER 1

# FOREWORD

# THE INTERNATIONAL EVOLUTION OF INTELLECTUAL PROPERTY RIGHTS

**RICHARD A. EPSTEIN**<sup>\*</sup>

Two of the papers included in this issue of the *NYU Journal of Intellectual Property and Entertainment Law* illustrate, in the context of intellectual property law, a tension that exists across all areas of international law. To what extent should the rules of different countries be harmonized? Or, alternatively, to what extent should these laws be adapted to the local conditions within any given country? A moment's reflection should indicate why there is no pat answer to this challenge in any area of substantive law.

On the one side, a stout commitment to uniformity of law facilitates the cross-border transactions that are the life-blood of international trade and cooperation. The ability of private parties and government officials to know that the rules of the game are constant in all arenas should lead to a massive simplification of the overall operation of the international legal order. The gains from such simplification should be substantial even in transactions requiring harmonization between only two legal systems. But with intellectual property, nothing is more common than for key transactions to have a global reach that could

<sup>&</sup>lt;sup>\*</sup> Laurence A. Tisch Professor of Law, The New York University School of Law, the Peter and Kirsten Bedford Senior Fellow, The Hoover Institution and the James Parker Hall Distinguished Service Professor of Law Emeritus and Senior Lecturer, the University of Chicago School of Law. My thanks to Craig Fligor and Manuel Valle, the University of Chicago Law School, Class of 2017 for their valuable research assistance.

easily require cooperation among dozens of nations. The greater the variation in local laws, the harder it becomes to do business in multiple jurisdictions simultaneously.

To be sure, this proposition is subject to one key qualification. It should be taken as a matter of course that routine ministerial functions such as recordation will require that different formalities be observed in first one state and then the other. But so long as these requirements do not actually conflict, small differences on ministerial matters will not retard international transactions any more than they block interstate commerce within the United States or, indeed, within any nation governed by federalist principles.

The stakes are considerably higher, however, with rules governing the substantive legality of particular transactions. For example, consider the intersection between antitrust and intellectual property law. In this context, the tension is omnipresent because the central purpose of all intellectual property rights (IPRs) is to create a limited monopoly as a spur to innovation within a given area. Yet difficulties arise when the holders of IPR seek to attach conditions to the use of their property, or to cross-license them, or in the patent context to incorporate them as part of standard essential patents.<sup>1</sup> On this substantive front, we have already witnessed serious difficulties when the European Union applies more stringent standards to mergers than does the United States.<sup>2</sup> In this context, because merger approval is needed in each and every country where the various

<sup>&</sup>lt;sup>1</sup> The literature on these topics is vast and is divided between those who think that market ingenuity is sufficient to respond to these risks and those who think that the holdout question is serious and needs explicit legislative or judicial intervention. For an exhaustive review of in support of the former view, see Jonathan M. Barnett, *The Anti-Commons Revisited*, 29 HARVARD J.L. & TECH. 127 (2015); for the most well known statements on the other side, see, for example, MICHAEL A. HELLER, THE GRIDLOCK ECONOMY: HOW TOO MUCH OWNERSHIP WRECKS MARKETS, STOPS INNOVATION, AND COSTS LIVES (2008); Michael A. Heller & Rebecca S. Eisenberg, *Can Patents Deter Innovation? The Anticommons in Biomedical Research*, 280 SCIENCE 698 (1998). For my critique, Richard A. Epstein, *Heller's Gridlock Economy In Perspective: Why There is Too Little, Not Too Much Private Property*, 53 ARIZ. L. REV. 51 (2011); Richard A. Epstein & Bruce Kuhlik, *Is There a Biomedical Anticommons?*, 27 REGULATION 54 (2004).

<sup>&</sup>lt;sup>2</sup> For one recent discussion, see, for example, EUR. PARLIAMENTARY RES. SERVICES, BRIEFING 27/03/2014, EU AND US COMPETITION POLICIES: SIMILAR OBJECTIVES, DIFFERENT APPROACHES (2014), http://www.europarl.europa.eu/RegData/bibliotheque/briefing/2014/140 779/LDM\_BRI(2014)140779\_REV1\_EN.pdf. For an account of the EU rejection of the 2001 GE/Honeywell merger, see Donna E. Patterson & Carl Shapiro, *Transatlantic Divergence in GE/Honeywell: Causes and Lessons*, ANTITRUST, Fall 2001, at 18, http://faculty.haas. berkeley.edu/shapiro/divergence.pdf.

parties plan to do business, the case for uniformity becomes quite powerful indeed. Yet deep substantive disagreements block that needed convergence, which accordingly gives the bargaining advantage to the nation that wishes to impose the most stringent standard, for it alone has a blocking position on any proposed transaction.

Yet on the other side, there are strong forces that push nations to wish to develop their own distinctive regimes for different forms of intellectual property. One such conflict takes place between large nations with sophisticated research facilities, which are more likely to be exporting intellectual property, and developing nations, which are more likely to be using or consuming such property. The problem is most acute in the patent area, especially for pharmaceuticals, where the developed nations continue to push hard for strong protection of IPR, while the developing nations work hard to limit the scope of patents in order to increase the sale of generic drugs that can be sold at a fraction of the price of branded drugs under patent protection.

Ironically, the shoe is often on the other foot in the area of copyright. Now many nations with strong indigenous cultures seek to extend copyright protection for those group works that, by definition, lack the authorship of original works required under traditional copyright conceptions.<sup>3</sup> Instead, they want protections for tribal and other cultural works that evolve collectively over time, for which there is a strong desire for protection. The difficulty here is that it is not sufficient to protect such intangibles as poems and dances solely in their country of origin, if they can be freely performed in mass markets elsewhere, where they receive no property protection. Oddly enough, therefore, recognizing these cultural claims also requires uniformity, in the willingness of other nations to pay a tax on productions that they could otherwise make for free. In this case, the developed nations enjoy the benefit of the blocking position.

In dealing with these issues, it should be clear that there are only two ways in which uniformity can be achieved. The first is for different nations to adopt parallel rules independently. That outcome is not so far-fetched as it sounds because there are good reasons to think that the basic trade-offs in IPR are the same everywhere. The point here is a modern instantiation of the earlier natural law tradition, dating from Gaius and Justinian, which treats the basic institutions of property (as acquired by first possession), tort (as protecting liberty and property

<sup>&</sup>lt;sup>3</sup> WORLD INTELL. PROP. ORG., BOOKLET NO. 1, INTELLECTUAL PROPERTY AND TRADITIONAL CULTURAL EXPRESSIONS/FOLKLORE (2001), http://www.wipo.int/edocs/pubdocs/en/tk/913/wipo\_pub\_913.pdf.

from the use of force and fraud), and contract (as facilitating joint ventures and the transfer of property) as largely universal.<sup>4</sup> Under this view, local differences are largely confined to matters of form, such as those needed to complete a contract or to transfer property. Differences in registration systems for IPR fall comfortably within the basic tradition. The second, and cleaner way is to enter into a set of bilateral, or preferably multilateral, agreements to set the standards for judging international transactions dealing with IPR, or indeed any other form of right.

On the substantive front, however, uniformity in IPR is more elusive. In one sense, this field is unified because the same basic trade-offs have to be negotiated in all countries. No matter where one looks, general mathematical theorems, ordinary words, and natural elements all fall into the public domain, leaving open for dispute the correct treatment of certain claimed inventions that apply particular transformations of various inputs in order to create directions for medical diagnosis<sup>5</sup> or financial investing.<sup>6</sup> Just how far these protections should extend is a subject of hot controversy within the United States, and in other counties. What is less clear is whether the ideal solution should vary across countries, when the same trade-offs occur in all places. Similarly, a strong system of IPR protection will encourage innovation, but simultaneously it will prevent the movement of technology and literary works into the public domain where in most instances they can be more effectively utilized. Yet once again, it is not clear that the ideal patent or copyright length should differ across countries. But even if uniformity is the ideal, there is ample room for healthy disagreement as to the ideal length of patents and copyrights, even if there is widespread agreement that copyright terms should be on average longer than patent terms. But even that basic position does not preclude criticism that patent protection on pharmaceuticals may be too short (given the time that patented goods are tied up before the FDA) or that copyright terms (following the Copyright Term Extension Act of 1998)<sup>7</sup> are too long, lasting as long as 50 years after the death of the original author.

<sup>&</sup>lt;sup>4</sup> For discussion of this theme, see Richard A. Epstein, *The Utilitarian Foundations of Natural Law*, 12 HARV. J.L. & PUB. POL'Y 713 (1989); Richard A. Epstein, *The Uneasy Marriage of Utilitarian and Libertarian Thought*, 19 QUINNIPIAC L. REV. 783 (2000).

<sup>&</sup>lt;sup>5</sup> See Ass'n for Molecular Pathology v. Myriad Genetics, Inc., 133 S. Ct. 2107 (2013) (denying patent eligibility for naturally occurring genetic sequences, but allowed them for gene sequences created by synthetic processes).

<sup>&</sup>lt;sup>6</sup> See Alice Corporation Pty. Ltd. v. CLS Bank Int'l, 134 S. Ct. 2347 (2014) (treating as patent ineligible a scheme for mitigating "settlement risk" in complex business transactions).

<sup>&</sup>lt;sup>7</sup> Copyright Term Extension Act of 1998, Pub. L. No. 105-298, 112 Stat. 2827 (codified as amended in 17 U.S.C. §§ 108, 203(a)(2), 301(c), 302, 303, 304(c)(2)).

These basic difficulties provide a convenient entrée into two of the papers contained in this volume: *Addressing Climate Change: Domestic Innovation, International Aid and Collaboration*,<sup>8</sup> Joy Xiang and *Towards a New Dialectics: Intellectual Property, Public Health and Foreign Direct Investments*<sup>9</sup> by Valentina Vadi.

In her paper, *Addressing Climate Change: Domestic Innovation, International Aid and Collaboration*,<sup>10</sup> Joy Xiang asks two key questions: "(1) Is IPR a major barrier to the international transfer of clean technologies, and (2) why has the international transfer of clean technologies to the developing nations been limited?" I agree with her basic position that IPR does not form such a barrier. Indeed, I would go further and argue that climate change issues are not an exception to the general rule that strong IPR acts as a spur to innovation. To be sure, the owners of IPR will charge for the use of their technologies, as in any other field. But before such charges could be regarded as a barrier to exchange, it must be remembered that without IPR protection, these new technologies may never have emerged in the first place. In general, the strongest protection against monopoly power is not price controls, but the emergence of competitive technologies, which will themselves emerge only if IPRs obtain strong protection.

Xiang is surely correct to insist that a strong patent system is not a sufficient condition for the diffusion of technological issues needed for patent control. Setting up cooperative business arrangements depends on a whole host of other government regulations that could either impede or propel the elaborate contractual schemes that are needed to develop an efficient system of tech transfer. The task is surely formidable owing to the high level of global cooperation needed to make good on these schemes. But the clearer the initial property rights in technology, the more likely it is that these beneficial arrangements can take place.

In her article *Towards a New Dialectics: Intellectual Property, Public Health and Foreign Direct Investments*<sup>11</sup> Valentina Vadi claims that international arbitral commissions should take into account public health considerations in adjudicating patent cases in the pharmaceutical area. In order to do so, she claims that it is imperative to avoid the "excessive protection" of private interests at the expense of public ones.

<sup>&</sup>lt;sup>8</sup> Joy Xiang, Addressing Climate Change: Domestic Innovation, International Aid and Collaboration, 5 N.Y.U. J. INTELL. PROP. & ENT. L. 196 (2015).

<sup>&</sup>lt;sup>9</sup> Valentina Vadi, Towards a New Dialectics: Intellectual Property, Public Health and Foreign Direct Investments, 5 N.Y.U. J. INTELL. PROP. & ENT. L. 113 (2015).

<sup>&</sup>lt;sup>10</sup> Xiang, *supra* note 8.

<sup>&</sup>lt;sup>11</sup> Vadi, *supra* note 9.

I agree that there is surely good reason to worry about how patent protection intersects with public health considerations. Nonetheless, it is less clear to me that these two should be regarded as necessarily in tension with each other. To be sure, at the time of some health crisis, the widespread availability of patented pharmaceuticals could be critical to the welfare of a nation. It need not, however, follow from this observation, that it is appropriate to weaken the level of patent protection provided for in the various treaties that regulate these issues. One possible response to Vadi's claims is to build some public health exception into the basic treaties that govern the use of these patented drugs, thereby eliminating the need to renegotiate or arbitrate these treaties down the road. Another possibility is for the state to exercise its eminent domain powers, which could allow it to purchase these drugs for its own citizens who may not be able to afford the price. That alternative will not shrink the supply of new drugs, because it will not dull the incentives to invest by the drug companies who are called upon to supply the drugs in question. With these challenges in mind, does it ever make sense to take separately into account public health considerations when adjudicating patent cases.<sup>12</sup> In this area, as in so many others, it is not possible to ignore the ex ante effects of ex post redistribution, whether it be through arbitration or adjudication.

In looking at these papers, therefore, it is useful for the reader to ask over and over again, the extent to which it is possible to develop a single overarching theory of IPR that works across subject matter areas and across national boundaries. In the end, the ability to achieve substantive uniformity on key issues may be the greatest boon to the technological improvements that are so needed in dealing with copyright, global warming, and pharmaceutical products.

<sup>&</sup>lt;sup>12</sup> See Richard A. Epstein & F. Scott Kieff, *Questioning the Frequency and Wisdom of Compulsory Licensing for Pharmaceutical Patents*, 78 U. CHI. L. REV. 71 (2011), for a discussion of the dangers of compulsory arbitration.

# NEW YORK UNIVERSITY JOURNAL OF INTELLECTUAL PROPERTY AND ENTERTAINMENT LAW

VOLUME 5	FALL 2015	NUMBER 1

# TOWARDS A NEW DIALECTICS: PHARMACEUTICAL PATENTS, PUBLIC HEALTH AND FOREIGN DIRECT INVESTMENTS

## VALENTINA S. $VADI^*$

This article highlights the emergence of a new dialectics between the protection of intellectual property and public health in international investment law and arbitration. International investment law is a vital area of international law, which has furthered the protection of intellectual property, considering it a form of investment and providing intellectual property owners access to investor-state arbitration. While investor-state arbitration constitutes a major development in international law and facilitates the access of foreign investors to justice, it may endanger the fundamental values of the international community as a whole, unless arbitrators duly take into account their role as "cartographers" of international law within their role as "adjudicators." Have arbitral tribunals taken public health considerations into account when adjudicating pharmaceutical patent-related cases? If so, have they considered public health either as an exception to investment treaty standards or as a part of the interpretation of the same standards? What techniques are available to avoid regime collisions between international investment law and other fields including public health law? This article offers a primer on recent investment disputes concerning pharmaceuticals. The underlying assumptions of this article are that adjudication is a mode of governance, and it has a fundamental importance with regard to the concrete implementation of a given legal regime. The article argues that arbitrators

<sup>&</sup>lt;sup>\*</sup> Professor of International Economic Law, Lancaster University, United Kingdom. Earlier versions of this article were presented at the Society of International Economic Law conference, held at the University of Bern on July 10–12, 2014 and at the City Law School, City University, London, on May 11, 2015. The author wishes to thank Oles Andriychuk, Enrico Bonadio, Emily Den, Maggie Diamond, Caroline B. Epstein, Caroline Foster, Lukasz Gruszczynski, Locknie Hsu, David G. Krone, Michele Potestà, Tania Voon, Wen Xue, Steven Wheatley and the participants at the conferences for useful comments on an earlier draft. The usual disclaimer applies.

should not put an excessive emphasis on the private interests embodied by pharmaceutical patents, but adequate consideration should be paid to the public interest equally embodied in these rights.

Intr	ODUCTION	114
I.	PHARMACEUTICAL PATENTS, INTELLECTUAL PROPERTY AND PUBLIC	
	Health in International Law	120
	A. Pharmaceuticals and Human Rights Law	123
	B. Pharmaceuticals and International Intellectual Property Law	
	C. Pharmaceuticals and International Health Law	
II.	INTERNATIONAL INVESTMENT LAW AND ARBITRATION	132
III.	THE RISE OF INVESTOR–STATE ARBITRATIONS CONCERNING	
	Pharmaceutical Patents	137
IV.	TOWARDS A NEW DIALECTICS: PHARMACEUTICAL PATENTS, PUBLIC	
	HEALTH AND FOREIGN DIRECT INVESTMENTS	144
	A. The Notion of Investment	147
	B. Expropriation	
	C. Determining Compensation	
	D. Fair and Equitable Treatment	166
	1. IP Rights as a Basis for Investor's Legitimate Expectations	170
	2. International IP Norms as a Source of Legitimate Expectation.	s172
	3. A New Tool to Enforce International Intellectual Property	
	Agreements	175
	4. Denial of Justice Claims	177
	E. Non-Discrimination	
V.	Critical Assessment	185
VI.	LEGISLATIVE AND INTERPRETIVE APPROACHES TO THE EMERGING	
	DIALECTICS BETWEEN PRIVATE AND PUBLIC INTERESTS IN IP-RELATED	)
	Investment Disputes	187
CON	CLUSION	193

#### INTRODUCTION

In nature we never see anything isolated, but everything in connection with something else...

Johann Wolfgang von Goethe<sup>1</sup>

In recent years, international investment agreements (IIAs)<sup>2</sup> have flourished, furthering the protection of intellectual property (IP) as a form of

114

<sup>&</sup>lt;sup>1</sup> Johann Peter Eckerman, Conversations of Goethe with Eckermann and Soret 266, 266-67 (John Oxenford trans., Smith, Elder & Co. 1850).

 $<sup>^2</sup>$  International investment agreements (IIAs) – a term encompassing both bilateral investment treaties (BITs) and Free Trade Agreements (FTAs) or Regional Trade Agreements (RTAs) with investment chapters – are "agreements concluded between states

investment.<sup>3</sup> In general terms, most bilateral investment treaties (BITs) only refer to IP rights in their definitions of protected investments.<sup>4</sup> These treaties do not provide a detailed and specific regulation of IP rights. However, they do formally and substantively raise the level of IP protection from the pre-treaty status. In fact, by considering IP rights as protected investments, BITs enable IP holders to enjoy the substantive and procedural protections of foreign investments provided by the applicable treaty. Substantive protections granted by IIAs include fair and equitable treatment, national and most favoured nation treatment and protection against unlawful expropriation, among others.<sup>5</sup>

Besides providing substantive protection to investors' rights, investment treaties also provide IP owners with direct access to investor-state arbitration, which can be a powerful dispute settlement mechanism to resolve claims of alleged IP infringement.<sup>6</sup> This is a novel development in international law because investors are no longer required to exhaust local remedies or depend on diplomatic protection to defend their interests against the host state. The claims are heard by *ad hoc* arbitral tribunals whose arbitrators are selected by the

for the promotion and protection of reciprocal investments." See Bertram Boie, The Protection of Intellectual Property Rights Through Bilateral Investment Treaties: Is There a TRIPS-Plus Dimension? 4 (NCCR Trade Regulation, Working Paper No. 2010/19, 2010).

<sup>3</sup> See, e.g., State Dep't, U.S. Model Bilateral Investment Treaty, art. 1 (2012) [hereinafter US Model BIT] (listing "intellectual property rights" among the "forms that an investment may take"); Treaty Concerning the Encouragement and Reciprocal Protection of Investments, Ger.-Burundi, art. 1(d), Sept. 10, 1984, 1517 U.N.T.S. 287 [hereinafter Germany-Burundi BIT] (noting that "[f]or the purposes of the present treaty, the term 'investments' shall comprise every kind of asset, in particular . . . [c]opyrights, industrial property rights, technical processes, trademarks, trade names, know-how and goodwill . . . ."); Agreement Concerning the Encouragement and Reciprocal Protection of Investments, Peru-China, art. 1(d), June 9, 1994, 1901 U.N.T.S. 257 (affirming that "[f]or the purpose of this agreement, the term 'investment' means every kind of asset invested by investors of one Contracting Party in accordance with the laws and regulations of the other Contracting Party in the territory of the Latter, and in particular, though not exclusively, includes: . . . copyrights, industrial property, know-how and technological process . . . .").

<sup>4</sup> FTAs, however, can include both investment and IP chapters and provide a detailed regulation of IP, tightening their protection beyond current international standards. *See* Susan K. Sell, *TRIPS-Plus Free Trade Agreements and Access to Medicines*, 28 LIVERPOOL L. REV. 41, 41 (2007) (highlighting that pharmaceutical companies have "succeeded in getting extremely restrictive TRIPS-Plus . . . intellectual property provisions into regional and bilateral free trade agreements."). On the impact of FTAs on access to medicines, see generally Carlos María Correa, *Implications of Bilateral Free Trade Agreements on Access to Medicines*, 84 BULL. WORLD HEALTH ORG. 399, 399 (2006).

<sup>5</sup> ANDREAS KULICK, GLOBAL PUBLIC INTEREST IN INTERNATIONAL INVESTMENT LAW (2012); *see, e.g.*, US Model BIT arts. 3–7; *see also* Germany-Burundi BIT, *supra* note 3, at arts. 2–3, 4(2).

<sup>6</sup> See, e.g., US Model BIT art. 2.

disputing parties or appointing institutions. Depending on the arbitral rules chosen, the proceedings occur behind closed doors (*in camera*) and the very existence of the claim and the final award may never become public.<sup>7</sup>

These arbitrations have recently been used by patent owners to challenge alleged infringements of their patents by measures of the host state.<sup>8</sup> Arbitral tribunals have scrutinized how domestic legal systems govern the availability, validity and scope of patents.<sup>9</sup> These arbitrations have involved "difficult and often elusive substantive questions" of intellectual property law,<sup>10</sup> and can affect a range of important public policy issues, such as public access to medicines.

Despite the important social and political implications, investment treaty arbitration is lacking in transparency, expertise, and arguably, legitimacy.<sup>11</sup> Most arbitral tribunals are neither open to the public nor obliged to publish final decisions, and hence lack the transparency generally afforded by normal judicial proceedings, even in disputes concerning public goods. Arbitrators may not have specific expertise in international intellectual property law, as they are mostly experts in international investment law. There are even disputes over whether or not norms external to investment law, such as IP law, should be relevant in investment treaty arbitration. Finally, according to some authors, investment treaty law and arbitration face a "legitimacy crisis" as arbitral awards seem to affect public policy "in a vacuum."<sup>12</sup> While arbitral tribunals consider important public policy issues, they are detached from the local polities' needs. Have IIAs "become a charter of rights for foreign investors, with no concomitant responsibilities or liabilities, no direct legal links to

<sup>&</sup>lt;sup>7</sup> Kate Miles, *Reconceptualising International Investment Law: Bringing the Public Interest Into Private Business, in* INTERNATIONAL ECONOMIC LAW AND NATIONAL AUTONOMY 295, 295–96 (Meredith Kolsky Lewis and Susy Frankel eds., 2010) (noting that "[a]lthough [investment disputes] resolve questions that can affect significant matters of public policy, the public generally does not have access to the documents, the proceedings are conducted behind closed doors, and the submission of amicus curiae briefs is restricted, if permitted at all.").

<sup>&</sup>lt;sup>8</sup> See infra Parts III and IV below for a comprehensive account of the current investorstate arbitrations of pharmaceutical patents.

<sup>&</sup>lt;sup>9</sup> Christine Haight Farley, *TRIPS–Plus Trade and Investment Agreements: Why More May Be Less for Economic Development*, 35 U. PA. J. OF INT'L L. 1061, 1065 (2014) (stating that arbitral tribunals review state regulatory and judicial measures "for how they define the availability, validity and scope of IP rights").

<sup>&</sup>lt;sup>10</sup> *Id.* (noting that "IP law is notoriously full of grey areas due to finely balanced policy objectives  $\ldots$ .").

<sup>&</sup>lt;sup>11</sup> See, e.g., Susan Franck, *The Legitimacy Crisis in Investment Treaty Arbitration: Privatizing Public International Law through Inconsistent Decisions*, 73 FORDHAM L. REV. 1521, 1537–38 (2005) (discussing the alleged legitimacy crisis of international investment law and arbitration).

<sup>&</sup>lt;sup>12</sup> See id. at 1571.

promoting development objectives, and no protection for public welfare in the face of environmentally or socially destabilizing foreign investment?"<sup>13</sup> Has international investment law become a "corporate bill of rights"<sup>14</sup> or a "system of corporate rights without responsibility"?<sup>15</sup>

Recent examples illustrate that investor-state arbitration can affect state autonomy in making important public policy decisions in the pharmaceutical sector, including making cheap generic medicines widely available and ensuring their safety. In 2008, Apotex, a Canadian company, filed an investor-state arbitration against the United States, claiming that the U.S. courts had erred in applying federal law violating several provisions of the North American Free Trade Agreement (NAFTA).<sup>16,17</sup> According to the claimant, the erroneous application of the law prevented Apotex from commercializing generic versions of medicines, and this amounted, inter alia, to an expropriation of its investments.<sup>18</sup> In a parallel dispute,<sup>19</sup> the company sought over \$1 billion in damages from the United States after the U.S. Food and Drug Administration (FDA) imposed an Import Alert on certain generic medicines that were produced in Canada, then exported to the U.S. and sold by a U.S.-based Apotex subsidiary.<sup>20</sup> The FDA issued the alert after its inspections of Apotex facilities in Canada found noncompliance with good pharmaceutical manufacturing practices.<sup>21</sup> In parallel, Eli Lilly, a major U.S. pharmaceutical company, filed an investor-state arbitration against Canada after Canadian Federal Courts invalidated a pharmaceutical patent on the ground of inutility.<sup>22</sup> Eli Lilly requested the Tribunal award economic compensation of at least 100 million

 $^{18}$  *Id.* ¶ 7.

<sup>20</sup> *Id.* ¶ 2.24.

 $^{21}_{22}$  Id. ¶ 2.40.

<sup>&</sup>lt;sup>13</sup> United Nations Conference on Trade and Development, Nov. 6–8, 2002, *The Development Dimension of FDI: Policy and Rule-Making Perspectives*, 212, UNCTAD/ITE/IIA/2003/4 (Aug 31, 2003) [hereinafter UNCTAD].

<sup>&</sup>lt;sup>14</sup> Todd Weiler, *Balancing Human Rights and Investor Protection: A New Approach for a Different Legal Order*, 1 TRANSNAT'L DISP. MGMT. 2 (2004).

<sup>&</sup>lt;sup>15</sup> UNCTAD, *supra* note 13, at 215.

<sup>&</sup>lt;sup>16</sup> North American Free Trade Agreement, U.S.-Can.-Mex., Dec. 17, 1992, 32 I.L.M. 289 (1993) [hereinafter NAFTA].

<sup>&</sup>lt;sup>17</sup> Apotex Inc. v. U.S., ICSID Case No. ARB(AF)/12/1, Notice of Arbitration, ¶ 22 (Dec. 10, 2008), http://www.state.gov/documents/organization/115447.pdf.

<sup>&</sup>lt;sup>19</sup> Apotex Holdings Inc, Apotex Inc. v. United States of America (Apotex III), ICSID Case No. ARB(AF)/12/1, Award (Aug. 25, 2014), http://www.state.gov/documents/organization/233043.pdf.

 $<sup>^{22}</sup>$  Eli Lilly and Company v. The Government of Canada (U.S. v Can.), ICSID Case No. UNCT/14/2, Notice of Intent to Submit a Claim to Arbitration under NAFTA Chapter Eleven, ¶ 35 (Nov. 7, 2012), http://www.italaw.com/sites/default/files/case-documents/ italaw1172.pdf.

Canadian dollars for alleged damages.<sup>23</sup> Not only do these cases show the clash between the national regulatory measures of the states to regulate IP in the public interest on the one hand and international investment law on the other, but they also highlight the emergence of a new form of dialectics between the private and public interests in IP governance at the international level.

Have arbitral tribunals taken public health considerations into account when adjudicating pharmaceutical patent cases? If so, have they considered public health as an exception to investment treaty standards or as a part of the interpretation of the same standards? What techniques are available to avoid regime-collisions between international investment law and other fields including international intellectual property law and public health law? Is investment arbitration a suitable forum to adjudicate pharmaceutical patentrelated disputes? Can investment treaty arbitration promote good governance in the pharmaceutical field? Is there a convergence or a divergence between international investment law and other branches of international law governing pharmaceuticals? Are there mechanisms to promote coherence? And is such coherence ultimately desirable?

This article addresses these questions, providing a comprehensive account of current investment treaty arbitrations, highlighting their significance for global intellectual property governance. It shows that investment arbitration serves as a new avenue for the ongoing dialectics between private and public interests in IP regulation. Conflicts between private and public interests are endemic in IP regulation. These take the form of disputes before various tribunals at the national, regional and even international levels. Investment treaty arbitration constitutes a new avenue for settling IP disputes. Far from being a neutral development of the increasing pervasiveness of international law in different areas of regulation, the attraction of IP disputes by investment treaty tribunals have the potential to revolutionize the current landscape of IP governance.

While a dialogue between public and private interests is intrinsic to any form of regulation and dispute resolution of IP rights, what is new in the emerging IP-related investment disputes is the articulation of *private* economic interests by *private transnational* actors against *public national* entities before *international* tribunals. In fact, while traditionally international law has only enabled states to file claims before international courts and tribunals, international investment law has empowered foreign investors to file claims against states before international tribunals. This development has the potential

<sup>23</sup> *Id.* ¶ 108.

revolutionize IP governance at the national and international levels.<sup>24</sup> On the one hand, investment arbitration provides a valuable avenue for foreign investors to be heard. Although a private investor could complain through its home state, inter-state disputes concerning IP have been rare, mainly because states are careful not to initiate proceedings and advance arguments that may backfire in the future.<sup>25</sup> Investor-state arbitration enables nongovernmental actors such as multinational corporations to directly file claims against states before international tribunals. On the other hand, eminent scholars warn against potential abuse of this mechanism,<sup>26</sup> as investment arbitration could emphasize private interests at the expense of the public interest. Non-state actors may adopt a different approach to litigation than state actors. They may strategically use investment arbitration to receive monetary compensation for state regulatory action,<sup>27</sup> and simply by filing an arbitration claim, they may have a chilling effect on domestic policy makers. The emerging dialectics between private actors and states in investment arbitration needs to be scrutinized given the public policy implications it can have on crucial areas of IP governance.

The tension between patent holders and state authorities in the governance of pharmaceutical patents is one example of a broader recurrent interplay in international law: the tension between the private interests of foreign investors and the regulatory autonomy of the host state. This article argues that arbitrators should not put excessive emphasis on the private interests in pharmaceutical patents, but must pay adequate consideration to the public interest equally embodied in these rights. Excessive protection of pharmaceutical patents can have a negative impact on the public health policy of the host state. This may seem paradoxical, as usually the protection of

<sup>&</sup>lt;sup>24</sup> M. Sornarajah, *Evolution or Revolution in International Investment Arbitration? The Descent into Normlessness, in* EVOLUTION IN INVESTMENT TREATY LAW AND ARBITRATION (Chester Brown and Kate Miles eds., 2011) [hereinafter Sornarajah, *Evolution or Revolution*] (arguing that "disparate trends" in international investment law and arbitration "show neither evolution nor revolution but an ongoing conflict [between private and public interests] that either will bring a new system – resulting in a revolution – or will keep the old, simply because one or the other of the camps wins the tussle.").

<sup>&</sup>lt;sup>25</sup> See Joost Pauwelyn, *The Dog that Barked but did not Bite: 15 Years of Intellectual Property Disputes at the WTO*, 1 J. INT'L DISP. MGMT. 389, 393, 395 (2010) (showing that IP complaints amount to only 3 per cent of all claims under the World Trade Organization agreements, and that such disputes have a higher settlement rate and lower appeal rate than average WTO disputes).

<sup>&</sup>lt;sup>26</sup> See Sornarajah, Evolution or Revolution, supra note 24, at 631 (arguing that "the law is hurtling into 'normlessness' as a result of State reactions to expansive interpretations placed on treaty prescriptions.").

<sup>&</sup>lt;sup>27</sup> See Pauwelyn, *supra* note 25, at 41 (explaining both the low number and the systemic type of IP disputes by the limited prospective remedies that the WTO offers to the winning complainants).

pharmaceuticals is associated with higher investments in the research and development of new medicines, and a corresponding broader availability of medicines that lead to positive effects on patient welfare. However, in some cases, corporations have used intellectual property to chill public health regulation. The article concludes with the argument that while investor-state arbitration constitutes a major development in international law and facilitates the access of foreign investors to justice, it may endanger the fundamental values of the international community as a whole unless arbitrators duly take into account their role as "cartographers" of international law.

The article shall proceed as follows. First, it explores what are pharmaceutical patents and how they are governed at the international law level. Second, it briefly describes the basic structure of investment treaty law and arbitration. Third, it illustrates the rise of investor-state arbitrations concerning pharmaceuticals. Fourth, it highlights the emergence of a new dialectics between intellectual property and public health in international investment law arbitration. examining recent investment disputes and concerning pharmaceuticals. Fifth, it critically assesses the potential impact of such arbitrations on the public health policies of the host state, and proposes some legal mechanisms that can help adjudicators to strike a suitable balance between the protection of pharmaceutical patents and public health in international investment law and arbitration.

Ι

## PHARMACEUTICAL PATENTS AND PUBLIC HEALTH IN INTERNATIONAL LAW

The patent system is based on a trade-off between promoting knowledge creation and knowledge diffusion.<sup>28</sup> A patent is a type of intellectual property constituting a set of exclusive rights granted by a state for a limited period of time in exchange for detailed public disclosure of an invention.<sup>29</sup> Patents are granted for inventions that are: (1) new, (2) nonobvious (involving an inventive step), and (3) capable of industrial application (useful).<sup>30</sup> In the pharmaceutical sector, the invention of new medicines entails significant research and

<sup>&</sup>lt;sup>28</sup> Org. for Econ. Co-operation and Development [OECD], *Patents and Innovation: Trends and Policy Challenges*, 9 (2004), http://www.oecd.org/sti/sci-tech/24508541.pdf (noting that patents are "considered to represent a trade-off between incentives to innovate on one hand, and competition in the market and diffusion of technology on the other.").

<sup>&</sup>lt;sup>29</sup> *Id.* at 8 (defining patents as "exclusive right[s] to exploit (make, use, sell, or import) an invention over a limited period of time (20 years from filing) within the country where the application is made.").

<sup>&</sup>lt;sup>30</sup> Agreement on Trade-Related Aspects of Intellectual Property Rights art. 27, Apr. 15, 1994, 1 Marrakesh Agreement Establishing the World Trade Organization, Annex 1C, Legal Instruments – Results of the Uruguay Round vol. 31, 1869 U.N.T.S. 299, 33 I.L.M. 81 (1994) [hereinafter TRIPS Agreement].

development costs.<sup>31</sup> The patent protection of a given medicine aims to ensure the remuneration of the inventor's efforts and provide an incentive for the invention of new medicines.<sup>32</sup>

Through this trade-off, pharmaceutical patent protection reflects both private and public interests. The patent system rewards the private interest and fosters the inventive efforts of the patent owner by awarding her exclusive rights for a limited period of time. At the same time, the patent system acknowledges the public interest in a two-fold manner. First, medicines invented under the incentive of patents may save lives and improve the quality of life of patients. Second, competitors may build upon existing knowledge inventing new medicines and contributing to the development of science. In addition, patients may have access to cheaper generic versions of the same medicine after the patent expires. During the patent lifespan, a balance between private and public interests is also embodied in the patent regime. The enjoyment of IP rights by the patent owner are not absolute, they are limited in consideration of the public interest. For example, certain rules provide for exceptions to the patent right;<sup>33</sup> some uses of the patent may be allowed without the patent owner's consent;<sup>34</sup> and there are limits to patentability.<sup>35</sup>

However, in recent years, a common criticism has been that legislatures and judges have expanded the rights of patent owners too far<sup>36</sup> at the expense of the global public interest.<sup>37</sup> An absolute protection of pharmaceutical patents has

<sup>&</sup>lt;sup>31</sup> Matthew Herper, *The Cost Of Creating A New Drug Now \$5 Billion, Pushing Big Pharma To Change*, FORBES (Aug. 11, 2013, 11:10 AM), http://www.forbes.com/sites/ matthewherper/2013/08/11/how-the-staggering-cost-of-inventing-new-drugs-is-shaping-the-future-of-medicine/ ("A company hoping to get a single drug to market can expect to have spent \$350 million before the medicine is available for sale.").

<sup>&</sup>lt;sup>32</sup> Keith E. Maskus & Mohan Penubarti, *How Trade Related Are Intellectual Property Rights*? 39 J. INT'L ECON. 227 (1995).

<sup>&</sup>lt;sup>33</sup> TRIPS Agreement art. 30.

 $<sup>^{34}</sup>$  *Id.* at art. 31.

<sup>&</sup>lt;sup>35</sup> *Id.* at art. 27.

<sup>&</sup>lt;sup>36</sup> See Rachel Sachs, *The New Model of Interest Group Representation in Patent Law*, 16 YALE J.L. & TECH. 344, 345 (2014) ("The various fields of intellectual property (IP) law have been marked by seemingly ever-increasing levels of protection.").

<sup>&</sup>lt;sup>37</sup> See, e.g., Kristen Jakobsen Osenga, Get the Balance Right!: Squaring Access With Patent Protection, 25 PAC. McGEORGE GLOBAL BUS. & DEV. L.J. 309 (2012); CARLOS CORREA, INTEGRATING PUBLIC HEALTH CONCERNS INTO PATENT LEGISLATION IN DEVELOPING COUNTRIES 9 (2000) (mentioning the "general concern that such legislative reform can have a major impact on people's access to drugs and on public health policies in the South."); Victoria E. Hopkins, Analysis of International Patent Protection and Global Public Health, 17 J. PUB. AND INT'L AFF. 83, 83 (2006) (noting that the TRIPS Agreement "has elicited public health concerns in developing countries, worried that they will be unable to access essential medicines as a result of increasing patented drug costs.").

a negative impact on public well-being. Pharmaceutical patents create welfarereducing monopoly rights, which often lead to higher prices due to a lack of competition, making medicines less affordable to the poor. Moreover, by engaging in "ever-greening" practices, pharmaceutical companies often use regulatory processes to extend their monopoly over highly profitable "blockbuster" medicines and further jeopardize access to medicines for the poor.<sup>38</sup> Even where a state adopts emergency measures to limit IP rights to facilitate access to medicines, the state's compliance with international treaty obligations to protect IP rights may be disputed.<sup>39</sup>

Pharmaceutical patents produce benefits and costs, the extent of which are country dependent.<sup>40</sup> The role of pharmaceutical patents in promoting research and development of new medicines depends on the amount of resources a country devotes to creating intellectual assets<sup>41</sup> and the country's ratio between knowledge owned and the knowledge needed to develop the pharmaceutical sector. <sup>42</sup> Historical evidence suggests that strong patent protection can "kick away the ladder" to development for low- and middle-

<sup>&</sup>lt;sup>38</sup> Symposium, *Enabling Patent Law's Inherent Anticipation Doctrine*, 45 HOUS. L. REV. 1101, 1106–07 (2008) (explaining that "evergreening refers to attempts by owners of pharmaceutical product patents to effectively extend the term of those patents on modified forms of the same drug, new delivery systems for the drug, new uses of the drug, and the like."); Rebecca S. Eisenberg, *The Role of the FDA in Innovation Policy*, 13 MICH. TELECOMM. TECH. L. REV. 345, 348–49 (2007) (noting that in recent years pharmaceutical companies have become "quite creative about strategies to secure 'evergreening' patents in order to defer the date their products go off-patent.").

<sup>&</sup>lt;sup>39</sup> An infamous case is that of *South African Pharmaceutical Manufacturers Ass'n v. South Africa*, Case No. 4183 (1998). In 1998, the South African Pharmaceutical Manufacturers Association (PMA) submitted a legal complaint to the High Court of Pretoria challenging the legality of relevant provisions of the (South African) Medicines Act in light of the TRIPS Agreement. The Medicines Act had been enacted to cope with a public health emergency and enabled the state to issue compulsory licenses and use parallel imports to make medicines affordable. Due to international protests and public outcry, the claim was withdrawn. For a detailed account of the case, see DUNCAN MATTHEWS, INTELLECTUAL PROPERTY, HUMAN RIGHTS AND DEVELOPMENT — THE ROLE OF NGOS AND SOCIAL MOVEMENTS 97-99 (2011).

<sup>&</sup>lt;sup>40</sup> See Peter Drahos, *Introduction* to GLOBAL INTELLECTUAL PROPERTY RIGHTS – KNOWLEDGE, ACCESS AND DEVELOPMENT 1, 4 (Peter Drahos & Ruth Mayne eds., 2002).

<sup>&</sup>lt;sup>41</sup> See Carlos Primo Braga, Carsten Fink & Claudia Paz Sepulveda, *Intellectual Property Rights and Economic Development*, in THE WTO, INTELLECTUAL PROPERTY RIGHTS AND THE KNOWLEDGE ECONOMY — CRITICAL PERSPECTIVES ON THE GLOBAL TRADING SYSTEM AND THE WTO 245, 254 (Keith E. Maskus ed., 2004).

<sup>&</sup>lt;sup>42</sup> See, e.g., David M. Gould & William C. Gruben, *The Role of Intellectual Property Rights in Economic Growth*, 48 J. DEV. ECON. 323, 324 (1996).

income countries,<sup>43</sup> and that even industrialized countries did not adopt strong pharmaceutical patent policies until recently.<sup>44</sup> Regulation of pharmaceuticals is a sensitive field with important public policy implications. Given that medicines and vaccines are now subject to patent protection worldwide,<sup>45</sup> their price increase has strained public health budgets.<sup>46</sup>

Pharmaceutical regulation constitutes a *regime complex*, which involves sets of multilevel regulatory frameworks that are at times diverging and at times converging, if not overlapping. <sup>47</sup> As a regime complex, pharmaceutical regulation is characterized by institutional density and governed by human rights law, international intellectual property law and international health law.

## A. Pharmaceuticals and Human Rights Law

The International Covenant on Economic, Social and Cultural Rights (ICESCR)<sup>48</sup> provides the human rights component of the pharmaceutical regime complex. Article 15 of the ICESCR identifies the need to protect both public and private interests in knowledge creation and diffusion. <sup>49</sup> Namely, it recognizes the right of everyone "[t]o benefit from the protection of the moral and material interests resulting from any scientific ... production of which he is the author,"<sup>50</sup> including pharmaceutical patents, on the one hand and the "right of everyone ... to enjoy the benefits of scientific progress and its applications"

 $<sup>^{43}</sup>$  HA-JOON CHANG, KICKING AWAY THE LADDER: DEVELOPMENT STRATEGY IN HISTORICAL PERSPECTIVE 1–5 (2003) (providing a historical overview of the economic development of industrialized countries and arguing that through the Washington Consensus such countries prescribe policies for the developing countries which they have not used themselves during their period of economic growth).

<sup>&</sup>lt;sup>44</sup> Ha-Joon Chang, *Intellectual Property Rights and Economic Development: Historical Lessons and Emerging Issues*, 2 J. HUM. DEV. 287, 305–06 n.8 (2001) (noting that pharmaceutical products "remained unpatentable until 1967 in West Germany and France, 1979 in Italy, and 1992 in Spain. Pharmaceutical products were also unpatentable in Canada into the 1990s.").

<sup>&</sup>lt;sup>45</sup> See TRIPS Agreement art. 27 (The TRIPS Agreement has required the patentability of pharmaceuticals).

<sup>&</sup>lt;sup>46</sup> Elisabeth Rosenthal, *The Price of Prevention: Vaccine Costs Are Soaring*, N.Y. TIMES, July 2, 2014, at A1.

<sup>&</sup>lt;sup>47</sup> See Robert O. Keohane & David G. Victor, *The Regime Complex for Climate Change*, 9 PERSP. ON POL. 7, 7 (2011) (introducing the notion of "regime complex" and defining it as a "loosely coupled set of specific regimes.").

<sup>&</sup>lt;sup>48</sup> International Covenant on Economic, Social and Cultural Rights, art. 15, Dec. 16, 1966, 993 U.N.T.S. 3, 6 ILM 36 [hereinafter ICESCR]. As of 2015, the Covenant has 164 parties. The United States has signed but has not ratified the Covenant. *See* Philip Alston, *The US Ratification of the Covenant on Economic, Social and Cultural Rights: The Need for an Entirely New Strategy*, 84 AM. J. INT'L L. 365, 365 (1990).

<sup>&</sup>lt;sup>49</sup> ICESCR, *supra* note 48, at art. 15.

<sup>&</sup>lt;sup>50</sup> *Id.* art. 15.1.c.

on the other.<sup>51</sup> In parallel, Article 12 of the ICESCR recognizes "the right of everyone to the enjoyment of the highest attainable standard of physical and mental health." The right to health requires access to medicines, according to General Comment 14.<sup>52</sup> While general comments are not binding instruments, they are deemed to constitute authoritative interpretation of states commitments under the ICESCR and can reflect emerging norms of customary law.<sup>53</sup> Although conceptualized after World War II, the right to health was under-theorized due to political reasons.<sup>54</sup> However, since the fall of the Berlin Wall, like other economic, social and cultural rights, it has had a renaissance, being understood in its "unity and complementarity" with civil and political rights.<sup>55</sup>

Yet, the lack of a World Human Rights Court (WHRC)<sup>56</sup> and the fragmentation of international human rights institutions have inevitably affected

<sup>53</sup> Helen Keller & Lena Grover, *General Comments of the Human Rights Committee and Their Legitimacy, in* UN HUMAN RIGHTS TREATY BODIES: LAW AND LEGITIMACY 116, 132 (Helen Keller and Geir Ulfstein eds., 2012).

<sup>54</sup> VALENTINA VADI, PUBLIC HEALTH IN INTERNATIONAL INVESTMENT LAW AND ARBITRATION 27 (2012) [hereinafter VADI] ("Given the political divide between the Eastern and Western blocs determined by the Cold War, the right to health as well as other economic, social and cultural rights were deemed to be politicized as reflecting a socialist perspective. The traditional distinction between civil and political rights and economic, social and cultural rights was also based on the assumption that while the first category of rights was susceptible to immediate realization, the second was deemed to be only of gradual implementation. The dichotomy was formalized by the division of the so-called International Bill of Rights into two Covenants adopted in 1966.").

<sup>55</sup> Id.

<sup>56</sup>On the desirability of a World Human Rights Court, see generally Stefan Trechsel, *A World Court for Human Rights*? 1 NW. J. INT'L HUM. RTS. 3 (2004); Int'l Comm. of Jurists, *Towards a World Court of Human Rights: Questions and Answers*, 2 (Dec. 2011) [hereinafter Int'l Comm. of Jurists] (highlighting "a glaring gap in th[e] . . . human rights architecture: a World Court of Human Rights, that would make available a judicial mechanism to provide enforceable and effective justice to individual victims of human rights violations.").

<sup>&</sup>lt;sup>51</sup> *Id.* art. 15.1.b.

<sup>&</sup>lt;sup>52</sup> Committee on Economic, Social and Cultural Rights ("CESCR"), General Comment 14: The Right to the Highest Attainable Standard of Health (Article 12), ¶ 17, UN Doc. HRI/GEN/Rev.9 (Vol. I) (2000), http://www.unhchr.ch/tbs/doc.nsf/(symbol)/E.C.12.2000 .4.En ("The creation of conditions which would assure to all medical service and medical attention in the event of sickness [in] (art. 12.2 (d) [of the ICESCR]), both physical and mental, includes the provision of equal and timely access to basic preventive, curative, rehabilitative health services and health education; regular screening programmes; appropriate treatment of prevalent diseases, illnesses, injuries and disabilities, preferably at community level; the provision of essential drugs; and appropriate mental health treatment and care.").

the realization of the right to health.<sup>57</sup> States maintain the prime duty of providing access to remedies at the domestic level.<sup>58</sup> However, effective remedies should be available at both the national and international levels,<sup>59</sup> because international remedies are essential in those cases where domestic remedies are not available or inadequate.<sup>60</sup> Several UN bodies deal with human rights,<sup>61</sup> but they do not fulfill the tasks of a world court for human rights.<sup>62</sup> Moreover, the institutional fragmentation of the human rights system — the existence of different UN bodies and monitoring frameworks with converging and diverging competences,<sup>63</sup> — and its substantive fragmentation — the existence of different treaties and regimes — can create obstacles to the effective realization of the right to health.<sup>64</sup>

#### B. Pharmaceuticals and International Intellectual Property Law

Several sources of international intellectual property law govern patent regulation. The Paris Convention<sup>65</sup> conceptualizes intellectual property as an

<sup>&</sup>lt;sup>57</sup> Laurence R. Helfer, *Pharmaceutical Patents and the Human Right to Health: The Contested Evolution of the Transnational Legal Order on Access to Medicines, in* TRANSNATIONAL LEGAL ORDERS 311, 317 (Terence Halliday & Greg Shaffer eds., 2014).

<sup>&</sup>lt;sup>58</sup> Int'l Comm. of Jurists, *supra* note 56, at 2 (pinpointing that states have "the primary responsibility for providing access to remedies at the national level.").

<sup>&</sup>lt;sup>59</sup> *Id.* at 2 (arguing that "victims of human rights violations should have access to effective remedies at both the national and international levels.").

<sup>&</sup>lt;sup>60</sup>*Id.* (stressing that "a complementary system of remedies at the international level is necessary to address instances where a State is unable or unwilling to provide remedies for violations or where such remedies are ineffective.").

<sup>&</sup>lt;sup>61</sup> Trechsel, *supra* note 56, at 4 (noting that "[t] here is already quite an impressive list of bodies which deal with human rights within the framework of the United Nations.").

<sup>&</sup>lt;sup>62</sup> *Id.* at 5 (pinpointing that "none can be regarded as a substitute for a world court for human rights" as "[e]ither [such UN bodies] are not judicial bodies—this applies in particular to the various commissions and committees—or they are not directly dealing with human rights issues, which applies to the Criminal Tribunals").

<sup>&</sup>lt;sup>63</sup> On the institutional fragmentation of the human rights system, see, e.g., Marjan Ajevski, *Fragmentation in International Human Rights Law – Beyond Conflict of Laws*, 32 NORDIC J. OF HUMAN RIGHTS 87, 88 (2014).

<sup>&</sup>lt;sup>64</sup> Mehrdad Payandeh, *Fragmentation within International Human Rights Law*, in A FAREWELL TO FRAGMENTATION: REASSERTION AND CONVERGENCE IN INTERNATIONAL LAW 297 (Mads Andenas and Eirik Bjorge eds., 2015) (stigmatizing the risks of conflicting jurisprudence among different monitoring bodies due to "structural biases of the different human rights treaty bodies.").

<sup>&</sup>lt;sup>65</sup> Paris Convention for the Protection of Industrial Property, Mar. 20 1883, last revised at Stockholm on July 14 1967, and amended on Sep. 28 1979, 828 U.N.T.S. 305 [hereinafter Paris Convention].

incentive to encourage innovation. <sup>66</sup> It harmonizes procedures relating to priority, registration, and licensing and requires national treatment for foreign patent owners. <sup>67</sup> In theory, a member that has failed to comply with its obligations under the Paris Convention could be sued before the International Court of Justice, <sup>68</sup> but no such cases have ever been brought. <sup>69</sup> Nonetheless, the Agreement on Trade-Related Aspects of Intellectual Property Rights Agreement (TRIPS Agreement) under the World Trade Organization (WTO), <sup>70</sup> incorporates some provisions of the Paris Convention and can be implemented through the WTO Dispute Settlement Mechanism (DSM).<sup>71</sup>

The TRIPS Agreement is the most comprehensive international treaty setting global standards for medical knowledge governance.<sup>72</sup> It requires WTO member states to provide patent protection for pharmaceuticals.<sup>73</sup> The patent owner is given limited monopoly rights over the patented medicine for twenty years, <sup>74</sup> and after this patent term expires, competitors may replicate the compound.

The TRIPS Agreement has been controversial since its inception. Developing countries opposed its adoption fearing that the introduction of high standards of intellectual property protection would jeopardize access to pharmaceuticals and other technology, and that the agreement would privilege the private economic interests of patent holders vis-à-vis important public

<sup>&</sup>lt;sup>66</sup> Rochelle Dreyfuss & Susy Frankel, *From Incentive to Commodity to Asset: How International Law is Reconceptualizing Intellectual Property* 3–4 (N.Y. Univ. Public Law & Legal Theory, Working Paper No. 14-53, 2014).

<sup>&</sup>lt;sup>67</sup> Helfer, *supra* note 57, at 314.

<sup>&</sup>lt;sup>68</sup> Paris Convention, *supra* note 65, at art. 28.

<sup>&</sup>lt;sup>69</sup> Dreyfuss & Frankel, *supra* note 66, at 5.

<sup>&</sup>lt;sup>70</sup> TRIPS Agreement Annex 1C.

<sup>&</sup>lt;sup>71</sup> The TRIPS Agreement has incorporated some of the fundamental principles of the Paris Convention such as the equal treatment of nationals and foreigners among others. *See* TRIPS Agreement art. 3; *see also id.* art. 2.1 (stating that "Members shall comply with Articles 1 through 12, and Article 19 of the Paris Convention.").

<sup>&</sup>lt;sup>72</sup> For a detailed commentary, *see* CARLOS CORREA, TRADE RELATED ASPECTS OF INTELLECTUAL PROPERTY RIGHTS — A COMMENTARY ON THE TRIPS AGREEMENT (2007); DANIEL GERVAIS, THE TRIPS AGREEMENT: DRAFTING HISTORY AND ANALYSIS (4th ed., 2012).

<sup>2012).</sup> <sup>73</sup> TRIPS Agreement at art. 27 (introducing pharmaceuticals as a patentable subject matter and requiring that patents be available in WTO member states "for any inventions, whether products or processes, in all fields of technology, provided that they are new, involve an inventive step and are capable of industrial application.").

 $<sup>^{74}</sup>$  *Id.* at art. 33 (stating that "[t]he term of protection available shall not end before the expiration of a period of twenty years counted from the filing date.").

policies furthering public health and developmental objectives.<sup>75</sup> Some scholars also doubted intellectual property's link to trade, given its effect of restricting the market.<sup>76</sup> Not by chance, the General Agreement on Tariffs and Trade (GATT)<sup>77</sup> listed intellectual property among the general exceptions to the general commitment to free trade and lower tariffs.<sup>78</sup> Nevertheless, through intense negotiation and linkage bargaining – that is, linking negotiations on intellectual property to negotiations in other sectors such as agriculture - the TRIPS Agreement was signed at the Marrakesh Ministerial conference in 1994. as part of a package deal with the other Uruguay Round Agreements, and came into force in January 1995.<sup>79</sup> As the outcome of intense cross-sectorial negotiations, the signing of the TRIPS Agreement does not mean that it provides an optimal equilibrium between the private and public interests. Rather, countries accepted its high standards of IP protection potentially reducing their regulatory autonomy in the pharmaceutical sector in light of the overall perceived benefits of the entire WTO package. By conceptualizing IP as a commodity,<sup>80</sup> the TRIPS Agreement severely constrained the regulatory autonomy of states in the pharmaceutical sector.

<sup>77</sup> General Agreement on Tariffs and Trade, Oct. 30, 1947, 61 Stat. A-11, 55 U.N.T.S. 194 [hereinafter GATT].

<sup>79</sup> José E. Alvarez, *The WTO as Linkage Machine*, 96 AM. J. INT'L L. 146, 147 (2002) (noting "[t]he WTO's success in 'nesting' issues within a broader context so that the 'fabric' of one became the foundation for another, as well as in making possible package deals between previously unlinked issues.").

<sup>80</sup> Dreyfuss & Frankel, *supra* note 66, at 3, 32 (noting that the TRIPS Agreement "moved from framing IP as a barrier to trade into conceptualizing it as a tradable commodity in the name of facilitating trade" and suggesting that the system may be "inclined to interpret proprietary rights broadly while construing user interests narrowly."). On the different, albeit related, phenomenon of the propertization of intangible assets, see Valentina Vadi, *Trademark Protection, Public Health and International Investment Law: Strains and* 

<sup>&</sup>lt;sup>75</sup> Jerome H. Reichmann, *The TRIPS Agreement Comes of Age: Conflict or Cooperation with the Developing Countries*, 32 CASE W. RES. J. INT.'L L. 441, 441–43 (2000) (pointing out that the TRIPS Agreement imposed "relatively high" standards of intellectual property protection which de facto correspond to those used in industrialized countries).

<sup>&</sup>lt;sup>76</sup> Michael Spence, *Which Intellectual Property Rights are Trade-Related?*, *in* ENVIRONMENT, HUMAN RIGHTS AND INTERNATIONAL TRADE 263–85 (Francesco Francioni and Tullio Scovazzi eds., 2001).

<sup>&</sup>lt;sup>78</sup> *Id.* at art. 20(d) ("Subject to the requirement that such measures are not applied in a manner which would constitute a means of arbitrary or unjustifiable discrimination between countries where the same conditions prevail, or a disguised restriction on international trade, nothing in this Agreement shall be construed to prevent the adoption or enforcement by any contracting party of measures: . . . (d) necessary to secure compliance with laws or regulations which are not inconsistent with the provisions of this Agreement, including those relating to . . . the protection of patents, trade marks and copyrights, and the prevention of deceptive practices . . . .").

The TRIPS Agreement provides minimum standards for intellectual property protection, below which the member states cannot fall.<sup>81</sup> WTO Members have the right to provide for more extensive protection that is not required by the TRIPS Agreement, as long as they follow the general principles of the most-favoured-nation clause and national treatment.<sup>82</sup> Therefore, any intellectual property agreement negotiated subsequent to TRIPS by WTO members can only create similar or higher standards for IP protection (commonly known as *TRIPS-plus*).<sup>83</sup> Members can enforce the provisions of the TRIPS Agreement through the WTO Dispute Settlement Mechanism (DSM), which has compulsory jurisdiction over TRIPS-related disputes.<sup>84</sup>

International investment law, the last wave of IP rights protection, considers IP as a form of investment.<sup>85</sup> As investment treaties broadly define the notion of investment, a potential tension exists when a state adopts measures governing pharmaceutical patents that interfere with foreign investments. This is because such regulation may be considered a violation of investment treaty provisions protecting the patent rights of foreign companies. Moreover, because investment treaties provide foreign investors with direct access to investment arbitration, foreign investors can directly challenge national measures and can seek compensation for the impact of such regulation on their business. Indeed, a number of investor-state arbitrations have dealt with pharmaceutical regulation, and the time is ripe for a comprehensive analysis and critical assessment,

*Paradoxes*, 20 EUR. J. INT'L. L. 773, 775 (2009) ("The propertization of intangible goods has become a common trend in international standard setting. Propertization can be defined as the process of putting emphasis on proprietary aspects of given intangible rights or the characterization of modern knowledge governance as moving towards a property-based regime.").

<sup>&</sup>lt;sup>81</sup> TRIPS Agreement art. 1.1 ("Members shall give effect to the provisions of this Agreement.")

<sup>&</sup>lt;sup>82</sup> *Id.* ("Members may, but shall not be obliged to, implement in their law more extensive protection than is required by this Agreement, provided that such protection does not contravene the provisions of this Agreement.").

<sup>&</sup>lt;sup>83</sup> In recent years, states have signed a number of regional and bilateral agreements including TRIPS-plus provisions. On the phenomenon, see, *e.g.*, Ruth L. Okediji, *Back to Bilateralism? Pendulum Swings in International Intellectual Property Protection*, 1 U. OTTAWA L. & TECH J. 125, 141 (2003–2004) (describing the phenomenon of forum shifting as a means of increasing the strength of protection of intellectual property rights).

<sup>&</sup>lt;sup>84</sup> TRIPS Agreement art. 64. See generally Rochelle Cooper Dreyfuss & Andreas F. Lowenfeld, *Two Achievements of the Uruguay Round: Putting TRIPS and Dispute Settlement Together*, 37 VAND. J. INT'L L. 275, 282 (1997).

<sup>&</sup>lt;sup>85</sup>Boie, *supra* note 2, at 4 (noting that "[international investment agreements] usually protect intellectual property by including it in the definition of investment.").

especially concerning their potential effect of emphasizing private property at the expense of the public interest.<sup>86</sup>

#### C. Pharmaceuticals and International Health Law

In contrast with IP protection, another component of the regime governing pharmaceuticals, international health law, has developed slowly.<sup>87</sup> The internationalization of public health law is not a new phenomenon. The shift from national to international governance began in the mid-19<sup>th</sup> century,<sup>88</sup> when states adopted a discrete number of binding international conventions dealing with various aspects of public health.<sup>89</sup> The cholera epidemics through Europe in the first half of the 19<sup>th</sup> century catalyzed intense international health diplomacy and cooperation.<sup>90</sup> Not only did the cholera epidemics show the failure of national quarantine systems to prevent the spread of the disease, but they also created discontent among merchants, whose trade had been affected by the quarantine measures.<sup>91</sup> The merchants urged their governments to take international action.<sup>92</sup> The first International Sanitary Conference was organized in 1851 "to discuss cooperation on cholera, plague, and yellow fever,"<sup>93</sup> and established the principle that "health protection was a proper subject for

<sup>&</sup>lt;sup>86</sup> Dreyfuss & Frankel, *supra* note 66, at 3.

<sup>&</sup>lt;sup>87</sup> Jennifer Prah Ruger, *Normative Foundations of Global Health Law*, 96 GEO. L. J. 423, 424 (2007–2008) (describing international health law as "a relatively new academic field"); Shawn H.E. Harmon, *International Public Health Law: Not so Much WHO as Why, and Not Enough WHO and Why Not?* 12 MED. HEALTH CARE AND PHILOS. 245, 245 (2009) (noting that "neither the WHO … nor international law … have yet played their necessary part in promoting 'health for all."); *see generally* DAVID P. FIDLER, INTERNATIONAL LAW AND PUBLIC HEALTH: MATERIAL ON AND ANALYSIS OF GLOBAL HEALTH JURISPRUDENCE (2000).

<sup>&</sup>lt;sup>88</sup> David P. Fidler, *International Law and Global Public Health*, 48 U. KAN. L. REV. 1, 2 (1999–2000) [hereinafter Fidler, *Int'l Law and Global Public Health*] (highlighting "states" extensive use in the late part of the nineteenth century and first half of the twentieth century of international law in dealing with public health problems.").

<sup>&</sup>lt;sup>89</sup> The First International Sanitary Convention focused on cholera. *See* BOB REINALDA, ROUTLEDGE HISTORY OF INTERNATIONAL ORGANIZATIONS: FROM 1815 TO THE PRESENT DAY 172 (2009). The Convention was adopted at the seventh International Sanitary Conference held in Venice in 1892. *See* AGINAM OBIJIOFOR, GLOBAL HEALTH GOVERNANCE: INTERNATIONAL LAW AND PUBLIC HEALTH IN A DIVIDED WORLD 51 (2005).

<sup>&</sup>lt;sup>90</sup> David P. Fidler, *The Globalization of Public Health: The First 100 Years of International Health Diplomacy*, 79 BULL. WORLD HEALTH ORG. 842, 843 (2001).

<sup>&</sup>lt;sup>91</sup> *Id*.

<sup>&</sup>lt;sup>92</sup> *Id*.

<sup>&</sup>lt;sup>93</sup>*Id*.

international consultations." <sup>94</sup> Other international conferences followed, "focusing exclusively on the containment of epidemics."<sup>95</sup>

Despite these early adoptions of binding international health law instruments, since the inception of the World Health Organization (WHO) in 1946,96 international health law has taken a less ambitious path. In fact, the WHO has favored non-legal, medical-technical approaches to health issues.<sup>97</sup> The WHO, mainly composed of health specialists,<sup>98</sup> has principally, if not exclusively, adopted medical guidelines and other nonbinding tools. It has developed "an ethos that looks at global health problems as medical-technical issues to be resolved by the application of the healing arts."99 Instruments such as declarations and recommendations adopted by the WHO have been described as "limited in scope and application"<sup>100</sup> as well as "historically, politically and structurally inadequate to do what is needed."<sup>101</sup> Such instruments "are being developed ... in an uncoordinated ... manner" and "pale in comparison to that of other international [organizations] ...."<sup>102</sup> International health law has not been an effective system, due to its mainly non-legal approach, lack of enforcement mechanisms and states' consequent failure to comply with its rules.<sup>103</sup> The WHO adopted its first binding convention only a decade ago.<sup>104</sup> The organization "rarely participate[s] in trade negotiations or the resolution of trade disputes, even when such are linked to public health."<sup>105</sup> Only in 2015 has it,

<sup>&</sup>lt;sup>94</sup> WHO, THE WORLD HEALTH REPORT 2007: A SAFER FUTURE: GLOBAL PUBLIC HEALTH SECURITY IN THE 21ST CENTURY 7 (2007).

<sup>&</sup>lt;sup>95</sup> Id.

<sup>&</sup>lt;sup>96</sup> Constitution of the World Health Organization, July 22, 1946, 62 Stat. 2679, 14 U.N.T.S. 185.

<sup>&</sup>lt;sup>97</sup> Fidler, *Int'l and Global Public Health*, *supra* note 88, at 22 (noting "the historical penchant [of the WHO] for dealing with public health problems within a narrow 'medical-technical' approach.").

<sup>&</sup>lt;sup>98</sup>*Id.* at 22 ("WHO has historically been staffed predominantly by physicians, medical scientists, and public health experts.").

<sup>&</sup>lt;sup>99</sup> David P. Fidler, *The Future of the World Health Organization: What Role for International Law?* 31 VAND. J. TRANSNAT'L L. 1079, 1099 (1998).

<sup>&</sup>lt;sup>100</sup> Harmon, *supra* note 87, at 251.

<sup>&</sup>lt;sup>101</sup> *Id.* (internal citation omitted).

 $<sup>^{102}</sup>$  *Id*.

<sup>&</sup>lt;sup>103</sup> Jennifer Prah Ruger, *Normative Foundations of Global Health Law*, 96 GEO. L.J. 423, 438 (2007–2008) (noting that "international health law has been viewed as 'ineffective").

<sup>&</sup>lt;sup>104</sup> WHO, FRAMEWORK CONVENTION ON TOBACCO CONTROL 6 (2003), http://www.who.int/tobacco/framework/WHO\_FCTC\_english.pdf.

<sup>&</sup>lt;sup>105</sup> Harmon, *supra* note 87, at 251.

cautiously, started intervening in investment treaty arbitration as *amicus* curiae.<sup>106</sup>

In the absence of a well-articulated international health law regime, public health protection has remained a fundamental prerogative of the states.<sup>107</sup> States have a right and a duty to protect public health, and the power to adopt measures to protect their population: one of the conditions of their very existence.<sup>108</sup> Each state has a social contract with its citizens, which prompt it to assume these public-health related burdens.<sup>109</sup>

Given the interconnectedness of health with other global issues, including trade and foreign investments, <sup>110</sup> and the asymmetrical development of international health law and other fields of international law, many elements of public health governance have been affected by the actions of international bodies whose primary objectives do not concern health. <sup>111</sup> For instance, international investment law and arbitration has increasingly governed or impacted international public health policy. The following sections will examine this interplay, focusing on how international investment law governs pharmaceutical patents and how investment treaty arbitral tribunals have adjudicated the relevant disputes.

<sup>&</sup>lt;sup>106</sup> Jarrod Hepburn, Clovis Trevino & Luke Eric Peterson, *World Health Organization is Given Green-Light by Arbitrators to Intervene in Philip Morris v. Uruguay Arbitration*, 8 INV. ARB. REP. 1, 31 (2015) (noting that "[i]n their request to intervene, the WHO and the FCTC Secretariat contended that their submission 'may assist the tribunal in the determination of factual and legal issues' as it w[ould] provide evidence of the relation between health warnings and labeling and the protection of public health, on tobacco control globally which, in their view, may assist the tribunal in assessing the claimant's legitimate expectations and the legal relation between the FCTC and the Switzerland-Uruguay BIT."). For a commentary of the specific arbitration, see Valentina Vadi, *Global Health Governance at a Crossroads: Trademark Protection v. Tobacco Control in International Investment Law*, 48 STAN. J. INT'L L. 93–130 (2012).

<sup>&</sup>lt;sup>107</sup> Lawrence O. Gostin, *Public Health Law in a New Century* 283 JAMA. 2837, 2837 (2000) (highlighting that "the government has the primary responsibility to advance the public's health because it acts on behalf of the people" and noting, at 2838, that "theories of democracy" explain "the primacy of government in matters of public health.").

<sup>&</sup>lt;sup>108</sup> VADI, *supra* note 54, at 30; Montevideo Convention on the Rights and Duties of States art. 1., Dec. 26, 1933, 49 Stat. 3097, 165 L.N.T.S. 19 (stating that a population is one of the three elements required for statehood, together with territory and government).

<sup>&</sup>lt;sup>109</sup> Harmon, *supra* note 87, at 247.

<sup>&</sup>lt;sup>110</sup> Allyn Taylor, *Global Governance, International Health Law and WHO: Looking Towards the Future*, 80 BULL. WORLD HEALTH ORG. 975, 975–76 (2002), http://www.who.int/docstore/bulletin/pdf/2002/bul-12-E-2002/80(12)975-980.pdf.

<sup>&</sup>lt;sup>111</sup> *Id.* at 251.

#### INTERNATIONAL INVESTMENT LAW AND ARBITRATION

International investment law constitutes an important part of international law governing foreign direct investment (FDI).<sup>112</sup> As there is still no single comprehensive global treaty, investor rights are mainly defined by almost 3,000 international investment agreements (IIAs), which encompass both bilateral investment treaties (BITs) and multilateral instruments, that are signed by participating states and are governed by public international law.<sup>113</sup> Under these agreements, state parties concede to provide a certain degree of protection to investors who are nationals of contracting states. These concessions include compensation in the case of expropriation, fair and equitable treatment, most favoured nation treatment, and full protection and security, among others.

As IIAs are "the most important instruments for the protection of foreign investment," <sup>114</sup> there is a general expectation that the conclusion of such agreements will encourage FDI among the contracting nations. <sup>115</sup> Host

<sup>113</sup> United Nations Conference on Trade and Development [UNCTAD], *World Investment Report 2011*, 100, U.N. Doc. UNCTAD/WIR/2011 (July 26, 2011).

<sup>114</sup> United Nations Conference on Trade and Development [UNCTAD], *Bilateral Investment Treaties: 1959–1999*, 1, U.N. Doc. UNCTAD/ITE/IIA2 (Dec. 14, 2000).

<sup>&</sup>lt;sup>112</sup> JOSÉ E. ALVAREZ, THE PUBLIC INTERNATIONAL LAW REGIME GOVERNING INTERNATIONAL INVESTMENT 14–15 (2011). For a historical overview, see ANDREAS LOWENFELD, INTERNATIONAL ECONOMIC LAW 469-494 (2d ed. 2008); JESWALD W. SALACUSE, THE LAW OF INVESTMENT TREATIES (2010); M. SORNARAJAH, THE INTERNATIONAL LAW ON FOREIGN INVESTMENT 19–28 (3d ed. 2010); ANDREW NEWCOMBE & LUIS PARADELL, LAW AND PRACTICE OF INVESTMENT TREATIES 3–57 (2009).

<sup>&</sup>lt;sup>115</sup> Some authors are skeptical about whether BITs actually attract investment. See Jason W. Yackee, Do BITs Really Work? Revisiting the Empirical Link between Investment Treaties and Foreign Direct Investment, in THE EFFECT OF TREATIES ON FOREIGN DIRECT INVESTMENT: BILATERAL INVESTMENT TREATIES, DOUBLE TAXATION TREATIES, AND INVESTMENT FLOWS (Sauvant & Sachs eds. 2009); Jason W. Yackee, Bilateral Investment Treaties, Credible Commitment, and the Rule of (International) Law: Do BITs Promote Foreign Direct Investment, 42 LAW & SOC'Y REV. 805, 807 (2008). See generally M. Hallward-Driemeier, Do Bilateral Investment Treaties Attract Foreign Direct Investment? Only a Bit... And They Could Bite (Policy Research, Working Paper No. 3121, 2003). However, other authors have identified a positive impact. See generally Jeswald Salacuse & N. P. Sullivan, Do BITs Really Work? An Evaluation of Bilateral Investment Treaties and Their Grand Bargain, 46 HARV. INT'L. L.J. 67 (2005); E. Neumayer & L. Spess, Do Bilateral Investment Treaties Increase Foreign Direct Investment to Developing Countries?, 33 WORLD DEV. 1567 (2005); A. Bénassy-Quéré, M. Coupet & T. Mayer, Institutional Determinants of Foreign Direct Investment, 30 WORLD ECONOMY 764 (2007); P. Egger & V. Merlo, The Impact of Bilateral Investment Treaties on FDI Dynamics, 30 WORLD ECONOMY 1536 (2007); P. Egger & M Pfaffermayr, The Impact of Bilateral Investment Treaties on Foreign Direct Investment, 32 J. OF COMPARATIVE ECON. 788 (2004); J. Tobin & S. Rose-Ackerman, Foreign Direct Investment and the Business Environment in Developing

countries, generally developing and least developed countries but now increasingly developed countries,<sup>116</sup> assume obligations for the protection of foreign investments in order to attract foreign investments. Countries also adhere to these dealings to protect the economic interests of their nationals investing overseas. For both of these reasons, such agreements have come to play a major role in the growing competition to attract and export FDI.

At the procedural level, IIAs can grant foreign investors holding patents direct access to investment treaty arbitration.<sup>117</sup> In doing so, they create a set of procedural rights for the direct benefit of investors.<sup>118</sup> This is a novelty in international law, as customary international law does not provide such a diagonal mechanism for settling disputes between foreign investors and host states.<sup>119</sup> The rationale for internationalizing investor-state disputes lies in the assumed independence and impartiality of international arbitral tribunals, while national dispute settlement procedures are often perceived as biased or inadequate to protect foreign investors.<sup>120</sup> Arbitration is also used because of perceived advantages in confidentiality and effectiveness.<sup>121</sup>

<sup>117</sup> Lahra Liberti, Intellectual Property Rights in International Investment Agreements: An Overview 1, 3 (OECD Working Papers on Int'l Inv., 2010/01, 2010), http://www.oecdilibrary.org/finance-and-investment/intellectual-property-rights-in-international-investment-

*Countries: The Impact of Bilateral Investment Treaties* (Yale Law and Econ. Working Paper No. 293, 2005).

<sup>&</sup>lt;sup>116</sup> See generally Valentina Vadi, Converging Divergences: The Rise of Chinese Outward Foreign Investment and Its Implications for International (Investment) Law, 2011–2012 Y.B. INT'L INV. L. 705 (2013) (noting that the traditional distinction between capital importers and capital exporters has become blurred and investment treaties have increasingly been signed not only among industrialized countries on the one side and developing countries on the other side, but also among LDCs and emerging economies).

agreements\_5kmfq1njzl35-en (noting the "possibility for an IPR holder to bring a claim against a state under the investor-state dispute settlement mechanism.").

<sup>&</sup>lt;sup>118</sup> Jan Paulsson, Arbitration Without Privity 10 ICSID REV. FOR INV. L. J. 232, 239 (1995).

<sup>&</sup>lt;sup>119</sup> David R. Sedlak, *ICSID's Resurgence in International Investment Arbitration: Can the Momentum Hold?*, 23 PENN. ST. INT'L L. REV. 147, 147–49 (2004) (noting that investor-state arbitration has become a standard feature in international investment treaties since the 1980s).

<sup>&</sup>lt;sup>120</sup> See Andrew Newcombe & Lluis Paradell, LAW AND PRACTICE OF INVESTMENT TREATIES 24 (2009).

<sup>&</sup>lt;sup>121</sup> See Ibrahim F.I. Shihata, *The Settlement of Disputes Regarding Foreign Investment: The Role of the World Bank, with Particular Reference to ICSID and MIGA*, 1 AM. U. J. INT'L L. & POL'Y 97, 103 (1986) (noting that "The main features of th[e ICSID System] include its voluntary character, its flexibility, and its effectiveness.").

Investor-state arbitration is procedurally similar to international commercial arbitration between private parties.<sup>122</sup> The parties choose the arbitrators among law scholars and practitioners.<sup>123</sup> Although arbitrators are expected to be both independent of the party appointing them and impartial,<sup>124</sup> they may permissibly share the political, economic, or legal ideals of the party that nominated them. From the offset, such appointees may be presumed sympathetic to the nominating party's contentions and positions.<sup>125</sup>

Confidentiality is one of the main features of arbitral proceedings as generally hearings are held *in camera*, and documents submitted by the parties remain confidential in principle.<sup>126</sup> Final awards may or may not be published, depending upon the parties' will. Names of the parties can remain undisclosed, as do the details of the dispute, albeit to a lesser degree.

Although confidentiality is well suited to private commercial disputes, the same may be problematic in investor-state arbitration, because arbitral tribunals can require states to compensate investors for regulations that hurt the latter. The lack of transparency may hamper efforts to track investment treaty arbitrations, monitor their frequency, and to assess the policy implications that flow therefrom.<sup>127</sup> Because investment disputes are settled using a variety of

<sup>&</sup>lt;sup>122</sup> Nigel Blackaby, *Investment Arbitration and Commercial Arbitration (or the Tale of the Dolphin and the Shark), in* PERVASIVE PROBLEMS IN INTERNATIONAL ARBITRATION 217, 232 (Julian Lew & Loukas Mistelis eds., 2006).

<sup>&</sup>lt;sup>123</sup> JOHN COLLIER & VAUGHAN LOWE, THE SETTLEMENT OF DISPUTES IN INTERNATIONAL LAW 69 (1999) ("The parties choose an uneven number of arbitrators, three in the absence of agreement, and the persons to act as arbitrators."); J.A. Fontoura Costa, *Comparing WTO Panelists and ICSID Arbitrators: The Creation of International Legal Fields*, 1 ONATI SOCIO-LEGAL SERIES 1, 14 (2011) ("Virtually all ICSID arbitrators and ad hoc committee members have some legal background, since only 0.4% of the whole population is composed of individuals who had not at least studied law. On the other hand, WTO figures are very different: 45% of panelists and 10% of AB members have no links to any legal background or professional activity.").

<sup>&</sup>lt;sup>124</sup> Jeswald W. Salacuse, *The Emerging Global Regime for Investment*, 51 HARV. INT'L L. J. 427, 466 (2010).

<sup>&</sup>lt;sup>125</sup> Alan S. Rau, Integrity in Private Judging, 38 S. TEX. L. REV. 485, 507 (1997).

<sup>&</sup>lt;sup>126</sup> Some hearings have been broadcast in special viewing rooms at the ICSID headquarters in Washington, but were not webcast. See Lise Johnson, As Hearings Kick Off in Apotex v. USA Arbitration, New Pleadings Show Continued Sparring Over Canadian Drug Companies's Claim to Own NAFTA-Protected Investments, 6 INV. ARB. REP. 1, 5 (2013).

<sup>&</sup>lt;sup>127</sup> While more awards have been published, some arbitrations and the relevant awards were given minimal publicity. For instance, a redacted version of the *Servier* award, discussed below, was released by a Polish Government agency following a request under the country's access to information laws. A May 2013 ruling of the Warsaw District Administrative Court directed Poland's Ministry of Health to release the *Servier* award,

arbitral rules,<sup>128</sup> some of which do not even disclose the existence of arbitration claims, there can be no accurate accounting of all such disputes.<sup>129</sup> This should be a matter of concern given the public policy implications of such disputes.

In recent years, efforts to make investment arbitration more transparent have been undertaken in various *fora*. In response to calls from civil society groups, the three parties to the North American Free Trade Agreement (NAFTA), Canada, the United States, and Mexico, have pledged to disclose all NAFTA arbitrations and open future arbitration hearings to the public.<sup>130</sup> Similarly, the International Centre for Settlement of Investment Disputes (ICSID) requires public disclosure of dispute proceedings under its auspices,<sup>131</sup> including the registration of all requests for conciliation or arbitration and an indication of the date and method of the termination of each proceeding. Increasingly, arbitral tribunals have allowed public interest groups to present *amicus curiae* briefs or to access the arbitral process.<sup>132</sup>

However, these important developments in transparency appear in only a limited number of investment disputes. The vast majority of existing IIAs do not mandate such transparency, which means that most of the proceedings are still resolved behind closed doors. The recent adoption of the United Nations Convention on Transparency in Treaty-based Investor-State Arbitration (the "Mauritius Convention on Transparency"),<sup>133</sup> by which Parties to IIAs have

<sup>129</sup> Luke Eric Peterson, Int'l Inst. for Sustainable Dev. [IISD], *Bilateral Investment Treaties and Development Policy-Making*, 15 (2004).

<sup>130</sup> NAFTA Free Trade Commission, *Statement of the Free Trade Commission on Non-Disputing Party Participation*, at 7 (Oct. 7, 2003), http://www.state.gov/documents/organization/38791.pdf.

<sup>131</sup> ICSID, Administrative and Financial Regulations, Reg. 22: Publication, at 66, ICSID Doc. ICSID/15 (April 2006), [hereinafter ICSID, Admin. and Financial Regs.], https://icsid.worldbank.org/ICSID/StaticFiles/basicdoc/CRR\_English-final.pdf).

<sup>132</sup> ICSID, Rules of Procedure for Arbitration Proceedings, Rule 37: Visits and Inquires; Submissions of Non-Disputing Parties, at 117, ICSID Doc. ICSID/15 (April 2006), https://icsid.worldbank.org/ICSID/StaticFiles/basicdoc/CRR\_English-final.pdf.

<sup>133</sup> United Nations Convention on Transparency in Treaty-based Investor-State Arbitration (the "Mauritius Convention on Transparency"), Dec. 10, 2014, A/RES/69/116.

subject to any redactions of confidential commercial information. A previously released copy of the 2012 award offered only the cover page and signature page. See Jarrod Hepburn, Poland Releases A New – Less Redacted – Version of Award From Dispute With French Pharma Companies; MFN can't Broaden Investment Treaty's Arbitration Clause, 6 INV. ARB. REP. 1, 3–4 (2013).

<sup>&</sup>lt;sup>128</sup> States usually offer investors a variety of rules to choose from, which may include the UNCITRAL Arbitration Rules, the Rules of Procedure for Arbitration of the International Centre for Settlement of Investment Disputes (ICSID), the arbitration rules of the International Chamber of Commerce (ICC) or other arbitration rules such as the arbitration rules of the Stockholm Chamber of Commerce (SCC).

expressed their consent to apply the United Nations Commission on International Trade Law (UNCITRAL) Rules on Transparency in agreementbased investor-state arbitrations, may increase the transparency of such disputes.

Finally, awards rendered against host states are, in theory, readily enforceable against host state property worldwide due to the widespread adoption of the New York,<sup>134</sup> and Washington Conventions.<sup>135</sup> In arbitrations under the ICSID Convention, awards are only subject to an internal annulment process, enforced as a local court judgment, and exempt from the supervision of local courts.<sup>136</sup> In non-ICSID arbitrations, annulment is subject to the supervision of the courts at the seat of arbitration, and enforcement is governed by the New York Convention, which allows for non-recognition and non-enforcement of an award only on limited grounds.<sup>137</sup> Thus, if the arbitration is sited in a country other than the host state, there may be no capacity whatsoever for the host government to challenge the award in its own legal system.

Given these characteristics of the arbitral process, significant issues arise in the context of disputes involving pharmaceuticals. Arbitration structurally constitutes a private model of adjudication, but arbitral awards ultimately shape the relationship between the state and private individuals.<sup>138</sup> Arbitrators weigh in on vital policy matters such as the legality of governmental activity, the degree to which individuals should be protected from regulation, and the appropriate role of the state.<sup>139</sup> In cases involving public health, one may wonder whether investment arbitration provides an adequate forum to address important noneconomic concerns. Furthermore, the mere possibility of a dispute with a

<sup>139</sup> M. Sornarajah, *The Clash of Globalizations and the International Law on Foreign Investment* 12 CAN. FOR. POL'Y. 2, 2–10 (2003).

The Convention will enter into force six months after the deposit of the third instrument of ratification. The list of the parties to the Convention as well as signatories is available at http://www.uncitral.org/uncitral/en/uncitral\_texts/arbitration/2014Transparency\_Convention\_status.html.

<sup>&</sup>lt;sup>134</sup> New York Convention on the Recognition and Enforcement of Foreign Arbitral Awards, Jun. 10, 1958, 330 U.N.T.S. 38 [hereinafter NY Convention].

<sup>&</sup>lt;sup>135</sup> Convention on the Settlement of Investment Disputes between States and Nationals of other States, Mar.18, 1965, 17 U.S.T. 1270 [hereinafter ICSID Convention].

<sup>&</sup>lt;sup>136</sup> *Id.* at art. 52.

<sup>&</sup>lt;sup>137</sup> NY Convention, *supra* note 134, at art. 5.

<sup>&</sup>lt;sup>138</sup> GUS VAN HARTEN, INVESTMENT TREATY ARBITRATION AND PUBLIC LAW 70 (Vaughan Lowe ed., 2007).

powerful investor can exert a chilling effect on governments' actions to regulate in the public interest.<sup>140</sup>

#### III

## THE RISE OF INVESTOR-STATE ARBITRATIONS CONCERNING PHARMACEUTICAL PATENTS

Despite the economic importance of pharmaceutical patents, and the flourishing of arbitrations concerning them among private parties, known patent investment disputes have been rare.<sup>141</sup> Only recently has this situation started to change.<sup>142</sup> The few known pharmaceutical patent arbitrations have been high profile disputes that raise a number of important questions. How much does investment arbitration limit the regulatory autonomy of states? What is the interplay between investment arbitration and the parallel WTO DSM? Does investment arbitration allow adjudicators to strike an optimal equilibrium between private and public interests characterizing pharmaceutical patents? This part examines the reasons for the traditional paucity of cases and the recent rise of investor-state arbitrations concerning pharmaceuticals. Part IV explores the substantive issues raised by such arbitrations, highlighting the emergence of a new dialectics between the public and private interests embedded in intellectual property rights.

Several factors may have accounted for the relative paucity of patentrelated investor-state arbitrations. Firstly, the available data could represent just the tip of the iceberg, given the investment arbitration's limited transparency. While ICSID makes the existence of all proceedings public and generally

<sup>&</sup>lt;sup>140</sup> See generally Kyla Tienhaara, Regulatory Chill and the Threat of Arbitration: A View from Political Science, in EVOLUTION IN INVESTMENT TREATY LAW AND ARBITRATION 607 (Chester Brown & Kate Miles eds., 2011); Stuart G. Gross, Inordinate Chill: BITS, Non-NAFTA MITS, and Host-state Regulatory Freedom: An Indonesian Case Study, 24 MICH. J. INT'L L. 893, 960 (2003) (examining a case where Indonesia repealed a regulation protecting forests after the threat of an investment treaty arbitration). But see Jeremy Caddel & Nathan M. Jensen, Which Host Country Government Actors are Most Involved in Disputes with Foreign Investors?, in COLUMBIA FDI PERSPECTIVES No. 120 at 1, 2 (Karl P. Sauvant & Shawn Lim eds., 2014) ("Given the low rate of disputes involving legislative branch activity, arguments that investor-state arbitration may encroach on the legitimate prerogatives of domestic governments appear to be overstated. Instead, democratic legislatures should embrace investor state arbitration as an additional check on executive branch misbehavior.").

<sup>&</sup>lt;sup>141</sup> LUKAS VANHONNAEKER, INTELLECTUAL PROPERTY RIGHTS AS FOREIGN DIRECT INVESTMENTS: FROM COLLISION TO COLLABORATION VII (2015) (noting "a relative paucity of cases").

 $<sup>^{142}</sup>$  For a comprehensive analysis of the pharmaceutical patent-related arbitrations see *infra* Part IV.

encourages the publication of awards, <sup>143</sup> other arbitral institutions do not necessarily disclose their dockets, and even when they do so, they do not publish the awards unless the parties so agree.<sup>144</sup> Moreover, the existence of *ad hoc* arbitrations could remain unknown.

Secondly, it takes time for parties to switch to this new forum. Although the first BIT providing for investor-state arbitration was signed in 1959,<sup>145</sup> only during the 1990's did investment arbitration clearly emerge as an international mechanism of adjudicative review.<sup>146</sup> The first investment treaty arbitration was registered in 1987.<sup>147</sup> Since then, the flow of investment treaty claims has increased remarkably,<sup>148</sup> totaling 608 as of the year 2015.<sup>149</sup> Traditionally, parties preferred other *fora* for claims concerning pharmaceutical patents. National courts are always an option to foreign investors.<sup>150</sup> As pharmaceutical patents are territorial in nature, they are subject to the national laws of each individual country.<sup>151</sup> At the regional level, the Court of Justice of the European Union (CJEU) has adjudicated several cases dealing with IP in general and pharmaceutical patents in particular. Even human rights courts can and have adjudicated IP-related cases. For instance, the European Commission of Human

<sup>&</sup>lt;sup>143</sup> ICSID Convention, *supra* note 135, at art. 48(5) ("The Centre shall not publish the award without the consent of the parties."); ICSID, *Admin. and Financial Regs., supra* note 131, at 66, ("The Secretary-General shall appropriately publish information about the operation of the Centre, including the registration of all requests for conciliation or arbitration and in due course an indication of the date and method of the termination of each proceeding. If both parties to a proceeding consent to the publication of . . . arbitral awards; or the minutes and other records of proceedings, the Secretary-General shall arrange for the publication thereof, in an appropriate form with a view to furthering the development of international law in relation to investments.").

<sup>&</sup>lt;sup>144</sup> See, e.g., The Arbitration Inst. of the Stockholm Chamber of Commerce, *Rules of the Arbitration Institute of the Stockholm Chamber of Commerce*, art. 46, (Jan. 2010), http://www.sccinstitute.se/filearchive/1/13207/1999\_web\_a4\_vanliga\_2004\_eng\_rev\_2005.pdf.

<sup>&</sup>lt;sup>145</sup> Treaty for the Promotion and Protection of Investments, Ger.-Pak., Nov. 25, 1959, 457 U.N.T.S. 24.

<sup>&</sup>lt;sup>146</sup> Gus Van Harten and Martin Loughlin, *Investment Treaty Arbitration as a Species of Global Administrative Law*, 17 EUROPEAN JOURNAL OF INTERNATIONAL LAW 121, 124 (2006).

<sup>&</sup>lt;sup>147</sup> Asian Agricultural Products Ltd v. Democratic Socialist Republic of Sri Lanka, ICSID Case No. ARB/87/3, Award, at 527 (June 27 1990).

<sup>&</sup>lt;sup>148</sup> LUCY REED, JAN PAULSSON & NIGEL BLACKABY, GUIDE TO ICSID ARBITRATION 7 (2d ed. 2011).

<sup>&</sup>lt;sup>149</sup> U.N. Conference on Trade & Dev. [UNCTAD], World Investment Report 2007: Transnational Corporations, Extractive Industries and Development, xi, U.N. Doc. UNCTAD/WIR/2007 (July 2007).

<sup>&</sup>lt;sup>150</sup> VADI, *supra* note 54, at 51.

<sup>&</sup>lt;sup>151</sup> Helfer, *supra* note 57, at 314 ("National patent laws are exclusively territorial in scope.").
Rights (ECoHR) has deemed that IP is a form of property and thus protected under Article 1 of the first Protocol of the Convention.<sup>152</sup> Finally, at the international level, the WTO has an additional DSM for cases in which a state violates its commitments under the TRIPS Agreement.<sup>153</sup>

Thirdly, investment disputes take many years to complete and are extremely expensive—often more expensive than dispute resolutions at national and regional *fora*.<sup>154</sup> Thus, initiating an investment dispute may prove to be a suitable option only for large corporate actors that have the resources to fund multi-year, multi-million dollar disputes.

Finally, investment lawyers may lack sufficient knowledge about intellectual property.<sup>155</sup> For a long time, investment disputes focused mainly on tangible assets,<sup>156</sup> while intellectual property was considered to be "a highly technical subject."<sup>157</sup> Conversely, IP lawyers may lack sufficient knowledge about international investment law. The lack of knowledge and familiarity on

<sup>155</sup> Valentina Vadi, Mapping Uncharted Waters: Intellectual Property Disputes with Public Health Elements in Investor-State Arbitration, 2 TRANSN'L DISP. MGMT. 1, 6 (2009) [hereinafter Vadi, Mapping Uncharted Waters].

<sup>156</sup> See, e.g., AHS Niger and Menzies Middle East and Africa S.A. v. Republic of Niger, ICSID Case No. ARB/11/11, Award, at 15 (July 2013) (where Niger was found liable for expropriation of airport services concession, but no damages due for subsequent "misuse" of intellectual property).

<sup>157</sup> See Vadi, Mapping Uncharted Waters, supra note 155 (referring to David Vaver, Does the Public Understand Intellectual Property? Do Lawyers? (Univ. of Oxford Faculty of Law & Legal Studies Research Paper Series, Working Paper No. 23/2006, 2006)).

<sup>&</sup>lt;sup>152</sup> See, e.g., Anheuser Busch Inc. v. Portugal, 2007-II Eur. Ct. H.R. (holding that intellectual property undeniably attracts the protection of Art. 1 of Protocol No. 1). See generally, Henning Grosse Ruse–Khan, Overlaps and Conflict Norms in Human Rights Law: Approaches of European Courts to Address Intersections with Intellectual Property Rights, in RESEARCH HANDBOOK ON HUMAN RIGHTS AND INTELLECTUAL PROPERTY (Christopher Geiger ed., 2014).

<sup>&</sup>lt;sup>153</sup> See generally Pauwelyn, supra note 25.

<sup>&</sup>lt;sup>154</sup> Although alternative dispute mechanisms such as arbitration and mediation have been traditionally described as cheaper than litigation, this is not always the case, especially with regard to investment disputes, where legal fees and expenses are extremely high. *See* Matthew Hodgson, *Counting the Costs of Investment Treaty Arbitration*, 9 GLOBAL ARB. REV. 2 (2014) ("[T]he average party costs were quite similar, at \$4,437,000 for claimants and \$4,559,000 for respondents."); Tamara L. Slater, *Investor-State Arbitration and Domestic Environmental Protection*, 14 WASH. U. GLOBAL STUD. L. REV. 131, 147 (2015) (noting that "[i]n international arbitration, the monetary cost is often millions of dollars."). The cost variation depends on jurisdiction. *See generally* International Bar Association, Intellectual *Property Courts and Tribunals* (Sep. 2007) (determining, country by country, the level of effectiveness of the judicial system in its ability to settle IP disputes).

the part of investment and IP lawyers may disincentivize them from advising their clients to pursue investment disputes for their IP rights.

However, patent holders have started filing investment treaty arbitrations to protect their rights. There are several reasons for this change. First, investment treaty arbitration allows the investor to file a claim against the host state directly without the home state's intervention.<sup>158</sup> The private party can control the litigation strategy,<sup>159</sup> and obtain compensation for the host state's past wrongs. <sup>160</sup> In contrast to the mechanism afforded by investor-state arbitration, the ICJ and the WTO dispute settlement systems are inter-state dispute resolution mechanisms. <sup>161</sup> Recourse to these dispute settlement mechanisms is exercised at the discretion of the home state of the private party and requires the exercise of diplomatic protection. <sup>162</sup> However, diplomatic protection constitutes a prerogative and not a duty for states, and they may

<sup>161</sup> Statute of the International Court of Justice art. 34(1), Jun. 26, 1946, 8 U.N.T.S. 993 ("Only state[s] may be parties in cases before the [International] Court [of Justice]."); *see also* Understanding on Rules and Procedures Governing the Settlement of Disputes art. 1, Apr. 15, 1994, Marrakesh Agreement Establishing the World Trade Organization, Annex 2, 1869 U.N.T.S. 401 [hereinafter DSU]; COLLIER & LOWE, *supra* note 123, at 132–69 (describing the nature and scope of ICJ jurisdiction); Robert O. Keohane, Andrew Moravcsik & Anne-Marie Slaughter, *Legalized Dispute Resolution: Interstate and Transnational*, 54 INT'L ORG. 457, 463 (2000) (referring to "the GATT and WTO panels" and the ICJ as "interstate tribunals... in which only member states may file suit against one another.").

<sup>162</sup> Barcelona Traction, Light and Power Company, Limited (Belgium v. Spain), 1970 I.C.J. 3 (Feb. 5). In a more recent case, the Court has recognized the residual nature of the exercise of diplomatic protection and recourse to the Court in case of investment disputes. Case Concerning Ahmadou Sadio Diallo (Guinea v. Dem. Rep. Congo), 2007 I.C.J. 582, ¶ 88–91 (May 24) (Preliminary Objections).

<sup>&</sup>lt;sup>158</sup> HEGE ELISABETH KJOS, APPLICABLE LAW IN INVESTOR-STATE ARBITRATION: THE INTERPLAY BETWEEN NATIONAL AND INTERNATIONAL LAW 225 (2013) (noting that "the sanctioning of the host state behaviour no longer depends on the discretionary intervention by the investor's home state.").

<sup>&</sup>lt;sup>159</sup> BARTON LEGUM, *Investment Treaty Arbitration: An Option Not to Be Overlooked, in* INTERNATIONAL LITIGATION STRATEGIES AND PRACTICE 189, 190 (Barton Legum ed., 2005) (stressing that "in a significant innovation, [investment treaties] allowed the foreign investor to initiate and control prosecution of the arbitration, without having to rely on its state to bring the treaty case for it.").

<sup>&</sup>lt;sup>160</sup> Arbitral tribunals have held states liable to compensate investors for breaches of treaty standards that result in injury, relying on a case involving a Chorzów, Poland factory. *See, e.g.*, MTD Equity Sdn. Bhd & MTD Chile S.A. v. Republic of Chile, ICSID Case No. ARB/01/7, Award, ¶ 238 (May 24, 2004). The Chorzów Factory case involved the German government seeking damages for harm sustained by two German companies caused by acts of the Polish government. Case Concerning the Factory at Chorzów, 1928 P.C.I.J. (ser. A) No. 17, at 47 (Sep. 13) (judgment on the merits) (holding that "reparation must, as far as possible, wipe out all the consequences of the illegal act and re-establish the situation which would in all probability, have existed if that act had not been committed.").

exercise it at their will.<sup>163</sup> While companies lobby their governments to file disputes before the WTO DSM, it is up to the states to decide whether to bring a claim.<sup>164</sup> The home state may be reluctant to initiate a trade dispute because of political and diplomatic considerations, especially when the alleged IP violation is limited in scope.<sup>165</sup> Even when the home state does bring an ICJ or WTO claim, governments are generally more wary in promoting interpretations of international law that could limit their own regulatory freedom in the future.<sup>166</sup> An investor would exercise limited, if any, control over the dispute settlement strategy. Moreover, under an ICJ or WTO dispute, the state would be under no obligation to pay any reparation to the IP owners who were actually injured.<sup>167</sup> Remedies under the WTO DSM <sup>168</sup> have only a prospective character.<sup>169</sup>

<sup>165</sup> CHRISTINA L DAVIS, SETTING THE NEGOTIATION TABLE 21 (2005) ("Low-profile issues that do not have a strong interest group on either side ... are unlikely to rise to the level of adjudication. A government will be reluctant to initiate the formal adjudication process if there is not a strong interest group with sufficient political and economic interests to gather the backing for a formal dispute complaint. Government officials rely on interest groups to provide the background information to help select and prepare trade dispute cases.").

<sup>166</sup> Sean Flynn, *How the Leaked TPP ISDS Chapter Threatens Intellectual Property Limitations and Exceptions*, INTELLECTUALPROPERTYWATCH.ORG, (Mar. 26, 2015), http://www.ip-watch.org/2015/03/26/how-the-leaked-tpp-isds-chapter-threatens-intellectual-property-limitations-and-exceptions/.

<sup>167</sup> MARTIN DIXON, ROBERT MCCORQUODALE & SARAH WILLIAMS, CASES AND MATERIALS ON INTERNATIONAL LAW 423 (5th ed. 2011) (noting that "[b]ecause a State brings an international claim for its own injury, it is neither under an obligation to exercise diplomatic protection nor to pay any reparation (including compensation) received by it to the national actually injured.").

<sup>168</sup> See generally DSU.

<sup>169</sup> Geraldo Vidigal, *Re-Assessing WTO Remedies: The Prospective and the Retrospective*, 16 J. INT'L ECON. L. 505, 505 (2013) (noting the "World Trade Organization (WTO) system of 'prospective' or 'forward-looking' remedies" and highlighting "their different functions when contrasted to reparation: inducing compliance *ex post*, rather than discouraging it *ex ante*.").

<sup>&</sup>lt;sup>163</sup> MALCOLM N. SHAW, INTERNATIONAL LAW 589 (7th ed. 2014) ("There is under international law no obligation for states to provide diplomatic protection for their nationals abroad.").

<sup>&</sup>lt;sup>164</sup> See generally Petros C. Mavroidis et al., Panel Discussion, Is the WTO Dispute Settlement Mechanism Responsive to the Needs of the Traders? Would a System of Direct Action by Private Parties Yield Better Results?, 32 J. WORLD TRADE 14 (1998) 147–165 (discussing the questions whether the WTO DSM is responsive to the traders' economic interests and whether a system of direct action would better serve those interests); Joel P. Trachtman & P.M. Moremen, Costs and Benefits of Private Participation in WTO Dispute Settlement: Whose Right is it Anyway?, 44 HARV. INT'L L.J. 221 (2003) (analyzing the role of private actors in the WTO DSM); A. Catbagan, Rights of Action for Private Non-State Actors in the WTO Disputes Settlement System, 37 DENV. J. INT'L L. & POL'Y 279, 302 (2008) (proposing the institutionalization of direct action by private parties).

Inversely proportional to the decrease of patent disputes at the DSM,<sup>170</sup> the number of patent investor-state arbitrations has arisen.<sup>171</sup> While the effectiveness of the DSM is under dispute,<sup>172</sup> the recent rise of IP-related investment disputes may indicate a shift of forum.<sup>173</sup>

Second, investment arbitration may be a suitable choice when the host state's judiciary does not seem to ensure fair trials or impartiality. In such circumstances, the foreign investor may immediately refer the dispute to arbitration.<sup>174</sup> Alternatively, the investor-state arbitration may constitute the last resort when the case has already been discussed at the national level and the foreign investor is unsatisfied with the result for reasons such as perceived discrimination and denial of justice.<sup>175</sup>

Third, the dispute settlement chapters of a number of Free Trade Agreements provide for the option of filing non-violation complaints for IP rights,<sup>176</sup> which is not currently possible under the TRIPS Agreement. Non-

<sup>&</sup>lt;sup>170</sup> Yoshifumi Fukunaga, *Enforcing TRIPS: Challenges of Adjudicating Minimum Standards Agreements*, 23 BERKELEY TECH. L.J. 868, 879 (2008) (noting that "the use of the WTO DSM to resolve TRIPS disputes has fallen, while its use to resolve general trade disputes continues unabated.").

<sup>&</sup>lt;sup>171</sup> But see Panel Report, Canada – Patent Protection of Pharmaceutical Products, WT/DS114/R (Mar. 20, 2000) (holding that the TRIPS permits generic producers to manufacture a given pharmaceutical during the life of the patent; only stockpiling is deemed incompatible with Article 30); Panel Report, India – Patent Protection for Pharmaceutical and Agricultural Chemical Products, WT/DS50/AB/R (Dec. 19, 1997).

<sup>&</sup>lt;sup>172</sup> Fukunaga, *supra* note 170 (noting "there remain questions regarding the effectiveness of the WTO DSM in the TRIPS context.").

<sup>&</sup>lt;sup>173</sup> States have increasingly settled potential IP-related disputes. *Id.* at 888–889 (noting that "more than half of the disputes concerning TRIPS were settled within the consultation process through a mutually agreed solution."). The TRIPS Council may have helped in reducing the number of IP-related disputes. *Id.* at 894, 897 (noting that "[t]he Council's effectiveness as a monitoring body might be working to preempt potential disputes well before they would reach the DSM."). In fact, discussion of given issues before the Council allows member states to explain, discuss and eventually adjust their regulatory measures.

<sup>&</sup>lt;sup>174</sup> However, in case of denial of justice claims, the exhaustion of local remedies is needed.

<sup>&</sup>lt;sup>175</sup> See generally Michael Goldhaber, *The Rise of Arbitral Power Over Domestic Courts*, 1 STAN. J. OF COMPLEX LITIG. 373, 375 (2013) (tracing the doctrinal evolution of the denial of justice doctrine and discussing the rise of arbitral power over domestic courts more generally.).

<sup>&</sup>lt;sup>176</sup> GATT, *supra* note 77, at art. 23(1)(b), (c) ("If any contracting party should consider that any benefit accruing to it directly or indirectly under this Agreement is being nullified or impaired or that the attainment of any objective of the Agreement is being impeded as the result of . . . (*b*) the application by another contracting party of any measure, whether or not it conflicts with the provisions of this Agreement, or (*c*) the existence of any other situation, the contracting party may, with a view to the satisfactory adjustment of the matter, make written

violation complaints are geared toward state measures that do not appear to violate treaty provisions directly but are nevertheless sufficiently disadvantageous to the investor's IP. The aim of the provision is to maintain the balance of benefits struck during negotiations and transfer from the treatynegotiating parties to arbitral panels the authority to decide when the investor has suffered enough disadvantage. There are indications that non-violation complaints have already been raised before investment tribunals.<sup>177</sup> Nonviolation complaints about IP regulation were controversial during the TRIPS negotiations and remain so.<sup>178</sup> While the TRIPS Agreement provides for such remedies,<sup>179</sup> WTO Members have adopted a moratorium and agreed not to use non-violation complaints.<sup>180</sup> This is because non-violation complaints were historically used in GATT to address situations that were not specifically covered by the vague obligations of the agreement.<sup>181</sup> Therefore, they were not needed in the TRIPS context, in which member states' obligations had been more clearly detailed in international conventions including the TRIPS Agreement and the Paris Convention.<sup>182</sup>

<sup>179</sup> TRIPS Agreement art. 64.2.

<sup>180</sup> The 9th WTO Ministerial Conference held in Bali, Indonesia (3–7 December 2013) reiterated the moratorium until its next session to be held in Nairobi, Kenya, in December 2015. The United States and Switzerland have asked for reconsideration of this issue, and the TRIPS Council is examining the scope and modalities for non-violation complaints. Press Release, WTO, Intellectual Property Meeting Mulls Irish Tobacco Plan, Drug Tariffs, Sport, Non-Violation (Oct. 10, 2013), https://www.wto.org/english/news\_e/news13\_e/trip\_10oct13 \_e.htm#nonviolation.

<sup>181</sup> ROBERT E. HUDEC, ENFORCING INTERNATIONAL TRADE LAW: THE EVOLUTION OF THE MODERN GATT LEGAL SYSTEM, 7 (1993) 7 (noting that the non-violation procedure allows, to a certain extent, "the closing-up of a loophole in substantive law, offering the possibility of maintaining the balance of interests even in cases where the substantive law dose not cover the issues at hand").

<sup>182</sup> Paris Convention, *supra* note 65.

representations or proposals to the other contracting party or parties which it considers to be concerned. Any contracting party thus approached shall give sympathetic consideration to the representations or proposals made to it."). *See generally* Susy Frankel, *Challenging TRIPS-Plus Agreements: The Potential Utility of Non-Violation Disputes*, 12 J. INT'L ECON. L. 1023 (2009).

<sup>&</sup>lt;sup>177</sup> Luke Eric Peterson, Newly Disclosed Document Shows that Pharma Corp Hopes to Construe Alleged Non-Compliance with Patent Treaties as a Breach of Investment Treaty, INV. ARB. REP. (Dec. 10, 2012).

<sup>&</sup>lt;sup>178</sup> Haochen Sun, *TRIPS and Non-Violation Complaints From a Public Health Perspective*, CTR. FOR INT'L DEV. AT HARV. UNIV. 5 (2002), http://www.cid.harvard.edu/ cidtrade/Papers/Sun-TRIPS.pdf ("During the TRIPS negotiations in particular, there was significant disagreement regarding the inclusion of a provision on non-violation in the context of intellectual property disputes," and that "[t]he potential application of the nonviolation remedy to the TRIPS Agreement remains controversial.").

Finally, the increasing use of investment arbitration for settling patentrelated disputes may reflect the growing importance of "intellectual capital" as a source of wealth generation vis-à-vis other forms of capital investment in industries such as the extractive industries, and manufacturing. Ideas play a vital role in modern economies.<sup>183</sup> Science, technology, and creativity generate economic value and increase the significance of intellectual property<sup>184</sup> as useful tools to incentivize creativity and technological development on as well as enhance access to technology.<sup>185</sup>

#### IV

# **TOWARDS A NEW DIALECTICS: PHARMACEUTICAL PATENTS, PUBLIC HEALTH** AND FOREIGN DIRECT INVESTMENTS

In recent years, a growing number of investor-state arbitrations have concerned the way host states govern the pharmaceutical sector. Arbitrations have been filed against both industrialized and developing countries in different continents, indicating that the phenomenon has a truly global scale.<sup>186</sup> The rise of patent-related investment arbitrations highlights the emergence of a new battlefield between the public and private interests. Investment arbitrations provide a new place of dialectical interaction between the private interests of the patent holders and the public interest of the host states in preserving access to medicines and ensuring the safety and effectiveness of given pharmaceutical products.

Some of these arbitrations are related to states' regulatory measures in the patent system.<sup>187</sup> For instance, the first known investment arbitration dealing with pharmaceutical patents, Signa S.A. v. Canada,<sup>188</sup> challenged Canada's patent regulations. Signa, a Mexican generic pharmaceutical company, contended that the regulations governing the authorization process violated the

<sup>&</sup>lt;sup>183</sup> Christopher S. Gibson, Latent Grounds in Investor-State Arbitration: Do International Investment Agreements Provide New Means to Enforce Intellectual Property Rights?, Y.B. ON INT'L INV. LAW & POL'Y 397, 398 (2010) [hereinafter Gibson, Latent Grounds in *Investor-State Arbitration*] (noting that modern economies have become "predominantly 'conceptual,' reflecting the vital role of ideas in ... products and services.").

 $<sup>^{184}</sup>$  *Id.* at 398.  $^{185}$  *Id.* at 412.

<sup>&</sup>lt;sup>186</sup> These arbitrations are showcased in the subsections below, which distinguish and categorize them on the basis of the claims articulated by the claimants.

<sup>&</sup>lt;sup>187</sup> See, e.g., Eli Lilly and Co. v. The Government of Canada, ICSID Case No. UNCT/14/2, http://www.italaw.com/cases/1625.

<sup>&</sup>lt;sup>188</sup> Signa S.A. v. Government of Canada, Notice of Intent to Submit a Claim to Arbitration Under Section B of Chapter 11 of the North American Free Trade Agreement (Mar. 4, 1996), http://www.international.gc.ca/trade-agreements-accords-commerciaux/ assets/pdfs/disp-diff/signa-01.pdf.

fair and equitable treatment standard under Article 1105 of the NAFTA.<sup>189</sup> Signa established a joint venture with the Canadian company Apotex, Inc. for the production of a generic version of Bayer's top-selling ciprofloxacin hydrochloride, an antibiotic that treats a number of bacterial infections.<sup>190</sup> In order to sell the pharmaceutical in Canada, an authorization was required by the relevant authorities.<sup>191</sup> According to the claimant, the relevant regulations provided that "by merely purporting to have a relevant patent, a person c[ould] obtain a mandatory prohibition against a generic competitor for a period of about 3 years."<sup>192</sup> Because Bayer, the patent holder company, prevented Apotex and Signa from making ciprofloxacin hydrochloride for a period of about three years, Signa claimed loss of revenues and market share.<sup>193</sup> As the parties quickly settled this case, there is no publicly available information on the dispute and whether the filing of the Notice of Intent to Arbitrate had any strategic or other impact is not known. Nonetheless, the case is significant because it shows that foreign investors can challenge patent regulation governing the duration of patent protection and even the authorization processes.

Other arbitration disputes relate to various issues, ranging from the regulation of competition law to the implementation of harmonization measures in the pharmaceutical sector required by the European Union. For instance, Uruguay is reportedly facing an arbitration claim over a recent decree that limits the concentration of ownership in Uruguay's pharmacy sector. <sup>194</sup> A U.S. investment fund has filed Notices of Dispute pursuant to the Spain–Uruguay and U.S.–Uruguay BITs respectively, alleging that the decree harms the company's recent investment in a chain of local pharmacies.<sup>195</sup> In parallel, the *Servier v. Poland* case arose because of regulatory measures adopted by Poland to implement EU law harmonizing pharmaceutical regulations.<sup>196</sup>

By including IP within their ambit, IIAs restrict the regulatory autonomy of states in the pharmaceutical sector, potentially affecting fundamental public

- $^{191}$  *Id.* ¶ 4.
- $^{192}_{102}$  Id. ¶ 6.

<sup>195</sup> Id.

<sup>&</sup>lt;sup>189</sup> *Id.* ¶¶ 4, 12.

<sup>&</sup>lt;sup>190</sup> *Id.* ¶¶ 1–3.

 $<sup>^{193}</sup>$  *Id.* ¶ 9.

<sup>&</sup>lt;sup>194</sup> Luke Eric Peterson, Uruguay Threatened over Decree Affecting Ownership of Pharmacies, INVESTMENT ARBITRATION REPORTER (May 13, 2014), http://www.iareporter.com/articles/round-up-water-concessionaire-warns-estonia-under-dutch-treaty-uruguay-threatened-over-decree-affecting-ownership-of-pharmacies/.

<sup>&</sup>lt;sup>196</sup> Luke Eric Peterson, *France's Second Largest Pharmaceutical Company Quietly Pursues Arbitration Against Republic of Poland*, INVESTMENT ARBITRATION REPORTER (Aug. 19, 2011), http://www.iareporter.com/articles/frances-second-largest-pharmaceuticalcompany-quietly-pursues-arbitration-against-republic-of-poland/.

interests. These disputes give rise to both jurisdictional and substantive issues. First, some disputes will center on the jurisdictional issue of which economic activities amount to an investment, giving rise to an arbitral tribunal's jurisdiction over the dispute.<sup>197</sup> Second, some investment disputes are concerned with whether or not a certain state action constitutes an unlawful expropriation of the patent right.<sup>198</sup> Third, if an expropriation has occurred, claims may concern the adequacy of the amount or form of compensation.<sup>199</sup> Fourth, the patent owner may also allege violation of the fair and equitable treatment standard.<sup>200</sup> Finally, some claims may concern alleged discrimination suffered by the foreign investor in violation of national treatment and most favoured nation treatment.<sup>201</sup> This article examines each of these claims.

While it is too early to predict how relevant arbitral tribunals will adjudicate these cases, such disputes highlight the emergence of an additional litigation venue, *i.e.* investment treaty arbitration, for resolving pharmaceutical patent-related disputes. International investment agreements enable private companies to file claims against the host states directly without the intervention of the home state and to recover damages and loss of profits; they internationalize a given dispute, isolating it from the oversight of the domestic courts of the host state.

At the same time, these new dialectics require the elaboration of new procedural, substantive and interpretive legal tools for recalibrating the expectations, entitlements and powers of the litigating parties. In fact, at the procedural level, investment treaty arbitration may not be adequate to enable arbitrators to strike an optimal equilibrium between public and private interests. As IP disputes can affect important public values, these arbitrations and the relevant awards should be disclosed to the public. Moreover, at the substantive level, arbitrators may not have in-depth expertise of IP law and the underlying policy considerations. The risk is that an inadequate appreciation of the policies underlying IP rights by adjudicators may lead to an overemphasis of the private interests and an under-emphasis of the public interests. The propertization of patents, *i.e.* conceiving them as mere assets, may lead interpreters to forget that they are based on a compromise between public and private interests.<sup>202</sup> As the substantive interplay between IP and international investment law remains

<sup>&</sup>lt;sup>197</sup> See infra Section IV. A.

<sup>&</sup>lt;sup>198</sup> See infra Section IV. B.

<sup>&</sup>lt;sup>199</sup> See infra Section IV. B.

<sup>&</sup>lt;sup>200</sup> See infra Section IV. D.

<sup>&</sup>lt;sup>201</sup> See infra Section IV. E.

 $<sup>^{202}</sup>$  See Dreyfuss & Frankel, supra note 66, at 3–4 (pinpointing the reconceptualization of IP by international law).

[Vol. 5:1

uncharted,<sup>203</sup> and the functioning of investment treaty obligations with regard to IP, the parties' expectations, and enforcement aspects of these treaties are largely unexplored.<sup>204</sup> Interpretation is crucial to striking an appropriate balance between private and public interests. The next subsections provide an overview of the existing patent-related investment disputes and are organized by issues that may arise in arbitration.

## A. The Notion of Investment

International investment agreements are "agreements concluded between states for the promotion and protection of reciprocal investments." <sup>205</sup> Addressing the question as to whether certain economic activities relating to pharmaceutical products amount to an investment is crucial to establishing an arbitral tribunal's subject matter jurisdiction. A patent holder is entitled to the substantive and procedural protections afforded by the treaty only if the treaty classifies her as an "investor" or her economic activity as an "investment". If a given economic activity—*in casu*, a pharmaceutical patent—constitutes a protected investment, the patent holder will benefit from the substantive protections of the applicable IIA.

In order to ascertain whether pharmaceutical patents constitute a form of protected investment under a given IIA, one has to look at the specific text of the applicable treaty. If the parties have opted for resolving their dispute at the ICSID, the ICSID Convention will be also applicable, which extends jurisdiction "to any legal dispute arising directly out of an investment."<sup>206</sup> In this situation, the adjudicators will have to determine whether a given economic activity constitutes an investment under both the ICSID Convention and the applicable IIA. Patents are usually considered a form of investment under the ICSID Convention and most IIAs.

<sup>&</sup>lt;sup>203</sup> For a seminal study, see Carlos A. Primo Braga & Carsten Fink, *The Relationship Between Intellectual Property Rights and Foreign Direct Investment*, 9 DUKE J. COMP. & INT.'L L. 163 (1998).

<sup>&</sup>lt;sup>204</sup> Ruth L. Okediji, *Is Intellectual Property "Investment"*? Eli Lilly v. Canada *and the International Intellectual Property System*, 35 U. PA. J. INT'L L. 1121, 1124 (2014) [hereinafter Okediji, *Is Intellectual Property "Investment"*?] (noting that "[a]lthough the definition of 'investment' contained in most investment treaties mention intellectual property, the obligations, expectations, and enforcement aspects of these treaties are largely undeveloped.").

 $<sup>^{205}</sup>$  Boie, *supra* note 2, at 4 (defining IIAs – a term encompassing both "bilateral investment treaties (BITs) and FTAs or Regional Trade Agreements (RTAs) with investment chapters" – as "agreements concluded between states for the promotion and protection of reciprocal investments.").

<sup>&</sup>lt;sup>206</sup> ICSID Convention, *supra* note 135, at art. 25(1).

The ICSID Convention does not provide a definition of investment.<sup>207</sup> Rather, it stipulates that ICSID jurisdiction extends "to any legal dispute arising directly out of an investment."<sup>208</sup> In practice this has meant that commentators and arbitral tribunals have elaborated a number of criteria for defining the term.<sup>209</sup> Most notably, the leading test was articulated by Salini v. Morocco, which involves a dispute arising out of the construction of a highway. The Salini test includes four elements: 1) a contribution of money or other assets of economic value; 2) a certain duration; 3) an element of risk; and 4) a contribution to the host state's development.<sup>210</sup> In general terms, tribunals allow the consideration of pharmaceutical patents as a form of investment. First, pharmaceutical patents are assets of economic value, with a duration of twenty years. Second, creating a medicine involves an element of risk, as it may take years of research and development. Finally, the availability of pharmaceutical products—which goes hand in hand with the protection of pharmaceutical patents—can improve the public health of a given country, and albeit indirectly, to its economic development. These requirements embody a balance between the private interests of foreign companies and the public interest of the host state, because they ensure that economic activities are protected as long as they

However, given the vagueness of the ICSID Convention, the definition of investment provided by the applicable IIA will often be decisive for ascertaining whether a given activity constitutes an investment, because the

contribute to the economic development of the host state.

<sup>&</sup>lt;sup>207</sup> Alex Grabowski, *The Definition of Investment Under the ICSID Convention: A Defense of Salini*, 15 CHI. J. INT'L L. 287, 293 (2014) (noting that "[t]he signatories to the [ICSID] convention purposefully left the term 'investment' undefined when granting the body jurisdiction over matters of international investment.").

<sup>&</sup>lt;sup>208</sup> ICSID Convention, *supra* note 135, at art. 25(1).

<sup>&</sup>lt;sup>209</sup> Grabowski, *supra* note 207, at 293 (noting that "[a] variety of tribunals have applied a plethora of different tests ....").

<sup>&</sup>lt;sup>210</sup> Salini Costruttori S.p.A. and Italstrade S.p.A. v. Kingdom of Morocco, ICSID Case No. ARB/00/4, Decision on Jurisdiction, (July 23, 2001). The need for the last element, the contribution to the economic development of the host state, is sometimes put in doubt. *See* L.E.S.I.–DIPENTA v. République Algérienne Démocratique et Populaire, Decision on Jurisdiction, (July 12, 2006); Apotex Holdings Inc. v. United States (Apotex III), ICSID Case No. ARB(AF)/12/1, Award, ¶ 7.62 (Aug. 25, 2014) (holding that it did not seem necessary that the investment contribute to the economic development of the country; according to the Tribunal, the contribution to economic development was difficult to establish, and was implicitly covered by the other three elements of an investment); Quiborax v. Bolivia, ICSID Case No. ARB/06/2, Decision on Jurisdiction, ¶ 220 (Sept. 27, 2012) (arguing that while the ICSID Convention attempts to foster economic development via international investment, such development is not a necessary element of investment).

specific languages of the IIAs are frequently given deference.<sup>211</sup> In Servier v. *Poland*,<sup>212</sup> a dispute concerning the commercialization of pharmaceuticals in Poland, the Tribunal upheld its jurisdiction notwithstanding Poland's opposition.<sup>213</sup> According to Poland, the presence of Servier subsidiaries in Poland did not entitle Servier to recover,<sup>214</sup> as the claimants did not have any investments in the host state itself under Polish law.<sup>215</sup> Servier counter-argued that "it [wa]s the Treaty, not Polish law, that [wa]s relevant in assessing whether Servier's assets [we]re protected investments."<sup>216</sup> The Tribunal held that it possessed jurisdiction, acknowledging that the companies were incorporated in France, thus being foreign investors, and therefore it had jurisdiction ratione personae.<sup>217</sup>

It usually requires a case-by-case analysis to determine whether IP constitutes an investment<sup>218</sup> because different IIAs provide different definitions of investment. BITs do not include detailed regulation of pharmaceutical patents. Rather, they briefly mention IP rights as a form of protected investment.<sup>219</sup> Some IIAs incorporate a broad definition of investment that generally covers both tangible and intangible property.<sup>220</sup> Other IIAs either

<sup>220</sup> For instance, Article 1139(g) of the North American Free Trade Agreement (NAFTA) states "investment" includes "real estate or other property, tangible or intangible, acquired in the expectation or used for the purpose of economic benefit or other business purposes."

<sup>&</sup>lt;sup>211</sup> Malavsian Historical Salvors SDN BHD v. The Government of Malaysia, ICSID Case No. ARB/05/10, Decision on the Application for Annulment (Apr. 16, 2009).

<sup>&</sup>lt;sup>212</sup> Les Laboratoires Servier, S.A.S., Biofarma, S.A.S., Arts et Techniques du Progrès v. Republic of Poland, Award, ¶¶ 515, 532 (Feb. 14, 2012).

<sup>&</sup>lt;sup>213</sup> Id. ¶ 190 (noting that Servier did not plead that the marketing authorizations were a protected investment).

<sup>&</sup>lt;sup>214</sup> *Id.* ¶ 206. <sup>215</sup> *Id.* ¶ 222.

<sup>&</sup>lt;sup>216</sup> *Id*.

<sup>&</sup>lt;sup>217</sup> *Id.* ¶ 510, 518.

<sup>&</sup>lt;sup>218</sup> Okediji, *Is Intellectual Property "Investment"?*, *supra* note 204, at 1126.

<sup>&</sup>lt;sup>219</sup> *Id.* (noting that "[s]uch agreements usually protect intellectual property by including it in the definition of investment."). Conversely, FTAs often include a distinct chapter for governing intellectual property. See id. (highlighting that "[t]he fact in RTAs, that several subject matters, including both investment and IP, are covered in one single agreement may have significant consequences for the interplay of these provisions"). IP chapters providing for higher standards of IP protection than those provided by the TRIPS Agreement are known as 'TRIPS-plus.' See Beatrice Lindstrom, Scaling Back TRIPS-Plus: An Analysis of Intellectual Property Provisions in Trade Agreements and Implications for Asia and the Pacific, NYU J. OF INT'L L. AND POL. 917, 919 (2010) (noting that "[o]ver the past ten years, a new trend has developed in which bilateral trade agreements mandate changes to domestic intellectual property laws, resulting in laws that exceed the standards agreed to at the WTO. These agreements are referred to as 'TRIPS-plus.'") A complete analysis of the interactions between the investment and IP chapters of FTAs is outside the scope of this article.

generally refer to IP rights, or explicitly indicate the types of IP covered, such as copyright, patents, industrial designs, trade secrets, trademarks and others.<sup>221</sup>

A question that often arises is whether patent applications are covered investments under the relevant investment treaty. Although registered patents are covered in most investment treaties, it remains an open question as to whether patent applications should be deemed a form of protected investment even if they are not entitled to the same protections as a patent itself.<sup>222</sup> Certain IIAs expressly exclude the possibility that patent applications constitute protected investments.<sup>223</sup> Other investment treaty provisions protecting "rights with respect to [IP]"<sup>224</sup> or "patentable inventions" leave much uncertainty.<sup>225</sup> For instance, the U.S.–Jamaica BIT covers patentable inventions and therefore should cover patent applications as investments.<sup>226</sup> Other IIAs protect

<sup>222</sup> Liberti, *supra* note 117, at 8 ("A first issue regarding the scope of the definition of investment is whether patent applications, though not an IPR, would qualify as an intangible property.").

<sup>223</sup> See, e.g., 2009 ASEAN Comprehensive Investment Agreement, art. 4(c) (limiting an "investment" to "intellectual property rights which are conferred pursuant to the laws and regulations of each Member State.").

<sup>224</sup> Agreement Between the Government of Hong Kong and the Government of Australia for the Promotion and Protection of Investment, Austl.-H.K., art 1(e)(iv), Sep. 15, 1993, 1748 U.N.T.S. 385; Agreement Between the Government of Canada and the Government of the Republic of Argentina for the Promotion and Protection of Investment, Arg.-Can., art. 1(a)(iv), May 11, 1991, 2467 U.N.T.S. 97.

<sup>225</sup> Treaty Between the United States of America and Jamaica Concerning the Reciprocal Encouragement and Protection Investment, Jam.-U.S., art. I.1(a)(iv), Feb. 2, 1994, S. TREATY DOC. NO. 103–35.

<sup>226</sup> *Id.* (stating that "[f]or the purposes of this Treaty, (a) 'investment' means every kind of investment in the territory of one Party owned or controlled directly or indirectly by nationals or companies of the other Party, such as equity, debt, and service and investment contracts; and includes without limitation: ... (iv) intellectual property which includes, inter alia, rights relating to: literary and artistic works, including sound recordings, patentable inventions,

North American Free Trade Agreement, signed on 17 December 1992, in force on 1 January 1994, 32 ILM 289, 605 (1993).

<sup>&</sup>lt;sup>221</sup> See, e.g., the Agreement between the Swiss Confederation and the Dominican Republic on the Promotion and Protection of Investments (CH-Cuba BIT), art. 1.2(d) (stating that "[t]he term 'investments' shall include every kind of asset, in particular, though not exclusively: ... copyrights, industrial property rights (such as patents, utility models, industrial designs or models, trade or service marks, trade names, indications of origin), technical processes, know-how and goodwill"). The first BIT, signed between West Germany and Pakistan in 1959, included "patents and technical knowledge" in the definition of "investment." Treaty for the Promotion and Protection of Investments, Ger.-Pak., art. 8(1)(a), Nov. 25, 1959, 457 U.N.T.S. 24 (affirming that "[t]he term 'investment' shall comprise capital brought into the territory of the other Party for investment in various forms in the shape of assets such as foreign exchange, goods, property rights, patents and technical knowledge.").

"intangible property" and arguably this generic notion can include patent applications.<sup>227</sup> As patent applications can be sold and assigned to third parties,<sup>228</sup> the argument goes that they are a form of "intangible property," even though they do not constitute "intellectual" property.<sup>229</sup> The European Court of Human Rights held that both registered trademarks and applications to register trademarks were "property rights" within the meaning of Article 1 of Protocol No. 1 of the European Convention on Human Rights.<sup>230</sup> The fact, however, that most investment treaties provide protection to both investors and their investments only after the establishment of an investment suggests that a case-by-case analysis is needed.

Recently in *Apotex Holdings Inc. v. United States (Apotex III)*, a Tribunal held that patent applications were not investments under NAFTA Chapter 11.<sup>231</sup> The claimants sought over \$1 billion in damages from the United States<sup>232</sup> after the U.S. Food and Drug Administration (FDA) imposed an Import Alert on certain generic medicines that were produced in Canada by Apotex Inc., exported to the U.S. and sold in that market by a U.S.-based Apotex subsidiary.<sup>233</sup> According to the respondent, the FDA issued the alert after its inspections of Apotex facilities in Canada found "significant violations of U.S. laws and regulations."<sup>234</sup> The United States emphasized that Apotex produced all of its products in Canada, <sup>235</sup> and argued that the cross-border trade of pharmaceuticals did not constitute an investment.<sup>236</sup> The claimants argued that

industrial designs, semiconductor mask works, trade secrets and confidential business information, and trademarks, service marks, and trade names.").

<sup>227</sup> See generally Liberti, supra note 117.

<sup>228</sup> Bryan Mercurio, Awakening the Sleeping Giant: Intellectual Property Rights in International Investment Agreements, 15 J. OF INT'L ECON. L. 871, 878 (2012) ("For instance, the value of the expected IPRs (and hence the expected profit to be derived from the IPRs) can be vast and easily quantifiable as, for instance, applications for a patent (and in some jurisdictions, applications for trademark) can be sold and assigned to third parties.").

<sup>229</sup> Patents can only be acquired through registration.

<sup>230</sup> Anheuser-Busch Inc. v. Portugal, 45 Eur. Ct. H.R. 36 (2007).

<sup>231</sup> Apotex Holdings Inc. v. United States (Apotex III), ICSID Case No. ARB(AF)/12/1, Award, ¶ 7.62 (Aug. 25, 2014).

 $^{232}$  Id. ¶ 2.34.

 $^{233}$  *Id.* ¶ 2.24.

 $^{234}$  Id. ¶ 2.40.

 $^{235}$  Id. ¶ 2.51 ("The Respondent submits that Apotex Inc. does not claim to manufacture or even test any drugs in the USA; nor does it assert the existence of any offices or employees in the USA; nor does it assert the existence of any offices or employees in the USA; it pays no taxes in the USA on its supposed investments (including its ANDA-related activities) ....").

....").  $^{236}$  Id. ¶ 2.37 (contending that "the Tribunal has no jurisdiction to decide the Parties" dispute under NAFTA"; that "the Claimants' complaint is in fact directed at a trade measure"; and that "the Claimants are seeking improperly in these proceedings to convert a

they had the following investments in the U.S.: 1) certain intellectual property rights, that is, abbreviated new drug applications (ANDAs), directly held by Apotex Inc. and indirectly held by Apotex Holdings;<sup>237</sup> and 2) Apotex Corp., a U.S.-based subsidiary of Apotex Holdings, that markets pharmaceuticals produced in Canada.<sup>238</sup>

The Tribunal held that ANDAs were not "investments" in the United States.<sup>239</sup> In this regard, the Tribunal followed previous awards (*Apotex I* and *II*) which rejected claims that applications for the sale of medicines into a host state could be considered investments.<sup>240</sup> The Tribunal clarified that even if preparing those applications required significant expenses, the true business activity was the production of the medicines in the home state for export in the host state.<sup>241</sup> Therefore, the only investment was the subsidiary Apotex Corp. Commentators criticized the award on this latter point, submitting that it "blurs the line between trade and investment disputes," and that companies might use their subsidiaries as a kind of "Trojan horse" for obtaining protection under the relevant BIT.<sup>242</sup>

The mere sale of pharmaceutical products does not amount to an investment. Mere sales of goods do not have the prerequisites of a certain duration, risk and contribution to the economic development of the host state which characterize investments. Rather, such sales can "preserve export markets for the patent owner, leading to welfare losses for the host country," potentially "impeding local innovation," and increasing the costs of medicines. <sup>243</sup> As mentioned, IIAs reflect a bargain where the state restricts some of its sovereign rights to attract foreign investments. When the private party is not holding up her end of the bargain by taking risks and making a real contribution to the host state's economy, such sales are not investments and are not entitled to the substantive protection of the IIA.

<sup>242</sup> Lise Johnson, New Weaknesses: Despite a Major Win, Arbitration Decisions in 2014 Increase the US's Future Exposure to Litigation and Liability 4 (2015), http://ccsi.columbia.edu/files/2014/03/Brief-on-US-cases-Jan-14.pdf.

<sup>243</sup> Okediji, Is Intellectual Property "Investment"?, supra note 204, at 1126.

possible trade-related claim between NAFTA Contracting States (under NAFTA Chapter Twenty) into an investment claim by a foreign entity (under NAFTA Chapter Eleven).").

<sup>&</sup>lt;sup>237</sup>*Id.*  $\P$  2.28.

 $<sup>^{238}</sup>$  *Id.* ¶ 2.27.

 $<sup>^{239}</sup>$  *Id.* ¶ 7.62.

<sup>&</sup>lt;sup>240</sup> Apotex Inc. v. United States, UNCITRAL, Award on Jurisdiction and Admissibility (June 14, 2013).

<sup>&</sup>lt;sup>241</sup> Apotex III, ¶ 7.62. One of the three arbitrators dissented from the Tribunal's conclusion. He suggested that approved ANDAs can be bought and sold and are in other ways treated as property under U.S. law. *Id.* ¶ 7.66.

An arbitral tribunal recently clarified that the mere sale of medicines does not amount to an investment in Italy v. Cuba.<sup>244</sup> Italy initiated this investment treaty arbitration arguing that the contractual agreement between Menarini, an Italian pharmaceutical company, and Medicuba, an entity affiliated with the Cuban Ministry of Health, was an investment protected under the Italy-Cuba BIT.<sup>245</sup> According to the claimant, the agreement did not relate merely to the supply of medicines, but also included the research and development of new pharmaceutical products.<sup>246</sup> The claimant also stressed the duration of the contract, the collaboration with local agents, and the particular importance of the given medicines to public health in Cuba.<sup>247</sup> The respondent counter-argued that Menarini was not an "investor" as it merely sold its products to Medicuba and had no subsidiary in Cuba.<sup>248</sup> According to the respondent, contacts with local agents should be considered a normal business practice, and the organization of a cardiology conference was merely aimed at marketing related products and should not be conceived as evidence of an investment.<sup>249</sup> Cuba concluded that it had reached an agreement with the company, according to which Cuba would have paid its invoices, while the company would have started its commercial operations with Medicuba again.<sup>250</sup> After reaching the mentioned agreement with Cuba, Menarini ceased to invoke diplomatic protection.<sup>251</sup> In light of this circumstance, Italy withdrew its diplomatic protection.<sup>252</sup> However, it did not withdraw the claim in its own name.<sup>253</sup>

<sup>&</sup>lt;sup>244</sup> La Republique d'Italie v. La Republique de Cuba, UNCITRAL, Arbitrage ad hoc, Sentence Finale, ¶ 219 (Jan. 15, 2008). Italy espoused the claims of sixteen investors operating in different fields and raised claims in its own name for breach of the Italy-Cuba BIT. *Id.* at ¶ 46. It sought the payment of  $\in$ 1 from Cuba as symbolic compensation and of several millions of U.S. dollars as compensation for the injury suffered by its investors. *Id.* ¶ 96(1)(e)(6).

<sup>&</sup>lt;sup>245</sup> See, e.g., Enrico Milano, The Investment Arbitration between Italy and Cuba: The Application of Customary International Law under Scrutiny, 11 L. & PRACTICE OF INT'L CTS AND TRIBUNALS 424, 500 (2012) (defining this arbitration as "a landmark case ... to the extent that it has constituted the first inter-State proceedings in the history of modern BITs.") See generally Michele Potestà, Republic of Italy v. Republic of Cuba, 106 AM. J. INT'L L. 341 (2012). See also Anthea Roberts, State-to-State Investment Treaty Arbitration: A Hybrid Theory of Interdependent Rights and Shared Interpretive Authority, 55 HARVARD INT'L L. J. 1 (2014).

 $<sup>^{246}</sup>$  La Republique d'Italie v. La Republique de Cuba, UNCITRAL, Arbitrage ad hoc, Sentence Finale, ¶ 219 (Jan. 15, 2008).

<sup>&</sup>lt;sup>247</sup> *Id.*  $\P$  90.

 $<sup>^{248}</sup>$  *Id.* ¶ 134.

 $<sup>^{249}</sup>$  *Id.* 

 $<sup>^{250}</sup>_{251}$  Id. ¶ 136.

 $<sup>^{251}</sup>$  *Id.* ¶ 39.

<sup>&</sup>lt;sup>252</sup> *Id.* ¶ 39, n.1.

<sup>&</sup>lt;sup>253</sup> *Id.* ¶ 93. In fact, Italy did still have standing to sue in its own name.

The Tribunal found Menarini's activities not an investment, and dismissed Italy's claims due to lack of subject matter jurisdiction. In its reasoning, the Tribunal defined investment as any economic activity carried out by an investor characterized by a contribution to the economic development of the host state, for a certain duration and involving commercial risks.<sup>254</sup> After examining the contract between Menarini and Medicuba, tellingly entitled "Contrato de Compra-Venta" which translates to "Contract of Sale,"<sup>255</sup> the Tribunal held that the given commercial activity was not an investment but a sale of pharmaceuticals. As there was neither contribution of resources into Cuba nor assumption of risk beyond the mere risk of nonpayment, the Tribunal held that such sale of medicines did not constitute an investment protected under the Italy–Cuba BIT.<sup>256</sup> The Tribunal added that sponsoring medical congresses does not qualify the subsequent sales of medicines as investments, as such activity is a classic marketing practice.<sup>257</sup>

To summarize, the question as to whether intellectual property constitutes "investment" requires a case-by-case assessment. Mere sales of an pharmaceuticals do not amount to investments. IIAs reflect a bargain-where the state gives up some of its sovereign rights in exchange for a better chance of attracting foreign investments. Arbitral tribunals have taken this bright-line rule that when it is mere sale of goods, the state is not gaining enough from the bargain and the investor is not contributing enough by taking risks or contributing to the economic development of the state.<sup>258</sup> Patent applications create a mere expectation of obtaining a patent but do not constitute patents.

<sup>&</sup>lt;sup>254</sup> La Republique d'Italie v. La Republique de Cuba, UNCITRAL, Arbitrage ad hoc, Sentence Finale, ¶ 81 (Jan. 15, 2008) ("sauf dispositions contraires spécifiques d'un Traité Bilatéral de protection des Investissements, trois éléments sont requis pour que l'on se trouve en présence d'un investissement: un apport, la durée et une prise de risque de la part de l'investisseur.... Ceci permet d'écarter, par exemple, les simples opérations de vente.").

<sup>&</sup>lt;sup>255</sup> *Id.* ¶ 215. <sup>256</sup> *Id.* 

 $<sup>^{257}</sup>$  Id. ¶ 220 (clarifying that "... le fait que Menarini aurait sponsorisé des congres medicaux, ce qui n'est d'ailleurs pas etabli ne permet pas de qualifier d'investissement la vente des medicaments en cause, puisqu'il s'agit d'operations classiques de promotion des produits vendus.").

<sup>&</sup>lt;sup>258</sup> For instance, the sale of cattle was deemed not to constitute an investment in the Canadian Cattlemen case. In 2003, when the United States closed the U.S.-Canadian border to beef and cattle after a case of mad cow disease was discovered in Canada, a group of Canadian cattlemen brought a NAFTA Chapter 11 suit alleging that the U.S. discriminated against Canadian operators, because it allowed U.S. cattlemen who owned Canadian cattle to keep it, while stopping Canadian cattle (of Canadian operators) at the border. Thus, Canadian cattlemen requested damages for losses incurred during the border closure. The case was dismissed on jurisdictional grounds. Canadian Cattlemen for Fair Trade v. United States, UNCITRAL, Award on Jurisdiction (28 Jan. 2008).

Although some argue that the application is a form of "intangible property", the question as to whether a patent application can be considered an investment depends on the precise wording of the relevant IIA.<sup>259</sup> Because the specific language of the treaty reflects the voluntary consent of the state involved, it can be presumed that the states have already taken the public interest into account when accepting to protect patent applications as forms of investments.

Any determination of intellectual property as an "investment" in international investment law and arbitration has far-reaching policy implications. Firstly, the IIA language reflects a delicate balance between private and public interests. States can shape this balance when defining investment in their IIAs—a fine balance that is also intrinsic in the protection of pharmaceutical patents. Secondly, when arbitral tribunals determine whether an economic activity constitutes an investment, such determination can affect both foreign and domestic pharmaceutical companies.<sup>260</sup> In fact, the tribunals' awards could have effects reverberating beyond the parties to the given disputes. Although the rule of *stare decisis*, or binding precedent, does not apply to international arbitration and awards are binding only between the parties,<sup>261</sup> previous arbitral awards have influenced, if not shaped, much of contemporary investment law.<sup>262</sup>

For example, if a patent application is considered to be a protected investment, private interests may receive a higher level of protection than they otherwise would be and the state regulatory autonomy will be restricted according to the relevant investment treaty provisions. By contrast, if a patent application is not considered to be a protected investment, private interests will receive a lower level of protection than they otherwise would, but the host state will preserve its regulatory autonomy. Therefore, it is crucial that when treating intellectual property as an "investment," arbitrators should consider the precise wording of the applicable investment treaty and the underlying policy implications, <sup>263</sup> taking into account both private and public interests. The determination whether a certain economic activity constitutes an investment can

<sup>&</sup>lt;sup>259</sup> Gibson, Latent Grounds in Investor-State Arbitration, supra note 183, at 433.

<sup>&</sup>lt;sup>260</sup> Okediji, *Is Intellectual Property "Investment"?*, *supra* note 204, at 1127 (noting that both investor and state "will be affected by any resulting welfare loss.").

<sup>&</sup>lt;sup>261</sup> See ICSID Convention, *supra* note 135, at art. 53 (stating that "The award shall be binding on the parties . . ."); *see also* NAFTA, *supra* note 16, at art. 1136(1) (providing that "an award made by a Tribunal shall have no binding force except between the disputing parties and in respect of the particular case.").

<sup>&</sup>lt;sup>262</sup> Gabrielle Kaufmann-Kohler, Arbitral Precedent: Dream, Necessity or Excuse?, 23 ARB. INT'L 357 (2007).

<sup>&</sup>lt;sup>263</sup> *Id.* at 1136 (illustrating "the dangers of treating intellectual property as 'investment' per se, isolated from its appropriate policy domains.").

affect the ability of the host state to calibrate national policies to local conditions and needs.

### B. Expropriation

International investment treaties provide, *inter alia*, for protection against unlawful expropriation.<sup>264</sup> This raises two questions: whether a state action constitutes expropriation, and if it does, whether or not the expropriation is lawful. Several arbitrations have been concerned with the issues of what acts of the state amount to an expropriation. Treaty provisions lack a precise definition of expropriation, and their languages encompass a potentially wide variety of state activities that may interfere with pharmaceutical patents.<sup>265</sup> Usually IIAs clarify that expropriatory measures are lawful if adopted: 1) for a public purpose; 2) on a non-discriminatory basis; 3) in accordance with due process of law; and 4) on payment of compensation.<sup>266</sup> Failure to satisfy any of these requirements will imply that the expropriation is unlawful and thus requires compensation.

Expropriation includes both direct and indirect expropriation. Direct expropriation of intellectual property is usually done through formal transfer of title or outright seizure of the same.<sup>267</sup> This has happened in the past.<sup>268</sup> For

<sup>&</sup>lt;sup>264</sup> See Germany-Burundi BIT, *supra* note 3, at art. 2(4) ("Investment by nationals or companies of either Contracting Party shall not be expropriated, nationalized or subjected to any other measure the effects of which would be tantamount to expropriation or nationalization in the territory of the other Contracting Party except for the public benefit and against compensation... The legality of any such expropriation, nationalization, or comparable measure and the amount of compensation shall be subject to review by due process of law."); Fr.-Pol., art. 5(2), Feb. 14, 1989 ("The Contracting Parties shall not take any expropriation or nationalization measures or any other measures which would have the effect of divesting investors of the other Party, either directly or indirectly, of investments belonging to them in its territory or maritime areas, except for reasons of public necessity and on condition that these measures are not discriminatory or contrary to a specific undertaking. Any divestment measures that may be taken shall give rise to the payment of prompt and adequate compensation, the amount of which shall correspond to the real value of the investments in question on the day before the measures are taken or made known to the public ....").

<sup>&</sup>lt;sup>265</sup> Wena Hotels Ltd. v. Arab Republic of Egypt, ICSID Case ARB/98/4, Award, at ¶ 98 (Dec. 8, 2000) (noting that "expropriation is not limited to tangible property rights.").

<sup>&</sup>lt;sup>266</sup> See NAFTA, supra note 16, at art. 1110.1.

<sup>&</sup>lt;sup>267</sup> United Nations Conference on Trade and Development, 2012, *Expropriation: UNCTAD Series on Issues in International Investment Agreements II*, 6, UNCTAD/DIAE/IA/2011/7 ("Direct expropriation means a mandatory legal transfer of the title to the property or its outright physical seizure. Normally, the expropriation benefits the State itself or a State-mandated third party.").

<sup>&</sup>lt;sup>268</sup> For instance, during the First World War, the German-owned Bayer trademark for aspirin was assigned to an unrelated US company. *See* Allen Z. Hertz, *Shaping the Trident:* 

instance, in *German Interests in Polish Upper Silesia*, the Permanent Court of International Justice found that a Polish statute, which transferred to the Polish Treasury all the properties of the German Reich located in the territory annexed to Poland, expropriated not only the Chorzów factory, but also certain patents.<sup>269</sup> More recently, in *Shell Brand International AG v. Nicaragua*,<sup>270</sup> two Shell subsidiaries filed a claim against the Government of Nicaragua for breach of the Netherlands–Nicaragua BIT in response to an alleged direct expropriation of their logo and brand name.<sup>271</sup> According to the claimants, Nicaragua seized their trademarks in an effort to enforce a judgment of a Nicaraguan court.<sup>272</sup>

Even without direct expropriation, a state action could nonetheless amount to indirect expropriation of a patent. Indirect expropriation indicates measures that do not directly take investment property but interfere with its use, depriving the owner of its economic benefit.<sup>273</sup> For instance, several studies have examined the question as to whether compulsory licenses—when a government allows someone else to exploit the patented product or process without the consent of the patent owner—and parallel imports—importing and selling branded goods into a market without the consent of the patent owner can amount to an expropriation of pharmaceutical patents.<sup>274</sup> Although the TRIPS Agreement permits compulsory licenses and parallel imports,<sup>275</sup> the issue remains open as to whether they constitute indirect expropriation under

Intellectual Property Under NAFTA, Investment Protection Agreements and at the World Trade Organization, 23 CANADA–U.S. L.J. 261, 276 (1997).

<sup>269</sup> The Factory at Chorzów (Germany v. Poland), Judgment, PCIJ Rep, Series A No. 7, at 44 (May 25, 1926).

<sup>270</sup> Shell Brands International AG & Shell Nicaragua S.A. v. The Republic of Nicaragua, ICSID Case No. ARB/06/14, Request for Arbitration (May 17, 2006).

<sup>271</sup> Damon Vis-Dunbar, *Shell Launches Claim against Nicaragua over Seizure of Intellectual Property*, INVESTMENT TREATY NEWS (Oct. 13, 2006) (noting that according to Shell, Nicaragua seized its trademarks in an effort to enforce a judgment handed down in 2002 by a Nicaraguan court in *Sonia Eduarda Franco Franco, et al. v. Dow Chemical, et al.* That judgment was in favour of Nicaraguan citizens who claimed to have been affected by a pesticide, which was manufactured for use on banana plantations in the 1960s and 70s. As the case was withdrawn, very little information is available about the dispute.).

<sup>272</sup> Id.

<sup>273</sup> Brigitte Stern, In Search of the Frontiers of Indirect Expropriation, in CONTEMPORARY ISSUES IN INTERNATIONAL ARBITRATION AND MEDIATION 35 (Arthur Rovine ed., 2008).

<sup>274</sup> For an examination of the question as to whether compulsory licenses can amount to an indirect expropriation, see VADI, *supra* note 54, at 52–53, 76–80, 88–90; Christopher Gibson, A Look at the Compulsory License in Investment Arbitration: The Case of Indirect Expropriation, 25 AM. U. INT'L L. REV. 25 357 (2010); Carlos M. Correa, Investment Protection in Bilateral and Free Trade Agreements: Implications for the Granting of Compulsory Licenses, 26 MICH. J. INT'L L. 331 (2004).

<sup>275</sup> TRIPS Agreement arts. 6, 31.

investment agreements. So far no claims have been brought concerning these specific issues.<sup>276</sup>

In Servier v. Poland, the Tribunal held Poland liable for expropriation of pharmaceutical marketing authorization in breach of the France–Poland BIT.<sup>277</sup> As part of Poland's accession to the European Union (EU), the country revised its pharmaceutical laws to harmonize them with EU law.<sup>278</sup> Under one of these harmonization measures, medicines to be sold in Poland required a renewal of their marketing authorization.<sup>279</sup> In late 2008, Polish health authorities did not renew the authorization for two medicines produced by the claimants,<sup>280</sup> the precise reasons for which remain confidential.<sup>281</sup> Around the same time, authorization was granted to Polish companies to produce market alternatives of these medicines.<sup>282</sup> Against this background, the claimants, three French pharmaceutical companies, commenced arbitration under the France-Poland BIT, contending that the denial of authorizations amounted to a substantial deprivation of value, and thus a direct or indirect expropriation of their pharmaceutical patents.<sup>283</sup>

Poland argued that its decisions not to renew marketing authorizations were adopted in the "normal course of [its] duties as pharmaceutical regulator, and based on the drugs' failure to comply with EU law requirements,"<sup>284</sup> and thus did not amount to an expropriation. In particular, Servier could not have expected that authorization would indefinitely be granted in the context of both a heavily-regulated pharmaceutical industry and Poland's transition to its EU membership.<sup>285</sup> Moreover, Poland contended that its conduct complied with EU law, which was binding on both Poland and France being the "product of a joint French and Polish policy choice."286 According to Poland, EU law constituted a "relevant rule of international law applicable between the parties" under Article 31(3)(c) of the Vienna Convention on the Law of Treaties.<sup>287</sup> and therefore it

 $^{282}$  Id. ¶¶ 108–110 and 124.

<sup>286</sup> *Id.* ¶ 264.

<sup>&</sup>lt;sup>276</sup> For discussion of an investment treaty arbitration concerning compulsory licensing, see VADI, supra note 54, at 78.

<sup>&</sup>lt;sup>277</sup> Les Laboratoires Servier, S.A.S. v. Republic of Poland, UNCITRAL, Final Award, ¶¶ 574-76 (Feb. 14, 2012), http://www.italaw.com/sites/default/files/case-documents/italaw 3005.pdf.

 $<sup>^{278}</sup>$  Id. ¶ 40.  $^{279}$  Id. ¶¶ 57–58.

 $<sup>^{280}</sup>$  *Id.* ¶¶ 80, 89.

<sup>&</sup>lt;sup>281</sup> *Id.* ¶ 48 (redacting the reason for denial).

<sup>&</sup>lt;sup>283</sup> *Id.* ¶ 215.

 $<sup>^{284}</sup>$  Id. ¶ 190.

<sup>&</sup>lt;sup>285</sup> *Id.* ¶¶ 271, 274.

<sup>&</sup>lt;sup>287</sup> *Id.* ¶ 265.

would be "inappropriate to find that the regulatory requirements to which both parties agreed could give rise to an obligation of compensation."<sup>288</sup> Poland further contended that in denying marketing authorizations to certain medicines, it exercised its police powers<sup>289</sup> in a way that was proportionate to the public interest to promote public health and adopted in good faith,<sup>290</sup> and hence the arbitrators should show deference to state regulatory choices.<sup>291</sup> Poland concluded that it had an obligation to adopt the regulatory measures because EU law would not have allowed other regulatory choices.<sup>292</sup>

Servier contended that the state measures were discriminatory, disproportionate and unreasonable. According to Servier, the state measures were discriminatory because the state granted authorizations to local producers but rejected Servier's applications, 293 even though no regulations required Poland to reject foreign applications over local.<sup>294</sup> Servier contended that "Poland viewed the harmonization process as a means to promote the local pharmaceutical industry, in particular through the registration of low-cost local generic products."<sup>295</sup> On proportionality, Servier suggested that, rather than denying authorization, the health authorities could have limited the indications for use of the medicines, or given conditional approval while requiring further information.<sup>296</sup> Finally, the claimant alleged that no reasonable serious public health reason justified the nonrenewal of their syrup product <sup>297</sup> while authorizing the same product in tablet form.<sup>298</sup>

The Tribunal found that the denial of marketing authorizations amounted to an indirect expropriation, implicating a State's substantial interference with

<sup>&</sup>lt;sup>288</sup> Id. ¶ 265.

<sup>&</sup>lt;sup>289</sup> *Id.* ¶ 276.

 $<sup>^{290}</sup>$  *Id.* ¶ 403.

<sup>&</sup>lt;sup>291</sup> Id. <sup>¶</sup> 280 (stressing that "in assessing the measures, [the Tribunal] should not embark upon an open-ended enquiry into the scientific correctness of the decisions in question or substitute its own regulatory choices for those made by the competent Polish regulator. Rather, the Tribunal should assess whether the measures were motivated by honest belief, held in good faith and based on reasonable scientific grounds, that is, whether Poland acted as a reasonable regulator.") and ¶ 282 (arguing that "A deferential standard of review must be employed by the Tribunal when it comes to regulatory decisions based around science and national regulation.").

<sup>&</sup>lt;sup>292</sup> *Id.* ¶ 336. <sup>293</sup> *Id.* ¶ 310.

 $<sup>^{294}</sup>$  Id. ¶ 264 (noting that "Neither the EU Treaty, nor the EU Pharmaceuticals Directive, require[d] Poland to favour the local pharmaceutical industry and adopt measures to drive foreign competitors from the market.").

 $<sup>^{295}</sup>$  Id. ¶ 267.  $^{296}$  *Id.* ¶ 332. <sup>297</sup> *Id.* ¶ 352. <sup>298</sup> *Id.* 

the investor's rights.<sup>299</sup> The Tribunal held that such indirect expropriation was discriminatory and "not a matter of public necessity" 300 and awarded compensation to the foreign investor. As the award is extensively redacted, the legal test that the Tribunal adopted remains opaque; it also remains unclear whether the Tribunal upheld Servier's argument that the indirect expropriation was unlawful.<sup>301</sup> But the award does show that the Arbitral Tribunal has looked closely to the language of the applicable IIA that provided that "any divestment" (whether lawful or unlawful) would give rise to prompt and adequate compensation at the "real value" of the investment.<sup>302</sup>

In another recent dispute, the U.S.-based pharmaceutical company Eli Lilly filed a Notice of Intent against the Government of Canada under NAFTA Chapter 11,<sup>303</sup> claiming that the invalidation of some of its patents by Canadian courts for "inutility"<sup>304</sup> amounted to unlawful expropriation<sup>305</sup> and sought \$500 million in damages.<sup>306</sup> Although this case is still pending, an examination of the parties' arguments on the central issue of expropriation sheds light on the private and public considerations in the evolving dialectics.

Eli Lilly contended that by invalidating its patent, the Canadian court adopted a standard of utility that was contrary to Canada's international treaty obligations.<sup>307</sup> It required not only that a given invention have some "scintilla" of usefulness, but also that the patent holder prove the invention has lived up to the usefulness "promised" by the patent holder at the time of seeking the patent.<sup>308</sup> If the patented invention is found not to meet this promise, the patent can be invalidated. According to the claimant, this promise doctrine of utility diverged from patent law in other countries, and had had the effect of invalidating a large number of patents in recent years.<sup>309</sup> Eli Lilly argued that not

 $^{302}$  *Id.* ¶ 643.

 $^{304}$  *Id.* ¶ 90.

<sup>305</sup> *Id.* ¶¶ 89–97.

<sup>307</sup> *Id.* at 94.

<sup>&</sup>lt;sup>299</sup> *Id.* ¶ 576.

<sup>&</sup>lt;sup>300</sup> *Id.* ¶ 575.

<sup>&</sup>lt;sup>301</sup> Id.  $\P$  426 ("Servier advance[d] a theory of 'full reparation in the event of unlawful expropriation,' supported by principles of international law").

<sup>&</sup>lt;sup>303</sup> Eli Lilly and Company v. The Government of Canada, ICSID Case No. UNCT/14/2, Notice of Intent (7 Nov. 2012) http://www.italaw.com/sites/default/files/case-documents/ italaw1172.pdf.

<sup>&</sup>lt;sup>306</sup> See Okediji, Is Intellectual Property Investment?, supra note 204, at 1121 (highlighting that "the firm seeks to compel a change in Canadian patent law, an intervention by the Parliament to limit the interpretation of the utility requirement by judges.").

<sup>&</sup>lt;sup>308</sup> Eli Lilly and Company v. The Government of Canada, ICSID Case No. UNCT/14/2, Notice of Intent, ¶ 37.  $^{309}$  *Id*.

only would the promise doctrine unduly impede research and development,<sup>310</sup> but it would also breach Canada's obligations under several IP conventions<sup>311</sup> "by imposing onerous and additional utility requirements that have had the effect of denying patent rights for inventions which meet the conditions precedent to patentability."<sup>312</sup> Thus, Eli Lilly argued, it constituted either a direct expropriation because it deprived Eli Lilly of its exclusive rights to prevent third parties from making, using, or selling its patented products during the patent term,<sup>313</sup> or alternatively, an indirect expropriation because it had the effect of nullifying the value associated with the patent.<sup>314</sup>

In its Statement of Defense, Canada countered that a direct expropriation only occurs when rights are taken by the state, <sup>315</sup> but not when a court invalidates a patent, because this "does not amount to a 'taking', but rather, constitutes juridical determination of the existence and scope of rights at law."<sup>316</sup> In other words, according to Canada, the company cannot claim its investments were expropriated because there were no investments; its "patents" did not even exist under Canadian law.<sup>317</sup> Canada also argued that the protection against expropriation under NAFTA Article 1110 "does not apply to the procedurally fair invalidation of a patent by a domestic court"<sup>318</sup> because this

 $^{312}$  *Id.* ¶ 42.

<sup>313</sup> Eli Lilly and Company v. The Government of Canada, ICSID Case No. UNCT/14/2, Notice of Arbitration, ¶ 75 (Sep. 12, 2012), http://www.italaw.com/sites/default/files/case-documents/italaw1582.pdf.

<sup>314</sup> Eli Lilly and Company v. The Government of Canada, ICSID Case No. UNCT/14/2, Notice of Intent, ¶ 91 (7 Nov. 2012), http://www.italaw.com/sites/default/files/case-documents/italaw1172.pdf.

<sup>315</sup> Eli Lilly and Company v. The Government of Canada, ICSID Case No. UNCT/14/2, Government of Canada Statement of Defence, ¶ 117 (June 30, 2014), http://www.italaw.com/sites/default/files/case-documents/italaw3253.pdf.

 $^{316}$  *Id.* ¶ 108.

 $^{317}$  Eli Lilly and Company v. The Government of Canada, ICSID Case No. UNCT/14/2, Counter Memorial, ¶ 302 (Jan. 27, 2015), http://www.italaw.com/sites/default/files/case-documents/italaw4131.pdf (adding that domestic law is the law that determines the existence and nature of property rights and stating that "If there is no valid property right at domestic law, then there is nothing that can be 'taken' within the meaning of the international law of expropriation. The only context in which a domestic court ruling on the validity of an asserted property right could amount to an expropriation is if there has been a denial of justice.").

<sup>318</sup> *Id*.

<sup>&</sup>lt;sup>310</sup> *Id.* ¶ 16.

 $<sup>^{311}</sup>$  Id. ¶ 6 (referring to Article 27 of the TRIPS Agreement, NAFTA Chapter 17 and the Patent Cooperation Treaty.)

happens each year by courts in all major jurisdictions.<sup>319</sup> Additionally, Canada argued that its actions cannot give rise to expropriation under Article 1110(7) of NAFTA,<sup>320</sup> because they were consistent with NAFTA Chapter Seventeen,<sup>321</sup> which grants the inventor exclusive rights in a new and useful invention for a limited period in exchange for disclosure of the invention so that society can benefit from this knowledge.<sup>322</sup>

Turning to the indirect expropriation claim, Canada argued that the patent invalidation did not constitute a substantial deprivation of the economic value of the claimant's investments.<sup>323</sup> Rather, according to Canada, the invalidated patents were just one component of Eli Lilly's overall business in Canada.<sup>324</sup> In fact, the company continues to grow and sells a number of products.<sup>325</sup> With regard to the character of the invalidation, Canada emphasized that "it was a legitimate and good faith exercise of the judicial authority of the state."<sup>326</sup> The defendant also highlighted that the "whole notion of judicial expropriation is entirely unsettled even in domestic legal systems, let alone in customary international law."<sup>327</sup> As the case is pending, it is not possible to foresee how it will be decided.

In *Apotex Inc. v. United States*, Apotex, a Canadian generic pharmaceutical company, alleged, *inter alia*, expropriation of its investments as domestic courts refused jurisdiction to its claim seeking a declaratory judgment of noninfringement. <sup>328</sup> The Federal Food, Drug and Cosmetic Act and subsequent amendments provide for an ANDA that enables generic

<sup>&</sup>lt;sup>319</sup> Eli Lilly and Company v. The Government of Canada, ICSID Case No. UNCT/14/2, Statement of Defence, ¶ 106 (Jun. 30, 2014), http://www.italaw.com/sites/default/files/case-documents/italaw3253.pdf.

<sup>&</sup>lt;sup>320</sup> Eli Lilly and Company v. Government of Canada, ICSID Case No. UNCT/14/2, Counter Memorial, ¶ 344 (Jan. 27, 2015), http://www.italaw.com/sites/default/files/case-documents/italaw4131.pdf.

<sup>&</sup>lt;sup>321</sup> *Id.* (invalidating patents cannot give rise to expropriation claims under Chapter Eleven if those measures are consistent with Chapter Seventeen).

 $<sup>^{322}</sup>$  *Id.* ¶ 7 (according to Canada, the "patent bargain" encompasses a balance between the patent owner and the public: "These rules are intended to ensure that patentees provide the consideration they promised in exchange for the grant of a 20-year monopoly. They seek to ensure that patents are filed on the basis of true invention, rather than of speculation. They verify that disclosure obligations in the patent, which is the basis for the 'patent bargain' with the public, are fulfilled. These rules are fundamental to the integrity of the patent system.").

<sup>&</sup>lt;sup>323</sup> *Id.* ¶¶ 409, 411.

 $<sup>^{324}</sup>$  *Id.* ¶ 411.

<sup>&</sup>lt;sup>325</sup> Id.

<sup>&</sup>lt;sup>326</sup> *Id.* ¶ 415.

 $<sup>^{327}</sup>$  Id. ¶ 414.

<sup>&</sup>lt;sup>328</sup> Apotex Inc. v. U.S., ICSID Case No. ARB(AF)/12/1, Notice of Arbitration, ¶ 7 (Dec. 10, 2008), http://www.state.gov/documents/organization/115447.pdf.

manufacturers to obtain regulatory approval of lower-priced generic versions of previously approved medicines on an expedited basis, thereby benefitting the U.S. healthcare system and American consumers.<sup>329</sup> In 2003, Apotex filed an application with the FDA to obtain the approval of a generic version of an antidepressant before the expiration of the relevant patent.<sup>330</sup> When the patent holder Pfizer declined to file an infringement suit, Apotex filed for a declaratory judgment that it was not infringing on the patent, which Apotex claimed to be a common legal tactic in patent litigation.<sup>331</sup> However, the Southern District of New York dismissed Apotex's suit as the claimant lacked a "reasonable apprehension" that Pfizer would launch a suit for patent infringement.<sup>332</sup> The Federal Circuit affirmed the district court's decision, and the petition for *certiorari* was denied.<sup>333</sup>

Against this background, Apotex filed a notice of arbitration, contending that the United States' conduct amounted to an unlawful expropriation in violation of NAFTA Article 1110.<sup>334</sup> The claimant argued that "under international law, expropriation occurs where government action unreasonably interferes with an alien's effective use or enjoyment of property."<sup>335</sup> According to the Apotex, the U.S. interfered with its property rights in the ANDA "by unlawfully preventing [it] from obtaining a federal court decision" assessing the validity of the relevant patent, and "substantially depriving [it] of the benefits of its investment."<sup>336</sup> The claimant also argued that the defendant "ha[d] no 'public purpose' for interfering with Apotex property rights,"<sup>337</sup> and it "failed to provide the company with due process of law."<sup>338</sup> Finally, Apotex claimed that it did not receive compensation for the damages it alleged to have suffered.<sup>339</sup>

A parallel dispute,<sup>340</sup> which was joined to the former and heard by the same Arbitral Tribunal,<sup>341</sup> involved the submission of an ANDA seeking

<sup>340</sup> Apotex Inc. v. The Government of the United States of America, ICSID Case No. ARB(AF)/12/1, Notice of Arbitration, ¶ 32 (June 4, 2009), http://www.italaw.com/sites/default/files/case-documents/italaw1229.pdf.

<sup>341</sup> Although there were two different statements of claims and the US Department of State maintained two different web pages for the documents relating to the respective claims,

approval for a generic version of a heart medication.<sup>342</sup> In order to obtain approval of its application, Apotex had sued the patent owner, Bristol Myers Squibb (BMS), to make sure that it would not face a patent infringement claim after it launches the Apotex medicines on the market.<sup>343</sup> In response, BMS moved to dismiss the claim for lack of subject matter jurisdiction on the ground that it had no intention of suing Apotex for infringement.<sup>344</sup> The Court granted BMS' motion to dismiss.<sup>345</sup> Apotex argued in the arbitration that the administrative decision of the FDA and the opinion of the courts each violate both U.S. statutory law<sup>346</sup> and NAFTA.<sup>347</sup> In particular, Apotex alleged that the state action interfered with its property rights in its medicine application, thus amounting to an unlawful expropriation in breach of NAFTA Article 1110.<sup>348</sup> Apotex further claimed that because the United States had no "public purpose" for interfering with its property rights and did not provide compensation,<sup>349</sup> the company was entitled to compensatory damages. The Arbitral Tribunal dismissed both claims on jurisdiction because of the failure to exhaust local remedies,<sup>350</sup> time limits,<sup>351</sup> and lack of investment.<sup>352</sup> It also ordered Apotex to pay the United States' legal fees and arbitral expenses.<sup>353</sup> Although the holding does not touch upon the claim of expropriation, the case shows that claims of judicial expropriation have been brought by pharmaceutical companies.

In conclusion, there is no mechanical formula for determining whether state conduct amounts to a direct or indirect expropriation. Generally,

<sup>345</sup> *Id.* ¶ 116.

 $\frac{347}{248}$  Id. ¶ 32.

 $^{348}$  *Id.* ¶ 76.

<sup>349</sup> *Id.* ¶¶ 78–80.

the jurisdiction/admissibility phase in each arbitration was held concurrently, albeit not consolidated. Therefore there was only one award dealing with the two different claims. Apotex Inc. v. the Government of the United States of America, ICSID Case No. ARB(AF)/12/1, Award on Jurisdiction and Admissibility, ¶ 4 (June 14, 2013), http://www.italaw.com/sites/default/files/case-documents/italaw1550.pdf.

<sup>&</sup>lt;sup>342</sup> Apotex Inc. v. the Government of the United States of America, ICSID Case No. ARB(AF)/12/1, Award on Jurisdiction and Admissibility, ¶ 105 (June 14, 2013), http://www.italaw.com/sites/default/files/case-documents/italaw1550.pdf.

<sup>&</sup>lt;sup>343</sup> *Id.* ¶ 114.

<sup>&</sup>lt;sup>344</sup> *Id.* ¶ 115.

<sup>&</sup>lt;sup>346</sup> Apotex Inc. v. The Government of the United States of America, ICSID Case No. ARB(AF)/12/1, Notice of Arbitration, ¶ 66 (June 4, 2009), http://www.italaw.com/sites/default/files/case-documents/italaw1229.pdf.

<sup>&</sup>lt;sup>350</sup> Apotex Inc. v. the Government of the United States of America, ICSID Case No. ARB(AF)/12/1, Award on Jurisdiction and Admissibility, ¶ 298 (*Apotex I and II*) (June 14, 2013), http://www.italaw.com/sites/default/files/case-documents/italaw1550.pdf.

<sup>&</sup>lt;sup>351</sup> *Id.* ¶ 335.

<sup>&</sup>lt;sup>352</sup> *Id.* ¶ 336.

<sup>&</sup>lt;sup>353</sup> See generally id.

expropriation requires that there be an investment in the first place. Depending on the language of the applicable IIA, patent applications may not constitute investments. Expropriation requires that there be a substantial deprivation to the investor.<sup>354</sup> The invalidation of a patent can affect the economic interests of the patent holder and can constitute an indirect expropriation of its rights.<sup>355</sup> However, the act of governing patents can constitute a form of legitimate regulatory activity.<sup>356</sup> The character and regulatory purpose behind the government regulation can carry weight in the assessment as to whether there was a legitimate exercise of the state's police power or an indirect expropriation.<sup>357</sup> The burden of proving that the state conduct is inconsistent with a legitimate exercise of its police powers falls upon the claimant.<sup>358</sup>

### C. Determining Compensation

Another area where the fine-tuning of private and public interest takes place is the determination of compensation to be paid after an expropriation has taken place. IIAs' expropriation provisions may be more beneficial to the patent owner than both domestic and international patent law. <sup>359</sup> Customary compensation rules, uniformly enshrined in investment protection treaties, do not differentiate between the various public purposes of expropriations, but instead pose a single standard:<sup>360</sup> in the case of expropriation, investors must be

<sup>&</sup>lt;sup>354</sup> Les Laboratoires Servier, S.A.S. v. Republic of Poland, UNCITRAL, Final Award, ¶ 576 (Feb. 14, 2012), http://www.italaw.com/sites/default/files/case-documents/italaw 3005.pdf (finding that the denial of marketing authorizations amounted to an indirect expropriation, implicating a State's substantial interference with the investor's rights.)

 $<sup>^{355}</sup>$  *Id.* (noting that "indirect expropriation, at issue in this case, implicates a State's substantial interference with an investor's rights. Such interference must be significant, even if not complete, in the sense of depriving the investor of its ability to benefit from the relevant asset").

<sup>&</sup>lt;sup>356</sup> Gibson, Latent Grounds in Investor-State Arbitration, supra note 183, at 454.

<sup>&</sup>lt;sup>357</sup> Les Laboratoires Servier, S.A.S. v. Republic of Poland, UNCITRAL, Final Award, ¶ 568 (Feb. 14, 2012), http://www.italaw.com/sites/default/files/case-documents/italaw 3005.pdf (holding that, while it "must accord due deference to the decisions of specialized Polish administrators interpreting and applying laws and regulations governing their area of competence", it "will also consider the manner in which those decisions were taken and their effect on the Claimants' investments.").

 $<sup>^{358}</sup>$  *Id.* ¶ 584 (stating that "the burden then falls onto the Claimants to show that Poland's regulatory actions were inconsistent with a legitimate exercise of Poland's police powers.").

<sup>&</sup>lt;sup>359</sup> Carlos M. Correa, *Bilateral Investment Agreements: Agents of New Global Standards* for the Protection of Intellectual Property Rights?, GRAIN.ORG 15 (Aug. 3, 2004), https://www.grain.org/fr/article/entries/125-bilateral-investment-agreements-agents-of-newglobal-standards-for-the-protection-of-intellectual-property-rights (last visited Oct. 15, 2015).

<sup>&</sup>lt;sup>360</sup> Compañia del Desarrollo de Santa Elena v. Costa Rica, Award, Case No. ARB/96/1, Final Award, ¶ 72 (Feb. 17, 2000) (holding that "[e]xpropriatory environmental measures no matter how laudable and beneficial to society as a whole—are, in this respect, similar to

fully compensated.<sup>361</sup> Several investment treaties further require compensation to be prompt, adequate and effective, according to the so-called Hull formula.<sup>362</sup>

In *Servier v. Poland*, the case concerning the alleged expropriation of Servier's investments, the France–Poland BIT required that any expropriation would give rise to "prompt and adequate compensation" at the real value of the investment.<sup>363</sup> Therefore, the Tribunal held that this compensation standard was to be applied, regardless of whether the expropriation was lawful or unlawful.<sup>364</sup> While the Tribunal had "discretion to impose additional sanctions to punish Treaty violations of particular seriousness,"<sup>365</sup> it found that Poland had "not engaged in bad faith behaviour … that would require damages beyond the Treaty standard." <sup>366</sup> Instead, the Tribunal awarded the real value of the investment plus interests, calculated "on the basis of the appropriate rate of interest in force at the time of divestment" as required by the France-Poland BIT.<sup>367</sup>

## D. Fair and Equitable Treatment

Fair and equitable treatment (FET) has become the most often invoked provision in investment treaty arbitration.<sup>368</sup> Due to its deliberate vagueness, it constitutes a catch-all provision covering the situations where there is no finding of expropriation or any other breach of other investment treaty standards.<sup>369</sup> The FET standard is an absolute standard of treatment, designed to

<sup>367</sup> Id. ¶ 663.

<sup>369</sup> Sempra Energy Int'l v. Argentine Republic, ICSID Case No. ARB/02/16, Award, ¶¶ 300–01 (Sept. 28, 2007).

any other expropriatory measures that a state may take in order to implement its policies: where property is expropriated, even for environmental purposes, whether domestic or international, the state's obligation to pay compensation remains.").

<sup>&</sup>lt;sup>361</sup> See, e.g., CME Czech Republic B.V. v. Czech Republic, UNCITRAL, Final Award, ¶ 497 (Mar. 14, 2003).

<sup>&</sup>lt;sup>362</sup> The Hull formula is named after the American Secretary of State, Cordell Hull, who described a full compensation standard as "prompt, adequate and effective" in a diplomatic exchange of notes with Mexico in 1930.

<sup>&</sup>lt;sup>363</sup> Les Laboratoires Servier, S.A.S. v. Republic of Poland, UNCITRAL, Final Award, ¶ 37 (Feb. 14, 2012), http://www.italaw.com/sites/default/files/case-documents/italaw3005.pdf.

<sup>&</sup>lt;sup>364</sup> *Id.* ¶ 644.

<sup>&</sup>lt;sup>365</sup> *Id.* ¶ 645.

 $<sup>^{366}</sup>$  *Id.* ¶ 642.

<sup>&</sup>lt;sup>368</sup> See Sergey Ripinsky, *Russia*, *in* COMMENTARIES ON SELECTED MODEL INVESTMENT TREATIES 605 (Chester Brown ed., 2013) (noting that "this obligation is the one most often invoked by claimants in investment disputes—it is present practically in every case."); *see also* Rudolf Dolzer, *Fair and Equitable Treatment: Today's Contours*, 12 SANTA CLARA J. INT'L L. 7, 10 (2014) (pinpointing that "FET may be considered to be at the heart of investment arbitration.").

provide a basic safeguard upon which the investor can rely at any time, as opposed to the "relative" standards embodied in both the "national treatment" and "most favored nation" principles, which, in contrast, define the required treatment by reference to the treatment accorded to other investments.<sup>370</sup>

In an attempt to delimit the perimeters of the standard, the NAFTA Free Trade Commission issued an interpretation of the provision,<sup>371</sup> which is binding on all NAFTA tribunals.<sup>372</sup> The Commission clarified that the FET provision under NAFTA Article 1105 prescribes the customary international law's minimum standard of treatment and does not require any standard of treatment that goes beyond that.<sup>373</sup> Traditionally, the minimum standard of treatment protected investors only in instances of "egregious and shocking" conduct or "manifestly unfair or inequitable conduct."<sup>374</sup> Therefore, in the NAFTA context, arbitral tribunals still consider the FET standard to be the customary international law minimum standard of treatment.<sup>375</sup>

<sup>&</sup>lt;sup>370</sup> See generally CATHERINE YANNACA SMALL, INTERNATIONAL INVESTMENT LAW: A CHANGING LANDSCAPE 74 (2005) (highlighting that fair and equitable treatment is "an 'absolute', 'non-contingent' standard of treatment, *i.e.* a standard that states the treatment to be accorded in terms whose exact meaning has to be determined, by reference to specific circumstances of application, as opposed to the "relative" standards embodied in "national treatment" and "most-favoured-nation" principles which define the required treatment by reference to the treatment accorded to other investment.").

<sup>&</sup>lt;sup>371</sup> See generally NAFTA Free Trade Commission, Notes of Interpretation of Certain Chapter 11 Provisions, (Jul. 31, 2001), http://www.sice.oas.org/tpd/nafta/Commission/CH11understanding\_e.asp.

<sup>&</sup>lt;sup>372</sup> NAFTA, *supra* note 16, at art. 1131 (providing that "[a]n interpretation by the [FTC] of a provision of this Agreement shall be binding on a Tribunal established under this Section.").

<sup>&</sup>lt;sup>373</sup> NAFTA Free Trade Commission, Notes of Interpretation of Certain Chapter 11 Provisions, *supra* note 371, at B.2 (affirming that "[t]he concepts of 'fair and equitable treatment' and 'full protection and security' do not require treatment in addition to or beyond that which is required by the customary international law minimum standard of treatment of aliens.").

<sup>&</sup>lt;sup>374</sup> See L. F. H. Neer and Pauline Neer (U.S.A.) v. United Mexican States, 4 REP. INT'L ARB. AWARDS, 60, 60–62 (1926). In *Neer*, the widow and daughter of a murdered US citizen sued the Mexican government for "lack of diligence" or "lack of intelligent investigation" in prosecuting the murderers. *Id.* at 61. The US-Mexico Claims Commission held that Mexico was not liable although it acknowledged that "better methods might have been used" for the investigations and the prosecution. *Id.* at 62. The Commission held that "the treatment of an alien, in order to constitute an international delinquency, should amount to an outrage, to bad faith, to wilful [sic] neglect of duty, or to an insufficiency of governmental action so far short of international standards that every reasonable and impartial man would readily recognize its insufficiency.").

<sup>&</sup>lt;sup>375</sup> For instance, the *Glamis Gold* Tribunal held that "the customary international law minimum standard remains as apparently articulated in the 1926 *Neer* award: to violate the

For instance, in *Apotex Holdings Inc, Apotex Inc. v. United States (Apotex III)*,<sup>376</sup> which concerned the import ban on certain pharmaceuticals produced in Canada, the claimant contended that the U.S. breached the minimum standard of treatment due to a perceived lack of due process in providing the issue alert and the delays experienced in re-inspecting the facilities.<sup>377</sup> Although Apotex contended that the FET standard is an evolving standard which has gone beyond the customary minimum standard of treatment, the Tribunal sided with the United States and affirmed that in the NAFTA context, FET means the customary minimum standard of treatment.<sup>378</sup> The Tribunal found that the Claimants had not presented sufficient evidence of state practice or *opinio juris* indicating an expansion of the customary minimum standard of treatment and applying the 'minimum standard', a Chapter 11 tribunal does not have an open-ended mandate to second-guess government decision making,"<sup>380</sup> the Tribunal did not find any breach of the FET provision.

In *Eli Lilly v. Canada*, the pending case relating to the invalidation of patents for failure to meet the utility requirement, the claimant contends that the allegedly unexpected and arbitrary adoption by the Canadian courts of a new, stricter approach to patent invalidation is contrary to the company's "reasonable investment-backed expectations,"<sup>381</sup> and in breach of NAFTA Article 1105.<sup>382</sup>

<sup>376</sup> Apotex Holdings Inc, Apotex Inc. v. United States of America (Apotex III), ICSID Case No. ARB(AF)/12/1, Award (Aug. 25, 2014).

 $^{377}$  Id. ¶¶ 2.30, 2.64.

 $^{378}$  *Id.* ¶ 9.3 (recalling the FTC Note of interpretation), ¶ 9.4 (accepting the binding effect of this Note of Interpretation).

<sup>379</sup> *Id.* ¶ 9.17.

<sup>380</sup> *Id.* ¶ 9.39 (quoting S.D. Myers Inc. v. The Government of Canada, UNCITRAL, Partial Award, ¶ 261 (Nov. 13, 2000)). *See also id.* ¶ 9.37 (recalling "the need for international tribunals to recognise the special roles and responsibilities of regulatory bodies charged with protecting public health and other important public interests. These are of course not binding on this Tribunal, which must make its own determinations regarding the facts and the law relevant to this case .... Nevertheless ... other decisions indicate the need for international tribunals to exercise caution in cases involving a state regulator's exercise of discretion, particularly in sensitive areas involving protection of public health and the wellbeing of patients.").

 $^{381}$  Eli Lilly and Company v. The Government of Canada, ICSID Case No. UNCT/14/2, Notice of Intent, ¶ 95 (Nov. 7, 2012), http://www.italaw.com/sites/default/files/case-documents/italaw1172.pdf.

customary international law minimum standard of treatment codified in Article 1105 of the NAFTA, an act must be sufficiently egregious and shocking – a gross denial of justice, manifest arbitrariness, blatant unfairness, a complete lack of due process, evident discrimination, or a manifest lack of reasons – so as to fall below accepted international standards ...." Glamis Gold, Ltd. v. The United States of America, UNCITRAL, Award, ¶ 22 (June 8 2009) http://www.italaw.com/sites/default/files/case-documents/ita0378.pdf.

The company argues that it could not have anticipated at the time of its investment that the requirement for utility would be altered by the adoption of the "promise of the patent" doctrine into Canadian law and practice.<sup>383</sup> In its Statement of Defence,<sup>384</sup> the Government of Canada counter-argued that the claimant received due process before Canadian courts and simply being disappointed with the outcome of two patent trials does not amount to a breach of the relevant obligations.<sup>385</sup> Rather, according to the respondent, "[t]he threshold for a violation by a court of the minimum standard of treatment" is set "extremely high" under customary international law.<sup>386</sup> Canada highlights that the FET standard does not prevent the evolution of a State's legal framework,<sup>387</sup> as NAFTA Chapter 11 was never meant "as a kind of insurance policy against the risk of any changes in the host State's legal and economic framework."<sup>388</sup> In its Counter Memorial, Canada also points out that NAFTA's FET provision does not go beyond the minimum standard of treatment required under customary international law.<sup>389</sup> According to Canada, "a violation of Article 1105(1) will not be found unless there is evidence of serious malfeasance, manifestly arbitrary behaviour or denial of justice by the respondent NAFTA Party." 390 Therefore, Canada argues that a mere frustration of investors' legitimate expectations does not establish a breach of the minimum standard of treatment, as the theory of legitimate expectations has not become a rule of customary international law.<sup>391</sup>

Although the FET standard has not presented much of a viable claim in the NAFTA context, it can have a concrete impact outside the NAFTA milieu, where arbitral tribunals have broadened the notion of fair and equitable treatment significantly. The standard has exceeded the customary minimum standard of treatment and comprises various additional requirements, such as transparency, due process, and others.<sup>392</sup> Under this broader conceptualization,

<sup>385</sup> *Id.* ¶ 90. <sup>386</sup> *Id.* ¶ 99.

<sup>387</sup> *Id.* ¶ 104.

<sup>388</sup> Id.

<sup>390</sup> *Id.* ¶ 227. <sup>391</sup> *Id.* ¶ 266.

<sup>&</sup>lt;sup>382</sup> *Id.* ¶¶ 98, 104.

<sup>&</sup>lt;sup>383</sup> *Id.* ¶ 101.

<sup>&</sup>lt;sup>384</sup> Eli Lilly and Company v. The Government of Canada, ICSID Case No. UNCT/14/2, Statement of Defence, (Jun. 30, 2014), http://www.italaw.com/sites/default/files/casedocuments/italaw3253.pdf.

<sup>&</sup>lt;sup>389</sup> Eli Lilly and Company v. The Government of Canada, ICSID Case No. UNCT/14/2, Counter Memorial, ¶ 15 (Jan. 27, 2015), http://www.italaw.com/sites/default/files/casedocuments/italaw4131.pdf.

<sup>&</sup>lt;sup>392</sup> Christoph Schreuer, Fair and Equitable Treatment in Arbitral Practice, 6 J. WORLD INV. & TRADE, 357, 360, 364 (2005).

the FET standard has figured prominently in a number of patent-related investment arbitrations.

IP-related FET claims, both within and beyond the NAFTA context, have raised a number of questions. Does the grant of the patent by the host state constitute state representations which in turn create legitimate expectations the patent holder may rely upon?<sup>393</sup> Can an investor rely upon international IP norms as a source of legitimate expectations?<sup>394</sup> Does investment treaty arbitration provide a new means to enforce international IP agreements?<sup>395</sup> What is the relationship between denial of justice and indirect expropriation claims? The next subsections address these questions.

## 1. IP Rights as a Basis for Investor's Legitimate Expectations

The concept of "legitimate expectations" allows a foreign investor to claim compensation in situations where "the conduct of a host state creates a reasonable expectation ... that [the investor] may rely on that conduct, such that a subsequent failure by the host state to honour those expectations causes the investor to suffer damages".<sup>396</sup> Legitimate expectations are not an independent cause of action. Whether or not the fair and equitable standard protects the legitimate expectations of foreign investors has been answered in various ways.<sup>397</sup> The divergence concerning the content of the FET standard, and the

<sup>395</sup> Gibson, Latent Grounds in Investor-State Arbitration, supra note 183, at 397.

<sup>396</sup> Chris Yost, A Case Review and Analysis of the Legitimate Expectations Principle as it Applies Within the Fair and Equitable Treatment Standard 6 (Mar. 8, 2007) (unpublished thesis, Australian National University), http://papers.ssrn.com/sol3/papers.cfm?abstract\_id =1364996.

 $^{397}$  See, e.g., Azurix Corp. v. Argentine Republic, ICSID Case No. ARB/01/02, Award, ¶ 372 (July 14, 2006) (holding that the fair and equitable treatment standard now protects legitimate investor expectations even in the absence of bad faith or egregious conduct by the host state); see also Vaughan Lowe, The Changing Dimensions of International Investment Law 98 (University of Oxford Faculty of Law Legal Studies Research Paper Series, Working Paper No. 4/2007, 2007) (arguing "there is an emerging consensus that transparency and legitimate expectations are matters that it is proper to consider in the context of fair and equitable treatment."); cf. Michele Podestà, Legitimate Expectations in Investment Treaty Law: Understanding the Roots and the Limits of a Controversial Concept 1-2 (Soc'y of Int'l 2012), Econ. Law, 3rd **Biennial** Global Conference, Working Paper, "Arbitral http://papers.ssrn.com/sol3/papers.cfm?abstract\_id=2102771## (noting that tribunals ... have typically taken for granted the idea that a breach of the investor's expectations may be relevant in deciding upon a violation of an investment treaty especially of the fair and equitable treatment standard.") (internal parenthetical omitted).

<sup>&</sup>lt;sup>393</sup> Henning Grosse Ruse-Khan, *Litigating Intellectual Property Rights in Investor-State Arbitration: From Plain Packaging to Patent Revocation* 13 (University of Cambridge Faculty of Law Legal Studies, Working Paper No. 52/2014, 2014), http://papers.ssrn.com/ sol3/papers.cfm?abstract\_id=2463711.

<sup>&</sup>lt;sup>394</sup> *Id*.

protection of the legitimate expectations of the investor, is really about the level of protection that should be granted to foreign investors and their investments. While investors want stronger investment protections, host states favor weaker restrictions on the exercise of their sovereign powers.<sup>398</sup> The variance also expresses the preference of NAFTA states for striking a balance between public and private interests at the legislative (domestic) level, rather than empowering arbitral tribunals to find that balance between such interests at the adjudicative (international) level.

Translating this general discussion in the specific context of IP protection, one wonders what type of expectations, if any, patents can give rise to. Patents are a type of IP, governed by both national statutes and international instruments such as the Paris Convention and the TRIPS Agreement. Can investors legitimately expect that these domestic and international instruments will not be violated by the host state? Can investors legitimately expect an absolute protection of their economic interests?

Patent law is characterized by the concept of the "patent bargain" or granting the right of exclusive exploitation of a given invention in exchange for the disclosure of a novel invention.<sup>399</sup> It expresses a fundamental and intrinsic balance of public and private interests. Patents do not confer absolute rights, nor do they create any legitimate expectation that the exclusivity they confer is absolute and will remain without interference from accepted checks and balances inherent in the IP system.<sup>400</sup> Not only does the international IP framework provide for commonly used regulatory controls on the utilization and exploitation of patents,<sup>401</sup> but patents are territorial in nature. Patents exist by virtue of legal recognition from the state. Therefore, it is within a host state's competence to determine the patentability and scope of protection offered for patents for rights holders to make or use the protected invention; rather they are negative rights, which allow rights holders to exclude competitors from exploiting a given invention for a limited time. They cannot prevent states from

<sup>&</sup>lt;sup>398</sup> See Tai-Heng Cheng, Remarks as Chairman for Panel Discussion at 2007 International Law Weekend: Is the Fair and Equitable Treatment Standard Fair and Equitable? (Oct. 27, 2006), http://papers.ssrn.com/sol3/papers.cfm?abstract\_id=1259939 at 5 ("[T]he disagreements about the content of the fair and equitable treatment standard are really about investors wanting stronger investment protections, and host states favoring weaker restrictions on the exercise of their sovereign powers.").

<sup>&</sup>lt;sup>399</sup> E.g., Katherine J. Strandburg, *What Does the Public Get? Experimental Use and the Patent Bargain*, 2004 WIS. L. REV. 81, 90–93 (2004) (describing a patent as a bargain between the inventor and society).

<sup>&</sup>lt;sup>400</sup> Grosse Ruse-Khan, *supra* note 393, at 13.

<sup>&</sup>lt;sup>401</sup> *Id.* at 13–14 (referring to the WTO panel report in *EC–Geographical Indications*).

regulating the use of such rights in the pursuit of legitimate public policy objectives.<sup>402</sup> Conversely, if a host state grants specific assurances to an investor regarding the exploitation of her investment in the host state, the adoption of new regulatory measures affecting the economic value of her investment might amount to a breach of fair and equitable treatment.<sup>403</sup>

### 2. International IP Norms as a Source of Legitimate Expectations

In several investment arbitrations, investors have claimed that measures adopted by the host state and affecting their investments are illegal under a number of international IP agreements and therefore violate the FET standard. According to this line of argument, if the host state is party to international intellectual property agreements such as the TRIPS Agreement, the Paris Convention and the Patent Cooperation Treaty, an investor is justified in having a legitimate expectation that the state will not violate such agreements.<sup>404</sup> This argument assumes that if the state has acted in a way that deviates from the investor's legitimate expectations, it violates the FET.

In *Eli Lilly v. Canada*, the pending case relating to the invalidation of patents on grounds of inutility, the claimant contends that the adoption by the Canadian courts of a new, stricter approach to patent invalidation is contrary to the company's "reasonable investment-backed expectations,"<sup>405</sup> and in breach of NAFTA Article 1105.<sup>406</sup> The claimant contends that by violating a number of international law instruments governing patentability requirements, the Canadian measures are in breach of the FET standard.<sup>407</sup> The company stresses its legitimate expectations that Canada complies with international IP treaties,<sup>408</sup> including the TRIPS Agreement, the Patent Cooperation Treaty and NAFTA Chapter 17.

 $<sup>^{402}</sup>$  Panel Report, *European Communities–Protection of Trademarks and Geographical Indications For Agricultural Products and Foodstuffs*, ¶ 7.210 WTO Doc. WT/DS/174R (Mar. 15, 2015) (holding that "the [TRIPS A]greement does not generally provide for the grant of positive rights to exploit or use certain subject matter, but rather provides for the grant of negative rights to prevent certain acts.").

<sup>&</sup>lt;sup>403</sup> Grosse Ruse-Khan, *supra* note 393, at 14.

<sup>&</sup>lt;sup>404</sup> Eli Lilly and Company v. The Government of Canada, ICSID Case No. UNCT/14/2. Notice of Intent, ¶¶ 95, 96 (7 Nov. 2012), http://www.italaw.com/sites/default/files/case-documents/italaw1172.pdf.

 $<sup>^{405}</sup>$  *Id.* ¶ 95.

<sup>&</sup>lt;sup>406</sup> *Id.* ¶¶ 98–104.

 $<sup>^{407}</sup>$  Id. ¶ 5–86.

 $<sup>^{408}</sup>$  *Id.* ¶ 96.

Canada maintains that the Tribunal lacks jurisdiction over the alleged breaches of Canada's international treaty obligations<sup>409</sup> under TRIPS, PCT or NAFTA Chapter Seventeen, and that enforcement of obligations under these other international IP agreements may only be brought before their own respective venues.<sup>410</sup>

Canada also maintains that it is not breaching the investor's legitimate expectations because it is complying with the substantive provisions of the TRIPS Agreement, NAFTA Chapter 17 and the PCT. First, according to Canada, the TRIPS Agreement "did not attempt to create a uniform or deeply harmonized patent regime," rather, it "left ample room for national variations and approaches to substantive patent issues." <sup>411</sup> In fact during the TRIPS negotiations, "broad terms were used due to the lack of consensus on substantive law and the desire to maintain flexibility."<sup>412</sup> Second, Canada stresses that NAFTA Article 1709(1), whose language was drawn upon the TRIPS negotiations, <sup>413</sup> includes the criteria "new," "result[ing] from an inventive step," and "capable of industrial application" as criteria for patentability of a given medicine, but also notes that "a Party may deem the terms 'inventive step' and 'capable of industrial application' to be synonymous with the terms 'non-obvious' and 'useful,' respectively."414 This indicates that the parties could not agree on a common terminology for patentability requirements and their substantive content. Third, Canada notes the irrelevance of the PCT to the case. In fact, according to the state, such treaty "does not govern either substantive conditions of patentability or the invalidation of patents. It simply facilitates the international filing of patent applications ...."<sup>415</sup> In fact, Canada stresses that "[f]iling in accordance with the PCT is no

 $<sup>^{409}</sup>$  Eli Lilly and Company v. The Government of Canada, ICSID Case No. UNCT/14/2, Government of Canada Statement of Defence, ¶ 83 (June 30, 2014), http://www.italaw.com/sites/default/files/case-documents/italaw3253.pdf (pinpointing that "[t]he Tribunal's jurisdiction in this matter relates only to alleged breaches of NAFTA Chapter Eleven obligations.").

 $<sup>^{410}</sup>$  Id. ¶ 84 (noting that "[d]isputes in respect of an alleged breach of TRIPS obligations may only be brought pursuant to the Dispute Settlement Understanding of the World Trade Organisation. Allegations of a breach of the PCT are, in accordance with that Treaty, to be brought before the International Court of Justice. Allegations of a breach of NAFTA Chapter Seventeen are to be brought on a State-to-State basis before a tribunal constituted pursuant to NAFTA Chapter Twenty.").

<sup>&</sup>lt;sup>411</sup> *Id.* ¶ 91.

<sup>&</sup>lt;sup>412</sup> *Id.* ¶ 87.

<sup>&</sup>lt;sup>413</sup> *Id*.

 $<sup>^{414}</sup>$  Id.

<sup>&</sup>lt;sup>415</sup> *Id.* ¶ 94.

guarantee that a patent application will result in a successful patent grant, or that any grant of a patent will withstand judicial scrutiny."<sup>416</sup>

The argument that a state's adhesion to other treaties gives rise to legitimate expectations that the state will not breach such treaties relies on an expansive and evolving interpretation of the FET standard. Under NAFTA, it seems that such a claim lacks merits, as NAFTA tribunals have adopted a restrictive approach to the interpretation of the standard, analogizing it to the minimum standard of treatment under customary law. Beyond the NAFTA context, some tribunals have considered that the protection of legitimate expectations constitutes part of the FET standard. However, it remains to be seen whether arbitral tribunals will consider that legitimate expectations include an expectation that the host state will not breach its international law commitments. The argument, if adopted, would impose a powerful constraint on states for which the state did not bargain for in the negotiation of IIAs.

Even if arbitral tribunals accepted such an expansive interpretation of the FET standard, the fact remains that international IP treaties provide very vague terms, and therefore have traditionally left much room for maneuver to the states. In general terms, international IP treaties "include deliberate gaps, reflecting areas of non-convergence and the residual sovereignty of states to legislate specific rules."<sup>417</sup> Such treaties do not define the concepts of utility, novelty and nonobviousness because "there is no consensus on how to apply these doctrines."<sup>418</sup> Rather the content of these "open-ended" standards evolves over time, <sup>419</sup> and states shape patentability standards "to achieve net policy goals in specific sectors."<sup>420</sup>

The national implementation of international IP standards varies across countries.<sup>421</sup> As the current international IP regime is "rooted in the disparate practices ... of different nations," "non-uniformity pervades [its] very fabric."<sup>422</sup> For instance, the TRIPS Agreement clarifies that "[m]embers shall be free to determine the appropriate method of implementing the provisions of this Agreement within their own legal system and practice."<sup>423</sup> Moreover, the Rules and Procedures Governing the Settlement of Disputes (DSU) provides that

<sup>&</sup>lt;sup>416</sup> *Id*.

<sup>&</sup>lt;sup>417</sup> Okediji, *Is Intellectual Property Investment?*, *supra* note 204, at 1132.

<sup>&</sup>lt;sup>418</sup> Jerome Reichman, Panelist Presentation, Investment Chapters in Trade Agreements: IP Rights as Protected Investments (Apr. 11, 2014).

 $<sup>^{419}</sup>$  *Id*.

<sup>&</sup>lt;sup>420</sup> Okediji, *Is Intellectual Property Investment?*, supra note 204, at 1134.

<sup>&</sup>lt;sup>421</sup> *Id.* at 1132.

<sup>&</sup>lt;sup>422</sup> Alan M. Anderson et al., *The Globalization of Intellectual Property Rights: TRIPS, BITs, and the Search for Uniform Protection,* 38 GA. J. INT'L & COMP. L. 265, 289 (2010).

<sup>&</sup>lt;sup>423</sup> TRIPS Agreement art. 1.1.
WTO panels and the Appellate Body (AB) "cannot add to or diminish the rights and obligations provided for in the covered agreements."<sup>424</sup> WTO jurisprudence has confirmed this "space reserved for state sovereignty."<sup>425</sup> In conclusion, how countries achieve a competitive balance between public and private interests remains a national prerogative, provided that they comply with their international obligations.

## 3. A New Tool to Enforce International Intellectual Property Agreements

Can investment treaty arbitration constitute a new tool to enforce international IP agreements? Can it provide investors with an alternative venue to challenge the consistency of domestic regulations with the TRIPS Agreement, instead of lobbying their governments to bring a WTO dispute? And if parallel proceedings are brought before the WTO DSM and investment treaty arbitral tribunals respectively, will arbitral tribunals, WTO panels and the AB show any deference to the other venues?

In some exceptional cases, foreign investors have attempted to use international investment law to indirectly protect other values by requiring a state to respect its international law obligations that are critical to the success of the investment.<sup>426</sup> For instance, a Canadian investor filed an investment treaty claim against Barbados, arguing that the alleged failure to enforce its own environmental law implementing international obligations violates FET under the Canada-Barbados BIT.<sup>427</sup> The formulation of this claim illustrates a novel form of interplay between international investment law and other branches of international law.

When adjudicating IP investment disputes, the question arises as to whether arbitral tribunals can take into account other bodies of law in addition to international investment law. A breach of the TRIPS Agreement cannot provide a basis for an independent claim in investment treaty arbitration. Investment treaty arbitral tribunals cannot adjudicate on a violation of international IP law, unless the relevant investment treaty requires them to do so.

<sup>&</sup>lt;sup>424</sup> DSU art. 19.2.

<sup>&</sup>lt;sup>425</sup> Appellate Body Report, *India—Patent Protection for Pharmaceutical and Agricultural Chemical Products*, ¶¶ 47–48, WTO Doc. WT/DS/50/AB/R (Dec. 19, 1997).

<sup>&</sup>lt;sup>426</sup> VALENTINA VADI, CULTURAL HERITAGE IN INTERNATIONAL INVESTMENT LAW AND ARBITRATION 129–31 (2014).

<sup>&</sup>lt;sup>427</sup> Peter A. Allard v. Barbados, UNCITRAL, Notice of Dispute, ¶ 16 (Sept. 8, 2009), http://graemehall.com/legal/papers/BIT-Complaint.pdf (asserting as the investor acquired wetlands and subsequently developed them into an ecotourism facility, he claimed that Barbados had failed to prevent the discharge of raw sewage into the wetlands and to investigate or prosecute polluters, thus reducing the profitability of its investment).

If an international investment agreement does not refer to other treaty obligations, it appears difficult to assume that the IIA parties wished to interpret the FET standard in such a wide-ranging manner.<sup>428</sup> In fact, had the IIA parties wished to expand the scope of protection to cover violations of other treaties, they could have included explicit reference to these other treaties. In addition, the DSM has exclusive jurisdiction in settling disputes over breaches of WTO law.<sup>429</sup> This seems to preclude arbitral tribunals to adopt such an expansive interpretation of the FET standard.

For instance, in *Grand River Enterprises Six Nations v. United States*, the Tribunal held that the FET standard in NAFTA Chapter 11 "does not incorporate other legal protections that may be provided investors or classes of investors under other sources of [international] law" otherwise the standard would become "a vehicle for generally litigating claims based on alleged infractions of domestic and international law."<sup>430</sup> In another case, the Tribunal held that the applicable law "does not incorporate the universe of international law into the BITs or into disputes arising under the BITs."<sup>431</sup>

Yet, when interpreting a treaty, a tribunal can take account of other international obligations of the parties according to customary rules of treaty interpretation as restated by the Vienna Convention on Law of Treaties (VCLT).<sup>432</sup> Article 31.3(c) of the VCLT provides that there shall be taken into account, together with the context, "[a]ny relevant rules of international law applicable in the relations between the parties." Therefore, the host state's obligation under other international IP treaties can come into consideration of the disputes before arbitral tribunals. The TRIPS Agreement, for example, can thus provide "interpretive background" to inform investment treaty standards.<sup>433</sup>

Arbitral tribunals risk overlooking important aspects of IP policy and being detached from local communities and their concerns. This is all the more likely considering the fact that their appointment usually requires expertise in international investment law, not IP law. They contribute to an investment law culture with its own language and way of speaking, expressing ideas, as well as

<sup>&</sup>lt;sup>428</sup> Grosse Ruse-Khan, *supra* note 393, at 295.

<sup>&</sup>lt;sup>429</sup> DSU art. 23.

<sup>&</sup>lt;sup>430</sup> Grand River Enterprises Six Nations, Ltd. v. United States, Award, ¶ 219 (Jan. 12, 2011), http://www.state.gov/documents/organization/156820.pdf.

<sup>&</sup>lt;sup>431</sup> Bernhard von Pezold v. Republic of Zimbabwe (ICSID Case No. ARB/10/15) and Border Timbers Ltd. v. Republic of Zimbabwe (ICSID Case No. ARB/10/25), Procedural Ord. No. 2, ¶ 57 (June 26, 2012), http://www.italaw.com/sites/default/files/casedocuments/ita1044.pdf.

<sup>&</sup>lt;sup>432</sup> Vienna Convention on the Law of Treaties, May 23, 1969, 1155 U.N.T.S. 331.

<sup>&</sup>lt;sup>433</sup> Gibson, Latent Grounds in Investor-State Arbitration, supra note 183, at 402.

defining problems and solutions.<sup>434</sup> Furthermore, due to the emergence of a *jurisprudence constante* in international investment law, there is a risk that arbitral tribunals will conform to these *de facto* precedents without necessarily considering analogous IP cases adjudicated before other international courts and tribunals. Although consistency in decision-making is desirable because it can enhance the coherence and predictability of the awards and contribute to the legitimacy of arbitral tribunals as a legal institution, arbitrators should be cautious of precedents that place strong emphases on the investors' economic interests at the detriment of the public interest pursued by the host state.

Have arbitral tribunals paid any attention to the specificities of IP? Are they imposing standards of good IP governance, by adopting general administrative law principles, such as proportionality, due process, and reasonableness? These questions present a fertile field of inquiry, which may help in detecting common patterns and lead to a balance between the protection of investors' economic interests and public welfare. While international investment law should not be used to enforce other IP treaties, arbitral tribunals still have to consider these other treaties in the arbitrations.<sup>435</sup>

### 4. Denial of Justice Claims

One particular form of FET violations,<sup>436</sup> denial of justice, is one of the oldest principles of customary international law,<sup>437</sup> and "lies at the heart of the

<sup>&</sup>lt;sup>434</sup> For an analogous argument with regard to the WTO law, see Fiona Smith, *Power*, *Rules and the WTO*, 54 B.C.L. REV. 1063, 1082 (2013) ("[I]n this 'world' ... ideas from outsiders, like human rights and environmental scholars, about how WTO law should be regulated are often rejected as 'wrong' or misguided by trade lawyers and policymakers. These ideas often place the individual at the heart of the analysis and address her diverse and complex needs in ways that simply do not translate readily into the language of comparative advantage and trade liberalization. We should not really be surprised therefore when trade experts dismiss them as wrong or misguided, or when such ideas are castigated as 'protectionist'....").

<sup>&</sup>lt;sup>435</sup> For an analogous argument concerning trade law and human rights, see Christopher McCrudden, *International Economic Law and the Pursuit of Human Rights: A Framework for Discussion of the Legality of "Selective Purchasing" Laws under the WTO Government Procurement Agreement*, 2 J. INT'L ECON. L. 3, 47 (1999).

<sup>&</sup>lt;sup>436</sup> IIAs require fair and equitable treatment consistent with customary international law, including "the obligation not to deny justice in criminal, civil, or administrative adjudicatory proceedings in accordance with the principle of due process embodied in the principal legal systems of the world." *See, e.g.*, Treaty Concerning the Encouragement and Reciprocal Protection of Investment, U.S.-Rwanda, art. 6(5), Feb. 19, 2008, S. TREATY DOC. No. 110–23. Therefore, the FET standard is considered to include denial of justice claims. See UNCTAD, *Fair and Equitable Treatment*, at xvi-xvii (2012).

development of international law on the treatment of aliens and of foreign investment."<sup>438</sup> Denial of justice imposes liability on the state for serious failures of its system of justice.<sup>439</sup> Since denial of justice involves a system failure, exhaustion of local remedies is a prerequisite for claiming it.<sup>440</sup> While denials of justice claims were traditionally discussed in inter-state disputes, nowadays, foreign investors can challenge denial of justice directly before arbitral tribunals.<sup>441</sup>

A successful invocation of denial of justice is mutually exclusive with a finding of a judicial expropriation,<sup>442</sup> but investors often make both claims as a matter of strategy. This parallel invocation of the denial of justice claim and the indirect expropriation claim enables the foreign investor to fully exploit the

<sup>438</sup> *Id.* at 729.

<sup>439</sup> JAN PAULSSON, DENIAL OF JUSTICE IN INTERNATIONAL LAW 4, 36 (2005) ("[A] state incurs responsibility if it administers justice to aliens in a fundamentally unfair manner" and "[I]nternational responsibility arises as a result of the failure of a national legal system to provide due process.").

<sup>440</sup> Loewen v. United States, ICSID Case No. ARB(AF)/98/3, Award, ¶ 154 (June 26, 2003), http://www.italaw.com/sites/default/files/case-documents/ita0470.pdf ("No instance has been drawn to our attention in which an international tribunal has held a State responsible for a breach of international law constituted by a lower court decision when there was available an effective and adequate appeal within the State's legal system.").

<sup>441</sup> Roger P. Alford, Ancillary Discovery to Prove Denial of Justice, 53 VA. J. INT'L L. 127, 131–132 (2012) ("Until recent decades, the denial of justice was frequently a wrong without a remedy . . ." that "the diplomatic espousal of claims pursuant to a friendship, commerce, and navigation treaty (FCN) or similar treaties — w[as a] cumbersome and rare event[]..." but that the rise of BITs has "altered this course of events . . . .").

<sup>442</sup> See, e.g., Saipem S.p.A. v. People's Republic of Bangladesh, ICSID Case No. ARB/05/7, Award (June, 30 2009), http://www.italaw.com/sites/default/files/case-documents/ita0734.pdf (finding the host state responsible for expropriation resulting from the judicial intervention in arbitral proceedings instituted by an investor in pursuit of its contractual right.).

<sup>&</sup>lt;sup>437</sup> Francesco Francioni, *Access to Justice, Denial of Justice and International Investment Law*, 20 EUR. J. INT'L L. 729, 730–31 (2009) ("[T]he principle of the 'minimum standard of justice' to be reserved to aliens and their economic interests under customary international law . . . presupposes that the individual who has suffered an injury in a foreign country at the hands of public authorities or of private entities must be afforded the opportunity to obtain redress before a court of law or appropriate administrative agency. Only when 'justice' is not delivered, either because judicial remedies are not available or the administration of justice is so inadequate, deficient, or deceptively manipulated as to deprive the injured alien of effective remedial process, can the alien invoke 'denial of justice': a wrongful act for which international responsibility may arise.").

scope of the protection afforded under IIAs.<sup>443</sup> This section examines how these claims have been articulated.

Denial of justice is very difficult to prove. Rarely has such a claim been successful. It is not a denial of justice if state courts made a mere error of law. Investment treaty tribunals are not an appeal mechanism for the decisions of domestic courts. Rather, denial of justice implies the failure of a national legal system as a whole to satisfy minimum standards of treatment. Moreover, to invoke denial of justice successfully, the claimant must exhaust local remedies first, giving the judicial system of the host state a chance to redress its failure before filing a claim before an international arbitral tribunal.<sup>444</sup>

For instance, in *Apotex v. United States* (*Apotex I* and *II*), concerning the approval for generic versions of given antidepressant and anti-cholesterol medicines, the claimant made parallel claims that the courts' judgments were "unjust" and amounted to an expropriation of its investment, and that they constituted a "substantive 'denial of justice" in violation of NAFTA Article 1105.<sup>445</sup> In particular, the claimant contended that it was denied justice when U.S. courts allegedly "rendered manifestly unjust decisions" by misapplying domestic law.<sup>446</sup>

Both parties agreed that, in order to eventually establish a denial of justice, "judicial finality must first be reached in the host State's domestic courts ... unless such recourse is 'obviously futile'."<sup>447</sup> However, they disagreed on the meaning of "obviously futile."<sup>448</sup> The United States pointed out that with respect to one of its medicines, Apotex had not pursued all available avenues before the domestic courts. In particular, it had not sought U.S. Supreme Court review of the lower court decisions.<sup>449</sup> Apotex submitted that "it [wa]s wholly unrealistic to suppose that the Supreme Court would not only have granted the petition, but could have scheduled argument and render an opinion in Apotex's

<sup>&</sup>lt;sup>443</sup> See generally Mavluda Sattorova, Denial of Justice Disguised?: Investment Arbitration and the Protection of Foreign Investors from Judicial Misconduct, 61 INT'L COMP. L. Q. 223–46 (2012); Mavluda Sattorova, Judicial Expropriation or Denial of Justice?: A Note on Saipem v Bangladesh, 13 INT'L ARB. L. REV. 35 (2010). On denial of justice, see generally PAULSSON, supra note 439.

<sup>&</sup>lt;sup>444</sup> PAULSSON, *supra* note 439, at 130.

<sup>&</sup>lt;sup>445</sup> Apotex Inc. v. U.S., ICSID Case No. ARB(AF)/12/1, Notice of Arbitration, ¶¶ 61–62 (Dec. 10, 2008), http://www.state.gov/documents/organization/115447.pdf.

<sup>&</sup>lt;sup>446</sup> *Id.* ¶ 63.

<sup>&</sup>lt;sup>447</sup> Apotex Inc. v. U.S., ICSID Case No. ARB(AF)/12/1, Award on Jurisdiction and Admissibility, ¶ 257 (June 14, 2013), http://www.italaw.com/sites/default/files/case-documents/italaw1550.pdf (footnote omitted).

 $<sup>^{448}</sup>_{440}$  Id.

<sup>&</sup>lt;sup>449</sup> *Id.* ¶ 250.

180

favour ... Any efforts to achieve such a result would have been "objectively futile."  $^{450}$ 

The Arbitral Tribunal upheld all preliminary objections raised by the United States, including dismissing the denial of justice claim, on the grounds that the claimant had failed to exhaust local remedies.<sup>451</sup> The Tribunal reasoned that the judicial acts of the lower courts lacked sufficient finality to form the basis of claims under NAFTA Chapter 11.<sup>452</sup> While the Tribunal appreciated that "petitioning the U.S. Supreme Court was unlikely to secure the desired relief,"<sup>453</sup> it held that "under established principles, the question whether the failure to obtain judicial finality may be excused for 'obvious futility' turns on the unavailability of relief by a higher judicial authority, not on measuring the likelihood that the higher judicial authority would have granted the desired relief."<sup>454</sup> The Tribunal explained that the national court system must be given a chance to correct errors before its perceived failings can constitute an international wrong.<sup>455</sup>

By contrast, claims of judicial expropriation have not required exhaustion of local remedies.<sup>456</sup> For instance, the *Saipem* Tribunal found the host state responsible for expropriation resulting from the judicial intervention in arbitral proceedings dismissing the respondent's objection that the exhaustion of local remedies was a substantive condition for judicial expropriation. Rather, the Tribunal clarified that the local remedies rule would apply in the case of denial of justice, but not in the case involving judicial expropriation. Therefore, the claim of judicial expropriation can be easier to substantiate and can be more investor-friendly in terms of eventual compensation. As a result, denial of justice claims seem to favour the state autonomy over the protection of private economic interests. Conversely, judicial expropriation claims may be more favorable to investors than denial of justice claims and can affect the state judiciary autonomy in the pharmaceutical sector.

<sup>450</sup> *Id.* ¶ 274.

 $<sup>^{451}</sup>$  *Id.* ¶ 135.

 $<sup>^{452}</sup>_{452}$  Id. ¶ 267.

 $<sup>^{453}</sup>_{454}$  Id. ¶ 276.

<sup>&</sup>lt;sup>454</sup> *Id.* 

<sup>&</sup>lt;sup>455</sup> *Id.* ¶¶ 281–282.

<sup>&</sup>lt;sup>456</sup> See generally Sattorova, Judicial Expropriation or Denial of Justice?: A Note on Saipem v Bangladesh, supra note 443; Sattorova, Denial of Justice Disguised?: Investment Arbitration and the Protection of Foreign Investors from Judicial Misconduct, supra note 443.

### E. Non-Discrimination

The non-discrimination principle is a cornerstone of international investment law.<sup>457</sup> It is typically reflected in two investment treaty provisions:<sup>458</sup> the principles of national treatment (NT)<sup>459</sup> and most-favored-nation (MFN) treatment.<sup>460</sup> The basic purpose of the NT and MFN clauses is to avoid discrimination and to guarantee equal competitive opportunities for foreign investors in the host state. These two standards do not guarantee a specific level of protection but are relative standards that require a host country to treat a foreign investor in the same way that a domestic investor or an investor from another country in like circumstances would be treated. In order to ascertain whether companies are in "like circumstances,"<sup>461</sup> one should first consider whether they are in the same sector and whether those competitors have been accorded more favorable treatment than the claimant. Then, in order to ascertain whether there is improper discrimination or a legitimate distinction, one should consider the impact and objective of a given state measure in the particular field.<sup>462</sup>

Certain apparently neutral regulations may substantively discriminate against foreign companies and their investments.<sup>463</sup> In Eli Lilly v. Canada, the pending case relating to the invalidation of patents, the claimant alleges that Canada denied the company national treatment.<sup>464</sup> First, the company contends that it faces more arduous patent standards in Canada than a Canadian investor might face in other jurisdictions, such as the United States and Europe.<sup>465</sup> Yet, this form of extraterritorial analogy is highly unusual in national treatment

<sup>465</sup> *Id.* ¶ 106.

<sup>&</sup>lt;sup>457</sup> Grosse Ruse-Khan, *supra* note 393, at 31.

<sup>&</sup>lt;sup>458</sup> The principle of non-discrimination also constitutes one of the prongs for establishing the lawfulness of expropriation and the unfairness of a given state's conduct. See supra Sections IV. B., IV. D. respectively.

<sup>&</sup>lt;sup>459</sup> See, e.g., US Model BIT ("1. Each Party shall accord to investors of the other Party treatment no less favorable than that it accords, in like circumstances, to its own investors with respect to the establishment, acquisition, expansion, management, conduct, operation, and sale or other disposition of investments in its territory. 2. Each Party shall accord to covered investments treatment no less favorable than that it accords, in like circumstances, to investments in its territory of its own investors with respect to the establishment, acquisition, expansion, management, conduct, operation, and sale or other disposition of investments.").

 $<sup>^{460}</sup>$ *Id*. <sup>461</sup> *Id*.

<sup>&</sup>lt;sup>462</sup> Grosse Ruse-Khan, *supra* note 393, at 34.

<sup>&</sup>lt;sup>463</sup> See Les Laboratoires Servier, S.A.S. v. Republic of Poland, UNCITRAL, Final Award (Feb. 14, 2012), http://www.italaw.com/sites/default/files/case-documents/italaw3005.pdf.

<sup>&</sup>lt;sup>464</sup> Eli Lilly and Company v. The Government of Canada, ICSID Case No. UNCT/14/2, Notice of Intent, ¶¶ 105–07 (Nov. 7, 2012), http://www.italaw.com/sites/default/files/casedocuments/italaw1172.pdf.

claims before arbitral tribunals, given the regulatory diversity of IP laws across the globe, and is likely not going to be accepted by the Arbitral Tribunal.<sup>466</sup> Second, the company argues that domestic generic pharmaceutical companies received more favourable treatment as they have benefited from the invalidation of Eli Lilly's patent.<sup>467</sup> Third, the claimant highlights that only pharmaceutical companies bear the burden of the promise doctrine, rather than patent holders in other economic sectors.<sup>468</sup> According to the claimants, the judicial decisions amount to a *de facto* discrimination against pharmaceutical patents, contrary to the state's obligation not to discriminate among different fields of technology under NAFTA Article 1709(7).<sup>469</sup> While the case is still pending, it can have a significant impact on access to medicines. In fact, if the Arbitral Tribunal upholds the investor's claim, it would be more difficult for generic pharmaceutical companies to enter into the relevant market.

In *Apotex v. United States* (*Apotex I* and *II*),<sup>470</sup> concerning the approval for generic versions of antidepressant and anti-cholesterol medicines,<sup>471</sup> the claimant contended *inter alia* that the host state violated the non-discrimination provision by "failing to treat Apotex in the same fashion as U.S. investors."<sup>472</sup> As the case was dismissed on jurisdiction, the discrimination claim became moot.<sup>473</sup>

There is a fine line between discrimination and legitimate distinctions based on public policy reasons. This line is difficult to identify, because "discrimination' and 'non-discrimination' are not polar opposites in a static

 $^{472}$  *Id.* ¶ 60(f).

<sup>&</sup>lt;sup>466</sup> Luke Eric Peterson, *Newly Discovered Document Shows that Pharma Corp Hopes to Construe Alleged Non-Compliance with Patent Treaties as a Breach of Investment Treaty*, 5 INV. ARB. REP. 15, 17 (Dec. 10, 2012) ("This unusual form of extra-territorial comparison is not commonly seen in National Treatment claims under investment treaties.").

<sup>&</sup>lt;sup>467</sup> Eli Lilly and Company v. The Government of Canada, ICSID Case No. UNCT/14/2, Notice of Intent, ¶ 107 (Nov. 7, 2012), http://www.italaw.com/sites/default/files/case-documents/italaw1172.pdf.

 $<sup>^{468}</sup>$  Eli Lilly and Company v. The Government of Canada, ICSID Case No. UNCT/14/2, Notice of Arbitration, ¶ 12 (Sept. 12, 2003).

<sup>&</sup>lt;sup>469</sup> *Id*.

<sup>&</sup>lt;sup>470</sup> Apotex Holdings Inc, Apotex Inc. v. United States of America (Apotex III), ICSID Case No. ARB(AF)/12/1, Award on Jurisdiction and Admissibility, ¶ 257 (June 14, 2013), http://www.state.gov/documents/organization/115447.pdf.

<sup>&</sup>lt;sup>471</sup> Apotex Holdings Inc, Apotex Inc. v. United States of America (Apotex III), ICSID Case No. ARB(AF)/12/1, Notice of Arbitration, ¶¶ 58–60 (Dec. 10, 2008), http://www.italaw.com/sites/default/files/case-documents/italaw1323.pdf.

<sup>&</sup>lt;sup>473</sup> Apotex Holdings Inc, Apotex Inc. v. United States of America (Apotex III), ICSID Case No. ARB(AF)/12/1, Award on Jurisdiction and Admissibility, ¶ 358(a)–(c) (June 14, 2013), http://www.state.gov/documents/organization/115447.pdf.

system." 474 In Apotex III, which concerned an import ban on certain pharmaceuticals produced in Canada, Apotex contended that it had been discriminated against as comparable national and foreign manufacturers had received better treatment. Under the NT claim, Apotex argued that it had been treated less favourably than other comparable domestic investors.<sup>475</sup> The U.S. countered that manufacturers in the U.S. are subject to even more regular inspections and enforcement due to their location.<sup>476</sup> The Tribunal held that there was no violation of NT as the claimant and the domestic competitors were not in "like circumstances."<sup>477</sup> Under the MFN claim, Apotex contended the FDA inspected a competitor's facilities in Israel and found many violations,<sup>478</sup> but did not issue an import alert against the Israeli manufacturer.<sup>479</sup> Although the Tribunal held that the U.S. had treated Apotex less favourably than the Israeli manufacturer,<sup>480</sup> and thus had *de facto* discriminated against Apotex, it still concluded that there was no discrimination because the U.S. had established legitimate reasons for the different treatment.<sup>481</sup> The United States submitted that "the FDA is required necessarily to exercise a difficult regulatory discretion lying at the heart of its important mandate on public health; and that this discretion as to enforcement actions is never a binary choice, but depends on many factors particular to the specific situation."482 The Tribunal concluded that, in casu, the FDA actions were "materially influenced by the FDA's genuine concerns over shortages of essential drugs manufactured" by the Israeli manufacturer, 483 and had established a legitimate reason for the different treatment.484

Not only can discrimination claims substantiate breaches of NT and MFN treatment, they can also evidence the unlawfulness of a given expropriation or the unfairness of a given state conduct. While in some arbitrations, arbitral tribunals can uphold such claims as a distinct violation of the MFN or NT

<sup>&</sup>lt;sup>474</sup> Konrad von Moltke, Discrimination and Non-Discrimination in Foreign Direct Investment: Mining Issues, Conference on Foreign Direct Investment and the Environment, at 7 (Feb. 8, 2002), http://www.oecd.org/env/1819921.pdf.

<sup>&</sup>lt;sup>475</sup> Apotex Holdings Inc. v. United States, ICSID Case No. ARB(AF)12/1, Award, (*Apotex III*), ¶ 2.31 (Aug. 25, 2014), http://www.italaw.com/sites/default/files/case-documents/italaw3324.pdf.

 $<sup>^{476}</sup>$  *Id.* ¶¶ 8.31, 8.48.

 $<sup>^{477}</sup>_{478}$  Id. ¶ 8.57.

 $<sup>^{478}</sup>_{470}$  Id. ¶ 3.120.

 $<sup>^{479}</sup>_{480}$  Id. ¶ 3.153.

<sup>&</sup>lt;sup>480</sup> *Id.* ¶ 8.62.

<sup>&</sup>lt;sup>481</sup> *Id.*  $\P$  8.65.

 $<sup>^{482}</sup>$  Id.  $\P$  8.69.

<sup>&</sup>lt;sup>483</sup> *Id.* ¶¶ 8.71, 8.73.

 $<sup>^{484}</sup>$  Id. ¶ 8.78.

provisions in the relevant BIT,<sup>485</sup> in other cases discrimination can constitute evidence of the breach of the FET standard,<sup>486</sup> or be one of the relevant factors of unlawful expropriation.<sup>487</sup> For instance, in *Servier v. Poland*, Servier asserted that "under customary international law, the expropriation of an investment can only take place for a public purpose, in a non-discriminatory manner, and against compensation." <sup>488</sup> After holding that "notions of unfairness and discrimination may insert themselves into a discussion of what constitutes divestment of property,"<sup>489</sup> the Arbitral Tribunal concluded that "[n]ot only was the refusal of authorisation discriminatory, but the regulatory measures were disproportionate in nature and … not a matter of public necessity,"<sup>490</sup> thus amounting to an indirect expropriation.<sup>491</sup>

Discrimination claims play an important role in investment treaty arbitration. A first issue that arbitral tribunals must ascertain is the existence of like circumstances. In the absence of like circumstances, differential treatment does not constitute discrimination but a legitimate distinction between different

<sup>487</sup> United Nations Conference on Trade and Development, 2012, *Expropriation: UNCTAD Series on Issues in International Investment Agreements II*, 3, UNCTAD/DIAE/IA/2011/7 (reviewing "the conditions for an expropriation to be lawful, namely public purpose, non-discrimination, due process and payment of compensation.").

<sup>488</sup> See Les Laboratoires Servier, S.A.S. v. Republic of Poland, UNCITRAL, Final Award, ¶ 217 (Feb. 14, 2012), http://www.italaw.com/sites/default/files/case-documents/ italaw3005.pdf.

<sup>489</sup> *Id.* ¶ 524.

<sup>490</sup> *Id.* ¶ 575.

<sup>&</sup>lt;sup>485</sup> See, e.g., id. ¶ 8.65.

<sup>&</sup>lt;sup>486</sup> Kenneth Vandevelde, A Unified Theory of Fair and Equitable Treatment, 43 N.Y.U. INT'L L. & POL. 43, 53 (2010) ("The fair and equitable treatment standard in BITs has been interpreted as requiring that covered investment or investors receive treatment that is reasonable, consistent, non-discriminatory, transparent, and in accordance with due process."). See also Les Laboratoires Servier, S.A.S. v. Republic of Poland, UNCITRAL, Final Award, ¶ 410 (Feb. 14, 2012), http://www.italaw.com/sites/default/files/casedocuments/italaw3005.pdf, ("Servier's position is that Poland has breached its obligation to provide fair and equitable treatment to Servier's investments and has treated Servier's investments in an unjustified and discriminatory manner." (footnote omitted)).

<sup>&</sup>lt;sup>491</sup> *Id.*  $\P$  570 ("[T]he Respondent's denial of marketing authorisations would divest the Claimants of their property, giving rise to a requirement of compensation under the BIT, if Poland exercised its administrative and regulatory powers in bad faith, for some non-public purpose, or in a fashion that was either discriminatory or lacking in proportionality between the public purpose and the actions taken.").

issues.<sup>492</sup> Certain distinctions may be legitimate and thus do not constitute discrimination in breach of the relevant investment treaty standards.<sup>493</sup>

In conclusion, non-discrimination is a key element for striking an appropriate balance between the public and private interests.<sup>494</sup> It helps to ensure that the private interests are not unduly constrained for unspecified illegitimate reasons. A measure allegedly pursuing a public purpose but in fact serving other private domestic interests can constitute a disguised discrimination in breach of relevant investment treaty standards. By reviewing state measures and checking that they are not discriminatory, arbitral tribunals can foster an appropriate balance between genuinely public and private interests.

### V

### **CRITICAL ASSESSMENT**

States have an inherent right to regulate,<sup>495</sup> particularly with regard to pharmaceuticals, because the regulation of medicines is crucial to public health.<sup>496</sup> Public health is central to the very existence of the state, and the duty to protect it arises from both domestic law and the social contract that underlies most governments.<sup>497</sup> Moreover, from a practical standpoint, national authorities are better placed to appreciate local societies' needs.<sup>498</sup> Therefore, international conventions protecting various aspects of IP acknowledge the state's right and duty to protect public health.<sup>499</sup>

<sup>&</sup>lt;sup>492</sup> Apotex Inc. v. U.S., ICSID Case No. ARB(AF)/12/1, Award, ¶ 8.57 (Aug. 25, 2014), http://www.state.gov/documents/organization/233043.pdf (stressing that domestic pharmaceutical companies and foreign companies were not in like circumstances).

<sup>&</sup>lt;sup>493</sup> *Id.* ¶ 8.78.

<sup>&</sup>lt;sup>494</sup> Konrad von Moltke, Discrimination and Non-Discrimination in Foreign Direct Investment: Mining Issues, Conference on Foreign Direct Investment and the Environment, at 6 (Feb. 8, 2002), http://www.oecd.org/env/1819921.pdf ("[N]on-discrimination in relation to foreign direct investment means that the interests of a foreign investor and the public interest in an investment will be weighed in a manner that is legitimate, transparent, and accountable, and in accordance with same rules, criteria and procedures that apply to domestic [and other foreign] investors.").

<sup>&</sup>lt;sup>495</sup> Chang-fa Lo, *External Regime Coherence: WTO/BIT and Public Health Tension as an Illustration*, 7 ASIAN J. WTO & INT'L HEALTH L. & POL'Y 263, 276 (2012) (noting that "the host country has an inherent... 'right to regulate").

<sup>&</sup>lt;sup>496</sup> See, e.g., the summary of the Respondent's case in *Apotex III*, ¶ 2.38 (contending that "for more than a century, the Respondent has established laws and regulations to prevent the importation of adulterated drugs in order to protect public health in the USA. The FDA's policy on import alerts has been in effect since at least the 1970s. The Respondent did not relinquish this authority and responsibility when it concluded NAFTA.").

<sup>&</sup>lt;sup>497</sup> VADI, *supra* note 54, at 30.

<sup>&</sup>lt;sup>498</sup> Id.

<sup>&</sup>lt;sup>499</sup> See, e.g., TRIPS Agreement art. 8.

Regulations governing patent rights are based on a delicate equilibrium between public and private interests.<sup>500</sup> States balance public and private interest in such areas depending on their developmental and public health needs. In fact, the protection of public health necessarily requires constraining a wide range of private activities. <sup>501</sup> For example, states can constrain the rights of pharmaceutical companies so as to prevent nuisance and protect public health.<sup>502</sup>

Patent owners have increasingly used investor-state arbitration to challenge regulatory measures adopted by the host states, and these arbitrations have significant impact on the state regulatory autonomy. Arbitral tribunals assess the state's compliance with investment treaty provisions. This scrutiny may promote good pharmaceutical governance, incentivizing states to pursue the regulation of public health objectives in a transparent, reasonable and nondiscriminatory manner, while preserving a state's legitimate interest to regulate for its domestic public policy.

Given the recent rise in the incidence of arbitrations,<sup>503</sup> it is of utmost importance to reflect on this emerging jurisprudence and its possible impact on the public health policies of host states. Pharmaceutical patent investment arbitrations constitute a paradigmatic case study of the interplay between the public and private interests in international investment law and arbitration.<sup>504</sup> They show that private actors are increasingly playing a prominent role in transnational governance of IP, and there are ongoing attempts of shifting enforcement of IP rights from interstate *fora* to international investment arbitration. Investment arbitration constitutes an avenue for the dialectical

<sup>&</sup>lt;sup>500</sup> See Apotex Holdings Inc, Apotex Inc. v. United States of America (Apotex III), ICSID Case No. ARB(AF)/12/1, Award on Jurisdiction and Admissibility, ¶ 210 (June 14, 2013), http://www.state.gov/documents/organization/115447.pdf; *Apotex Inc. v. U.S.*, ICSID Case No. ARB(AF)/12/1, Award, ¶ 7.44 (Aug. 25, 2014), http://www.state.gov/documents/ organization/233043.pdf (with regard to grant of patents and the ANDAs); Eli Lilly and Company v. The Government of Canada, ICSID Case No. UNCT/14/2, Notice of Intent to Submit a Claim to Arbitration under NAFTA Chapter Eleven, ¶ 35 (Nov. 7, 2012), http://www.italaw.com/sites/default/files/case-documents/italaw1172.pdf (with regard to the revocation of patents).

<sup>&</sup>lt;sup>501</sup> VADI, *supra* note 54, at 31.

 $<sup>^{502}</sup>$  *Id.* (noting that "[w]hile the industry often asserts that economic principles militate against state interference, public health law has historically constrained the rights of individuals and businesses so as to prevent nuisance.").

<sup>&</sup>lt;sup>503</sup> See supra Part IV.

<sup>&</sup>lt;sup>504</sup> Other studies have examined the clash between private and public interests in investment law and arbitration. See Julie A. Maupin, Public and Private in International Investment Law: An Integrated Systems Approach, 54 VA. J. INT'L L. 367 (2013–2014); Alex Mills, Antinomies of Public and Private at the Foundations of International Investment Law and Arbitration, 14 J. INT'L ECON. L. 469 (2011).

interaction between the economic interests of the patent holders and the state interest in public health protection.

### VI

## LEGISLATIVE AND INTERPRETIVE APPROACHES TO THE EMERGING DIALECTICS BETWEEN PRIVATE AND PUBLIC INTERESTS IN IP-RELATED INVESTMENT DISPUTES

In the emerging dialectics between patent protection and public health in international investment law and arbitration, treaty making and interpretation can play a crucial role to address the tension between, and eventually reconcile, public and private interests. This section proposes some legislative and interpretive approaches to better accommodate the dialectics between private and public interests in international investment law and arbitration.

At the legislative level, treaty negotiators can introduce some carve-outs, clarifications and flexibilities in the text of investment treaties. Negotiators could consider carving out litigation on pharmaceutical patents from the jurisdiction of investment arbitral tribunals. Some international investment agreements expressly clarify that the exercise of state regulatory autonomy in the pharmaceutical sector does not *per se* amount to a breach of investment treaty provisions,<sup>505</sup> and that compliance with the TRIPS Agreement provisions may preclude any expropriation claim.<sup>506</sup> For instance, Article 6(5) of the U.S. Model BIT of 2012 states that "This Article does not apply to … the revocation, limitation, or creation of intellectual property rights, to the extent that such issuance, revocation, limitation, or creation is consistent with the TRIPS Agreement."<sup>507</sup>

Yet, the creation, limitation, and revocation of IP rights are regulated only in very broad brushes by the TRIPS Agreement. For instance, the TRIPS Agreement only requires that patents should be granted for new, inventive and useful inventions,<sup>508</sup> but it does not define these terms.<sup>509</sup> The question of what

 $<sup>^{505}</sup>$  See, e.g., US Model BIT art. 6(5) ("This Article does not apply to the issuance of compulsory licenses granted in relation to intellectual property rights in accordance with the TRIPS Agreement, or to the revocation, limitation, or creation of intellectual property rights, to the extent that such issuance, revocation, limitation or creation is consistent with the TRIPS Agreement.").

<sup>&</sup>lt;sup>506</sup> Mercurio, *supra* note 228, at 905.

<sup>&</sup>lt;sup>507</sup> US Model BIT art. 6(5).

<sup>&</sup>lt;sup>508</sup> TRIPS Agreement art. 27(1) ("Subject to the provisions of paragraphs 2 and 3, patents shall be available for any inventions, whether products or processes, in all fields of technology, provided that they are new, involve an inventive step and are capable of industrial application.").

deserves to be patented is left for countries to determine in light of their own needs. Countries can exclude some fields, such as plants, animals and surgical methods, from patentability to protect public order.<sup>510</sup> The TRIPS Agreement also allows for member states to provide for limited exceptions and other uses of the patent without the patent owner's consent, leaving states with the flexibility to implement regulatory measures for the purpose of domestic policy.<sup>511</sup> With regard to revocation, the TRIPS Agreement does not address the grounds for forfeiture; it only requires member states to provide judicial review for every decision to revoke a patent.<sup>512</sup>

Therefore, not only can arbitrations pioneer the interpretation and application of relevant IP provisions and pave the way to subsequent arbitral awards, but they can also serve as indirect enforcement tools of WTO law and influence the development of the same. WTO law has its own enforcement tools. The WTO DSM has been defined as the "jewel in the crown" of this organization,<sup>513</sup> and it has exclusive jurisdiction to settle disputes under the covered agreements.<sup>514</sup> However, only a limited number of IP disputes have been brought before the WTO, <sup>515</sup> and TRIPS consistency is tested in proceedings outside the DSM.<sup>516</sup> There is a certain "convergence" between

<sup>&</sup>lt;sup>509</sup> For instance, deciding whether a new formulation (producing a pill version of a medicine that formerly came as a powder) or a new combination (combining two or more existing molecules into a new pill) or a new use of a medicine deserves a new twenty-year patent is a prerogative of states and is not determined by the TRIPS Agreement.

<sup>&</sup>lt;sup>510</sup> TRIPS Agreement art. 27(2) ("Members may exclude from patentability inventions, the prevention within their territory of the commercial exploitation of which is necessary to protect *ordre public* or morality, including to protect human, animal or plant life or health or to avoid serious prejudice to the environment, provided that such exclusion is not made merely because the exploitation is prohibited by their law.").

<sup>&</sup>lt;sup>511</sup> *Id.* at art. 30 ("Exceptions to Rights Conferred") and art. 31 ("Other Use Without Authorization of the Right Holder").

 $<sup>^{512}</sup>$  *Id.* at art. 32 (providing that "[a]n opportunity for judicial review of any decision to revoke or forfeit a patent shall be available.").

<sup>&</sup>lt;sup>513</sup> Amrita Narlikar, The World Trade Organization: A Very Short Introduction 85 (2005).

<sup>&</sup>lt;sup>514</sup> DSU art. 23 (providing that "When Members seek the redress of a violation of obligations or other nullification or impairment of benefits under the covered agreements or an impediment to the attainment of any objective of the covered agreements, they shall have recourse to, and abide by, the rules and procedures of this Understanding.").

<sup>&</sup>lt;sup>515</sup> Id. at 20. See generally Joost Pauwelyn, The Dog That Barked But Didn't Bite: Fifteen Years of Intellectual Property Disputes at the WTO, 1 J. OF INT'L DISP. SETTLEMENT 389 (2010).

<sup>&</sup>lt;sup>516</sup> Grosse Ruse-Khan, *supra* note 393, at 19, 36 (highlighting the risk that "the interpretative result may well be different from the result achieved in a 'pure' WTO setting.").

international investment law and international trade law,<sup>517</sup> and the interpretation of the TRIPS Agreement by arbitral tribunals is one of the areas of contact between the two areas of international law.<sup>518</sup>

In interpreting the TRIPS Agreement, arbitrators should be aware of the balance between private and public interests intrinsic to the regulation of pharmaceutical patents. The TRIPS Agreement expressly presents clauses taking public health under consideration in construing IP rights. Article 7 of the TRIPS Agreement provides that

The protection and enforcement of intellectual property rights should contribute to the promotion of technological innovation and to the transfer and dissemination of technology, to the mutual advantage of producers and users of technological knowledge and in a manner conducive to social and economic welfare, and to a balance of rights and obligations.<sup>3519</sup>

In parallel, Article 8 of the TRIPS Agreement states that "Members may, in formulating or amending their laws and regulations, adopt measures necessary to protect public health and nutrition, and to promote the public interest in sectors of vital importance to their socio-economic and technological development, provided that such measures are consistent with the provisions of this Agreement."<sup>520</sup> When interpreting the TRIPS Agreement, arbitrators must take into account Articles 7 and 8, which set forth fundamental principles of IP governance,<sup>521</sup> and provide space for reconciliation between private and public interests in IP regulation.

The Doha Declaration on the TRIPS Agreement and Public Health<sup>522</sup> has further reinforced state regulatory space to adopt public health measures,<sup>523</sup> recognizing the WTO members' right to protect public health<sup>524</sup> and to use the

<sup>&</sup>lt;sup>517</sup> *Id*.

<sup>&</sup>lt;sup>518</sup> See VALENTINA VADI, ANALOGIES IN INTERNATIONAL INVESTMENT LAW AND ARBITRATION 148 (forthcoming 2016) (on file with author) (pinpointing that although there is no binding precedent in international law, both WTO panels and arbitral tribunals are not bound to follow "precedents" of other jurisdictions, they refer to each other's jurisprudence.).

<sup>&</sup>lt;sup>519</sup> TRIPS Agreement art. 7.

<sup>&</sup>lt;sup>520</sup> TRIPS Agreement art. 8(1).

<sup>&</sup>lt;sup>521</sup> Articles 7 and 8 of the TRIPS Agreement are entitled "Objectives" and "Principles", respectively.

<sup>&</sup>lt;sup>522</sup> World Trade Organization, Ministerial Declaration of 14 November 2001, WTO Doc. WT/MIN(01)/DEC/1, 41 ILM 746 (2002) [hereinafter Doha Declaration].

<sup>&</sup>lt;sup>523</sup> See Frederick Abbott, The Doha Declaration on the TRIPS Agreement and Public Health: Lighting a Dark Corner at the WTO, 5 J. INT'L ECON. L. 469 (2002).

 $<sup>^{524}</sup>$  Doha Declaration ¶ 4 ("We agree that the TRIPS Agreement does not and should not prevent members from taking measures to protect public health. Accordingly, while

flexibilities provided by the TRIPS Agreement.<sup>525</sup> Where clear reference is made to the TRIPS Agreement, international investment agreements incorporate the TRIPS Agreement, including its objectives and principles as stated in Articles 7 and 8, as well as the relevant interpretative background provided by the Doha Declaration.<sup>526</sup> Such provisions then become applicable and may provide guidance in the context of investment disputes.

Arbitrators must be mindful of the need of preserving a suitable balance between the public and private interests intrinsic in patent protection even in those cases in which the investment chapters of FTAs refer to its own IP chapters instead of TRIPS as a safeguard against expropriation claims.<sup>527</sup> For instance, Article 1110(7) of NAFTA exempts "the issuance of compulsory licensing" and "the revocation, limitation or creation of intellectual property rights" from expropriation protection, if such measures are consistent with NAFTA Chapter 17.<sup>528</sup> NAFTA Chapter 17 contains "TRIPS-plus" provisions on IP rights, which strengthen the IP regimes of NAFTA countries beyond the global standards established by the TRIPS Agreement. For instance, NAFTA Chapter 17 does not include provisions analogous to Articles 7 and 8 of the TRIPS Agreement. Still, arbitrators can take into account public interest considerations under a number of flexibilities embodied in NAFTA Chapter 17.<sup>529</sup> For instance, states can exclude certain inventions from patentability,<sup>530</sup> introduce limited exceptions,<sup>531</sup> and compulsory licenses,<sup>532</sup> as well as revoke the patents.<sup>533</sup>

Striking an appropriate balance between the private and public interests in investment arbitration should be easier where states have appended declarations to their FTAs clarifying the interplay between the expropriation provision

<sup>528</sup> NAFTA, *supra* note 16, at art. 1110(7).

reiterating our commitment to the TRIPS Agreement, we affirm that the Agreement can and should be interpreted and implemented in a manner supportive of WTO members' right to protect public health and, in particular, to promote access to medicines for all.").

<sup>&</sup>lt;sup>525</sup> *Id.* ("In this connection, we reaffirm the right of WTO members to use, to the full, the provisions in the TRIPS Agreement, which provide flexibility for this purpose.").

<sup>&</sup>lt;sup>526</sup> For instance, the EU has referred to the provisions of the Doha Declaration as an overarching principle in its bilateral trade agreements with Korea, Colombia and Peru, and Central America. *See Access to Medicines*, EUROPEAN COMMISSION, http://ec.europa.eu/trade/policy/accessing-markets/intellectual-property/access-to-medicines/ (last visited Oct. 16, 2015).

<sup>&</sup>lt;sup>527</sup> Grosse Ruse-Khan, *supra* note 393, at 36–7.

<sup>&</sup>lt;sup>529</sup> *Id.* at art. 1709.

<sup>&</sup>lt;sup>530</sup> *Id.* at art. 1706(2).

<sup>&</sup>lt;sup>531</sup> *Id.* at art. 1706(6).

<sup>&</sup>lt;sup>532</sup> *Id.* at art. 1706(10).

<sup>&</sup>lt;sup>533</sup> *Id.* at art. 1706(8).

(included in the investment chapter) and IP provisions (included in the relevant chapter). For instance, in the Canada-EU Comprehensive Economic and Trade Agreement (CETA),<sup>534</sup> a declaration appended to the expropriation provision of Chapter X, which governs foreign direct investment,<sup>535</sup> clarifies that "investor state dispute settlement tribunals ... are not an appeal mechanism for the decisions of domestic courts," and that "the domestic courts of each Party are responsible for the determination of the existence and validity of intellectual property rights."<sup>536</sup> This means that arbitration tribunals should be deferential to the decisions of domestic courts and tribunals regarding the existence and validity of patents. The mere fact that a company is disappointed with the outcome of a patent trial does not amount to a breach of the relevant treaty provisions. CETA reasserts "each Party shall be free to determine the appropriate method of implementing the provisions of this Agreement regarding intellectual property within their own legal system and practice." <sup>537</sup> The possibility to issue binding interpretations at a later stage is also reserved.<sup>538</sup> Moreover, Article 3 of Chapter 22, which governs intellectual property, refers to the Doha Declaration, thus incorporating its interpretative guidelines on balancing IP rights and public health.<sup>539</sup>

In most cases, however, IIAs make no reference to the TRIPS Agreement. In the absence of an express reference, it would be a radical departure from the text of the IIA, as well as the DSU,<sup>540</sup> to provide investors with the possibility of asserting violations of the TRIPS Agreement against host states. Therefore, in the absence of a reference to the TRIPS Agreement, the argument that an investor can assert a claim for a violation of the state's TRIPS obligation in an investor-state arbitration proves too much.

<sup>&</sup>lt;sup>534</sup> Comprehensive Economic and Trade Agreement, Can.-E.U., Sep. 26, 2014, European Comm'n, http://ec.europa.eu/trade/policy/in-focus/ceta/.

<sup>&</sup>lt;sup>535</sup> *Id.* at art. X.11,  $\P$  6.

<sup>&</sup>lt;sup>536</sup> *Id*.

<sup>&</sup>lt;sup>537</sup> *Id*.

<sup>&</sup>lt;sup>538</sup> *Id.* 

<sup>&</sup>lt;sup>539</sup> *Id.* at ch. 22, art. 3 (recognizing "the importance of the Doha Declaration on the TRIPS Agreement and Public Health" and providing that "[i]n interpreting and implementing the rights and obligations under this Chapter, the Parties shall ensure consistency with this Declaration" and that "[t]he Parties shall contribute to the implementation and respect the Decision of the WTO General Council of 30 August 2003 on Paragraph 6 of the Doha Declaration on the TRIPS Agreement and Public Health, as well as the Protocol amending the TRIPS Agreement, done at Geneva on 6 December 2005.").

<sup>&</sup>lt;sup>540</sup> DSU art. 3.

However, this does not mean that the TRIPS Agreement is irrelevant. The TRIPS Agreement can provide interpretive guidance and context.<sup>541</sup> If the applicable law is national law, as is the case for IP, which is territorial by nature, and national law implements the TRIPS Agreement, the interpretation of the relevant TRIPS provisions may help the arbitral tribunal to ascertain the legitimacy of the same state measures, their rationality and reasonableness, and their eventual conformity with international practice. In turn, this could foster a coherent international framework of IP rules.

Treaty interpretation can also provide the adjudicators with interpretive tools to reconcile the public and private interests emerging in the new dialectics between patent protection and public health in international investment law and arbitration. When adjudicating investment disputes, arbitrators must identify the applicable rules, clarify their meaning and relate them to the specific facts of the case. When the arbitrators have limited expertise on IP and its policy implications, experts should be consulted to facilitate sound decision-making and ensure the arbitrators take into account the two equilibria that characterize patent regulation.

The intrinsic equilibrium between private and public interest concerns the very structure or architecture of patents. It is evident in the conceptual matrix of patent regime. The "patent bargain" indicates the *quid pro quo* between the private and public interests that are intrinsic to the patent regime. For instance, compulsory licenses, limited exceptions and even the grant and revocation of patents provide means to limit the private interests under certain circumstances and give a margin of deference to policymakers and adjudicators to determine whether a patent should be granted, or revoked, or limited.

In parallel, the extrinsic equilibrium between patent rights and other values appears in the interplay between the IP regime and other fields of law. If one adopts an instrumentalist view of IP, the international IP system should function for the good of all. The notion that the IP regime serves such a social function is widely accepted in international law,<sup>542</sup> as expressly indicated by Articles 7 and 8 of the TRIPS Agreement.<sup>543</sup> In scrutinizing the regime complex that governs IP, it appears that IP is never an absolute right.<sup>544</sup> Rather, IP rights

<sup>&</sup>lt;sup>541</sup> Gaetan Verhoosel, *The Use of Investor-State Arbitration under Bilateral Investment Treaties to Seek Relief for Breaches of WTO Law*, 6 J. INT'L ECON. L. 493, 503–6 (2003).

<sup>&</sup>lt;sup>542</sup> See generally Christophe Geiger, *The Social Function of Intellectual Property Rights,* or How Ethics can Influence the Shape and Use of IP Law (Max Planck Institute for Intellectual Property and Competition Law, Working Paper No. 13-06, 2013).

<sup>&</sup>lt;sup>543</sup> TRIPS Agreement arts. 7, 8.

<sup>&</sup>lt;sup>544</sup> Geiger, *supra* note 542, at 5 (stressing that "there cannot be an 'absolute' right that can be exercised in a totally selfish manner with no consideration for the consequences that this

must be put into perspective as they are part of a broader legal system,<sup>545</sup> and must always be harmonized with other rights of equally significant value and with the interests of the community.<sup>546</sup> This is particularly the case with regard to pharmaceuticals, which have deep implications in public health.

Finally, arbitrators should acknowledge their responsibility for the charting of the contours of international law norms and, more broadly, as cartographers of the international legal order. Pursuant to Article 31(3)(c) of the VCLT, adjudicators should take into account "[a]ny relevant rules of international law applicable in the relations between the parties."<sup>547</sup> Therefore, "[e]very treaty provision must be read not only in its own context, but in the wider context of general international law, whether conventional or customary."<sup>548</sup> A number of international organizations play an active role in the governance of pharmaceutical patents, creating a sort of institutional density or regime complex. As all these organizations receive almost worldwide consensus, a broader perspective of the legal environment that surrounds a given dispute should be adopted in investor-state arbitration.

### CONCLUSION

This article highlights the emergence of international investment law and arbitration as a new battlefield, where the dialectical interaction between private and public interest is taking place. The clash between the economic interests of the patent owner and the pursuit of public policies is not a new phenomenon; what is new is the use of investment treaty law and arbitration as a place of confrontation between these private and public interests. International investment law is a vital area of international law that has furthered the protection of patents, considering them as a form of investment and providing patent owners access to investor-state arbitration. By including intellectual property within their ambit, investment treaties restrict the regulatory autonomy of states in the pharmaceutical sector, potentially affecting fundamental public

<sup>547</sup> Vienna Convention art. 31(3)(c).

exercise involves, but only rights that are 'relativized' by the rights of others and the wellbeing of the community.").

<sup>545</sup> *Id.* at 4.

<sup>&</sup>lt;sup>546</sup> Id. See also Jakob Cornides, Human Rights and Intellectual Property: Conflict or Convergence?, 7 J. WORLD INTELL. PROP. 135, 143 (2004) (pointing out that "property is not an end in itself. Obviously, it must be used in a way that contributes to the realization of the higher objectives of human society."); Daniel J. Gervais, *The Changing Landscape of International Intellectual Property, in* INTELLECTUAL PROPERTY AND FREE TRADE AGREEMENTS 49, 60 (Christopher Heath & Anselm Kamperman Sanders eds., 2007) (cautioning that "one should not protect beyond what is necessary to achieve policy objective(s) because the risk of a substantial negative general welfare impact is too high.").

<sup>&</sup>lt;sup>548</sup> IAN SINCLAIR, THE VIENNA CONVENTION ON THE LAW OF TREATIES 139 (1984).

interests. Patent owners have increasingly used investment treaty arbitration to challenge alleged infringements of patent rights by governments, giving rise to an increasingly complex and contested interplay between pharmaceutical patent protection and public health.

This article examines the growing number of investment treaty arbitrations relating to pharmaceutical patents and critically assesses how the emerging dialectics between public and private interests is taking place in investment treaty arbitration. These arbitrations give rise to both jurisdictional and substantive issues. First, some disputes will center on the question as to which economic activities amount to an investment, giving rise to the arbitral tribunal's jurisdiction over the dispute.<sup>549</sup> Second, although it may be very difficult to prove, an affected patent owner may claim that an unlawful expropriation has taken place.<sup>550</sup> Third, if an expropriation has occurred, claims may concern the adequacy of the amount, or mode, of compensation.<sup>551</sup> Fourth, the patent owner may also allege a violation of the FET standard.<sup>552</sup> Finally, some claims may concern alleged discrimination suffered by the foreign investor.<sup>553</sup>

This article argues that international investment law and arbitration should contribute to the construction of public international law as a unitary whole, which aims at furthering public policy interests internationally. To the extent that investment treaty arbitration has failed to do so, either by deemphasizing public policies or leaving them out entirely, it would be problematic to move forward with globally important policy issues through the vehicle of public international law.

Against the critical examination of the legal norms that are developing in the field, this article proposes some legislative and interpretive approaches to better accommodate the dialectics between private and public interests in pharmaceutical patent-related investment disputes. Treaty-making and interpretation can play a crucial role to address the tension between, and eventually reconcile, public and private interests.

At the normative level, treaty negotiators can introduce some clarifications, flexibilities or carve-outs in the text of investment treaties. Treaty drafting can improve the language of international investment agreements to include reference to other international instruments, such as the Doha

<sup>&</sup>lt;sup>549</sup> See supra Section IV. A.

<sup>&</sup>lt;sup>550</sup> See supra Section IV. B.

<sup>&</sup>lt;sup>551</sup> See supra Section IV. C.

<sup>&</sup>lt;sup>552</sup> See supra Section IV. D.

<sup>&</sup>lt;sup>553</sup> See supra Section IV. E.

Declaration on the TRIPS Agreement and Public Health. Although these other instruments are not necessarily promoting a better balance between the public and private interests, reference to such international law instruments can still help international arbitrators to obtain useful information on how other instruments are coping with the interaction between private and public interests, as well as achieve mutual support and harmonization across instruments. Negotiators could consider carving out litigation on pharmaceutical patents from the jurisdiction of investment arbitral tribunals.

Interpretation can help arbitrators reach a suitable balance between the protection of patent rights *qua* foreign investments and other non-economic values in public health-related investment disputes. Arbitrators should focus on the nature and purpose of the right that is being protected. Intellectual property rights should not be considered as absolute rights but should be interpreted in the light of their goals and limits. Regulations adopted to protect public health, depending on the specific circumstances of the case, might be viewed as an intrinsic limit to the patent right. Foreign investments protection, when applied to pharmaceutical patents, should be considered not as an end in itself but as one of the available tools to promote human welfare. Moreover, as required by customary rules of treaty interpretation, arbitrators should embrace their roles as cartographers of international law and adopt a holistic approach to treaty interpretation, which takes into account other international law instruments that are binding upon the parties.

# NEW YORK UNIVERSITY JOURNAL OF INTELLECTUAL PROPERTY AND ENTERTAINMENT LAW

VOLUME 5	Fall 2015	NUMBER 1

# ADDRESSING CLIMATE CHANGE: DOMESTIC INNOVATION, INTERNATIONAL AID AND COLLABORATION

# JOY Y. XIANG<sup>\*</sup>

Climate change is a pressing issue confronting the global community. The rapid development and diffusion of clean technologies (i.e., technologies necessary for adapting to or mitigating climate change) must be a central part of the solution. However, a stalemate has persisted in global climate change negotiations at the United Nations, caused by diverging views regarding the role of intellectual property rights ("IPR") in the international transfer of clean technologies. Developed nations insist on strong IPR for clean technologies, while developing nations claim that IPR is a major barrier to the international transfer of clean technologies.

This article explores two questions: (1) Is the existence of IPR a major barrier to the international transfer of clean technologies, and (2) why has the international transfer of clean technologies to developing nations been limited? Analyzing evidential data available, this article concludes that IPR probably has not been a major barrier to the international transfer of clean technologies. However,

<sup>&</sup>lt;sup>\*</sup> Intellectual Property Fellow, IIT Chicago-Kent College of Law. The author thanks the colleagues who contributed to this article, including participants in various conferences where the work was presented and the anonymous subject experts for Edward Elgar Publishing, which will publish the author's book on this topic in 2017. In particular, the author thanks Richard Wilder, a former colleague, who started the author on the research, Nives Dolšak and Toshiko Takenaka at University of Washington, Edward Lee, Felice Batlan, Sungjoon Cho, David Schwaltz, Chris Buccafusco, Martin Malin, and the other faculty at IIT Chicago-Kent College of Law, for their input to the work at its different stages, Josiah Harrist for proofreading the article, and the editors at the NYU Journal of Intellectual Property & Entertainment Law for their great editorial input.

sustainable international transfer of clean technologies requires the joint efforts of developing and developed nations. To prepare for sustainable international transfer of clean technologies and to advance the effort for addressing climate change, this article proposes a new paradigm based on domestic innovation, international aid and international technology collaboration.

INTR	ODUCTION	198
I.	GROUNDWORK: CLIMATE CHANGE, CLEAN TECHNOLOGIES, AND	
	INTERNATIONAL TRANSFER OF CLEAN TECHNOLOGIES	201
	A. Climate Change	202
	B. Clean Technologies	203
	C. International Transfer of Clean Technologies to Developing	
	Nations	208
	1. Transferring Clean Technologies to Developing Nations Has	
	Been an Important Focus of International Climate Change	
	Efforts	208
	2. Technology Transfer Defined	
	3. International Transfer of Clean Technologies to Developing	
	Nations Has Been Limited	212
	D. How to Increase Transfer of Clean Technologies to Developing	
	Nations – An Ongoing Debate	215
	1. Developing Nations	
	2. Developed Nations	
II.	ANALYSIS: POSSIBLE REASONS FOR THE LIMITED INTERNATIONAL	
	TRANSFER OF CLEAN TECHNOLOGIES TO DEVELOPING NATIONS	219
	A. Is the Existence of IPR a Major Barrier for Transfer of Clean	
	Technologies to Developing Nations?	219
	1. IPR and Its Role	
	2. Evidential Data	222
	i. Investments for Clean Technologies	223
	ii. Patent Ownership for Clean Technologies	
	3. Assessment	
	i. The Emerging Economies	230
	ii. The LDCs	
	iii. The Other Developing Nations – i.e., the Mid-tier Developing	
	Nations	-
	B. What Are the Potential Underlying Reasons for the Limited	
	Transfer of Clean Technologies to Developing Nations?	232
	1. Evidential Data	
	i. Developing Nations' Own Assessments	
	ii. Other Evidential Data	

	2. Assessment	238
	i. International Technology Licensing	. 238
	ii. Foreign Direct Investment	
	iii. International Trade	
	C. Summary	
III.	PROPOSAL: FOCUS ON DOMESTIC INNOVATION, INTERNATIONAL AID,	
	AND INTERNATIONAL TECHNOLOGY COLLABORATION	242
	A. Domestic Innovation	243
	1. Developed Nations	243
	2. Developing Nations	244
	i. Building National IPR Systems That Reflect Developmental	
	Realities	. 245
	ii. Building up National Capacity to Attract Inbound Transfer of	
	Clean Technologies	. 248
	B. International Aid	248
	C. International Technology Collaboration	251
IV.	APPRAISAL: ADVANTAGE AND CONCERNS REGARDING THE PROPOSAL	
	A. Advantages	252
	B. Concerns	
CONC	CLUSION	

### **INTRODUCTION**

"[T]he question before us is no longer the nature of the challenge – the question is our capacity to meet it."

- Barack Obama<sup>1</sup>

In December 2009, at the 15<sup>th</sup> global climate change conference in Copenhagen, leaders from 115 nations gathered to negotiate an international agreement for addressing climate change.<sup>2</sup> The agreement was expected to include provisions to enhance the international transfer of technologies capable of adapting

<sup>1</sup> Barack Obama, Speech to the Copenhagen Summit, (Dec. 18, 2009), *in* GUARDIAN, http://www.theguardian.com/environment/2009/dec/18/obama-speech-copenhagen-climate-summit. There may still be skeptics of climate change, of its causes, or of the optimal timing for addressing climate change. For the purpose of discussion, this article adopts the international consensus, manifested at the United Nations, which presumes that climate change is unequivocal and that the time to address climate change is now, rather than in the future.

<sup>&</sup>lt;sup>2</sup> Copenhagen Climate Change Conference - December 2009, U.N. FRAMEWORK CONVENTION ON CLIMATE CHANGE, http://unfccc.int/meetings/copenhagen\_dec\_2009/ meeting/6295.php (last visited July 15, 2015).

to or mitigating climate change.<sup>3</sup> Unfortunately, the talks stalled. Developed and developing nations disagreed on a host of issues, especially the treatment of intellectual property rights ("IPR") protecting clean technologies.<sup>4</sup> Even before the Copenhagen conference, developing nations proposed to exclude clean technologies held by developed nations from patent protection.<sup>5</sup> Developed nations, meanwhile, considered that IPR should not be part of the global climate change negotiations and proposed to remove provisions dealing with IPR from the negotiations.<sup>6</sup>

The Copenhagen conference resulted in a non-binding agreement<sup>7</sup> that did not reference IPR issues.<sup>8</sup> Nevertheless, the debate regarding IPR persisted through the subsequent global climate change negotiations. The global climate change conference, held in Lima in December 2014, presented both developed nations' and developing nations' positions regarding IPR as equal options to be negotiated at the next global climate change conference in Paris in December 2015.<sup>9</sup> The agreement resulting from the 2015 Paris conference, however, did not mention IPR issues; just as in the Copenhagen conference, the preference of developing nations was not reflected.<sup>10</sup>

The debate regarding the treatment of IPR in the climate change context breaks down as follows: developed nations<sup>11</sup> insist on strong IPR for clean

<sup>4</sup> See id.

<sup>7</sup> Copenhagen Climate Change Conference - December 2009, supra note 2.

<sup>&</sup>lt;sup>3</sup> Tove Iren S. Gerhardsen, *Technology Transfer Will Be Part of Copenhagen Climate Deal*, INTELL. PROP. WATCH (Sept. 16, 2009), http://www.ip-watch.org/2009/09/16/technology-transfer-will-be-part-of-copenhagen-climate-deal/.

<sup>&</sup>lt;sup>5</sup> United Nations Framework Convention on Climate Change, Bangkok, Thai. / Barcelona, Spain, Sept. 28-Oct. 9, 2009 / Nov. 2-6, 2009, *Report of the Ad Hoc Working Group on Long-Term Cooperative Action Under the Convention on its Seventh Session*, at 156, U.N. Doc. FCCC/AWGLCA/2009/14 (Nov. 20, 2009).

<sup>&</sup>lt;sup>6</sup> Hira Jhamtani, US Proposal to Remove IPRs from the Table Arouses Developing Countries' Objections, TEBTEBBA (Aug. 11, 2009), http://www.tebtebba.org/index.php/content/137-technology-us-proposal-to-remove-IPR-from-the-table-arouses-developing-countries-objections.

<sup>&</sup>lt;sup>8</sup> Gerhardsen, *supra* note 3.

<sup>&</sup>lt;sup>9</sup> See United Nations Framework on Climate Change, Conference of the Parties, Twentieth Session, Lima, Peru, Dec. 1-14, 2014, *Lima Call for Climate Action*, U.N. Doc. FCCC/CP/2014/10/Add.1 (Feb. 2, 2015).

<sup>&</sup>lt;sup>10</sup> United Nations Framework Convention on Climate Change, Twenty-First Session, Paris, Fr., Nov. 30-Dec. 11, 2015, *Adoption of the Paris Agreement*, U.N. Doc. FCCC/CP/2015/L.9 (Dec. 12, 2015).

<sup>&</sup>lt;sup>11</sup> Developed nations are nations which rank highly in the United Nations developed indicators such as GDP, industrialization, life expectancy, and education level. The U.S., Canada, Europe, and Japan are typical examples. International groups, like the WTO, do not

technologies, viewing IPR as indispensable for incentivizing the development of such technologies and facilitating their deployment. Conversely, developing nations<sup>12</sup> have sought to weaken or even remove IPR for clean technologies, viewing the existence of IPR as a major barrier to the international transfer of clean technologies.

Hence, an ongoing divide exists between developing and developed nations regarding the role of IPR in the international transfer of clean technologies for addressing climate change. International agencies such as the World Trade Organization ("WTO"), the World Intellectual Property Organization ('WIPO"), the United Nations Environmental Programme ("UNEP"), the World Meteorological Organization, and the World Bank have all initiated discussions to resolve the divide.<sup>13</sup> The stakeholders in this discussion include governments, public entities, and commercial entities from developed and developing nations, and those with interests in combatting climate change. To date, these shareholders are still searching for effective solutions.

This article joins the search by exploring whether the existence of IPR is a major barrier to the international transfer of clean technologies, and the possible reasons behind the currently limited transfer of clean technologies to developing nations. After analyzing evidential data available on clean technologies and reviewing current scholarship on international technology transfer, this article concludes that IPR has been a major barrier to the international transfer of clean technologies, and that successful and sustainable international transfer of clean technologies needs certain conditions, which require efforts from both developing and developed nations.

To create such conditions, and continue advancing the effort of leveraging clean technologies to address climate change, this article proposes a solution based

have an official definition. *See, e.g., Who Are Developing Countries in the WTO?*, WORLD TRADE ORG., https://www.wto.org/english/tratop\_e/devel\_e/d1who\_e.htm (last visited July 2, 2015).

<sup>&</sup>lt;sup>12</sup> Developing nations are countries other than developed nations. *Id.* This article groups developing nations into three categories: the emerging economies, the least developed countries ("LDC"s), and the rest of developing nations, which this article will call mid-tier developing countries ("MDC"s). *See Emerging Markets,* WIKIPEDIA, https://en.wikipedia.org/wiki/Emerging\_markets (last visited Oct. 23, 2015); *List of Least Developed Countries,* UNITED NATIONS (Dec. 4, 2013), http://www.un.org/en/development/desa/policy/cdp/ldc/ldc\_list.pdf.

<sup>&</sup>lt;sup>13</sup> E.g., Climate Change and the WTO Intellectual Property (TRIPS) Agreement, WORLD TRADE ORG., https://www.wto.org/english/tratop\_e/trips\_e/cchange\_e.htm (last visited Aug. 20, 2015); Climate Change and IP, WORLD INTELL. PROP. ORG., http://www.wipo.int/policy/en/climate\_change/ (last visited July 23, 2015).

domestic innovation, international aid, and international technology collaboration, instead of the international transfer of clean technologies.

This article proceeds as follows. Part I reviews climate change, the role of clean technologies in addressing climate change, the reality of international transfer of clean technologies, and the disagreement between developed and developing nations over how to improve international transfer of clean technologies to developing nations. Part II explores whether the existence of IPR is a major barrier to the international transfer of clean technologies to developing nations and what may be the reasons for the currently limited international transfer of clean technologies to developing nations. Based on Part II's analysis and findings, Part III proposes the solution summarized above. Part IV discusses the advantages and concerns regarding the solution.

I

# **GROUNDWORK: CLIMATE CHANGE, CLEAN TECHNOLOGIES, AND INTERNATIONAL TRANSFER OF CLEAN TECHNOLOGIES**

The development and deployment<sup>14</sup> of clean technologies are a central part of the response to climate change. Because of developing nations' need for clean technologies, and because developed nations own the majority of the existing clean technologies, transfer of clean technologies from developed nations to developing nations has been the focus of the global effort in leveraging clean technologies to address climate change. However, despite this focus, such transfers have been limited in the past two decades, with the majority going to the emerging economies,<sup>15</sup> and little being transferred to the other developing nations. Meanwhile, developed and developing nations continue to disagree on how to improve the situation.

on

<sup>&</sup>lt;sup>14</sup> For the purpose of this Article, deployment of clean technologies includes both the implementation and distribution of clean technologies, as well as cross-border transfer of technologies.

<sup>&</sup>lt;sup>15</sup> Emerging economies are developing nations that have experienced rapid economic growth. These countries have the potential to continue this growth, but also pose substantial political, financial, or social risk. As of 2015, typical nations that are considered emerging economies include Brazil, Russia, India, China, Mexico, Indonesia, Turkey, Saudi Arabia, Iran. Similar terms used include emerging markets and emerging market economies. See, e.g., Definition of Emerging Markets, FIN. TIMES, http://lexicon.ft.com/Term?term=emerging-markets (last visited Oct. 23. 2015): Emerging Economies, BUSINESSDICTIONARY.COM, http://www. businessdictionary.com/definition/emerging-economies.html (last visited Oct. 23, 2015); Definition of Emerging Market, FIN. TIMES, http://lexicon.ft.com/Term?term=emerging-markets (last visited Oct. 23, 2015); Emerging Markets, WIKIPEDIA, https://en.wikipedia.org/wiki/ Emerging markets (last visited Oct. 23, 2015).

### A. Climate Change

Climate change is occurring, and its impact is global. Human activities using high-carbon technologies have been deemed the main cause of climate change.

In the context of this article, the term "climate change" refers to change in global or regional climate patterns, such as increasing global temperature and the rising sea level, which have become particularly apparent from the mid to late 20<sup>th</sup> century onwards.<sup>16</sup> The Intergovernmental Panel on Climate Change ("IPCC"),<sup>17</sup> the leading international scientific organization for assessing climate change, concluded that the period spanning from 1983-2012 was likely the warmest period of the past 1,400 years.<sup>18</sup> The IPCC also concluded that greenhouse gases ("GHG") present in the atmosphere are at levels unprecedented in at least the past 800,000 years.<sup>19</sup>

The effect of climate change on human and natural environments is global. The IPCC found that changes in climate have impacted natural and human systems on all continents and across the oceans.<sup>20</sup> These impacts include alteration of ecosystems, disruption of water supply, reduction of crop yields that result in increased food price and food insecurity, excess heat-related human mortalities, and infectious disease patterns.<sup>21</sup> According to a 2009 report by the Global Humanitarian Forum, climate change costs 300,000 human lives each year, and

 $^{21}$  *Id.* at 4-7.

<sup>&</sup>lt;sup>16</sup> *Climate Change*, OXFORD DICTIONARIES, http://www.oxforddictionaries.com/us/definition/ american\_english/climate-change (last visited July 2, 2015).

<sup>&</sup>lt;sup>17</sup> Organization, INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE, http://www.ipcc.ch/organization/organization.shtml (last visited July 30, 2015) [hereinafter *IPCC Organization*].

<sup>&</sup>lt;sup>18</sup> Lisa V. Alexander et al., *IPCC 2013: Summary for Policymakers, in* CLIMATE CHANGE 2013: THE PHYSICAL SCIENCE BASIS. CONTRIBUTION OF WORKING GROUP I TO THE FIFTH ASSESSMENT REPORT OF THE INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE 5 (Stocker et al. eds., 2013), http://www.ipcc.ch/pdf/assessment-report/ar5/wg1/WG1AR5\_SPM\_FINAL.pdf [hereinafter *IPCC Fifth Synthesis Report*].

<sup>&</sup>lt;sup>19</sup> *Id.*, at 11.

<sup>&</sup>lt;sup>20</sup> Christopher B. Field et al., *IPCC, 2014: Summary for Policymakers in* CLIMATE CHANGE 2014: IMPACTS, ADAPTATIONS, AND VULNERABILITY. PART A: GLOBAL AND SECTORAL ASPECTS. CONTRIBUTION OF WORKING GROUP II TO THE FIFTH ASSESSMENT REPORT OF THE INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE 4 (Christopher B. Field et al. eds., 2014), http://www.ipcc.ch/pdf/assessment-report/ar5/wg2/ar5\_wgII\_spm\_en.pdf.

leaves 300 million people vulnerable to its effects, a number set to double by  $2030^{22}$ 

The United Nations Framework Convention for Climate Change ("UNFCCC"),<sup>23</sup> the main global agreement designed for addressing climate change, attributes climate change "directly or indirectly to human activity that alters the composition of the global atmosphere."<sup>24</sup> In its latest assessment report, the IPCC once again confirmed that, using statistical qualification methods on the scientific data collected, "it is extremely likely that human influence has been the dominant cause of the observed warming since the mid-20<sup>th</sup> century."<sup>25</sup> The human influence or activities referred to involve the use of fossil fuel,<sup>26</sup> e.g., by developed nations' coal-fired industries since the Industrial Revolution and today's hydrocarbon fueled transportation industries. These human activities account for the 70% increase in GHG emissions from 1970 to 2004.<sup>27</sup> Technologies relying heavily on fossil fuel - such as steam-engine locomotives, ships, airplanes, and power grids – were the backbone of these human activities. These high-carbon technologies attributed to the increased GHG emissions, leading to climate change.

### B. Clean Technologies

Going forward, clean technologies<sup>28</sup> play a critical role in the solution for climate change. These technologies produce low GHG emissions and enable us to

<sup>&</sup>lt;sup>22</sup> Hilary Whiteman, Report: Climate Change Crisis 'Catastrophic,' CNN (May 29, 2009, PM). http://www.cnn.com/2009/WORLD/europe/05/29/annan.climate.change.human/ 1:17 index.html?eref=rss world.

<sup>&</sup>lt;sup>23</sup> The goal of UNFCCC is to stabilize "greenhouse gas concentration in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system." UNFCCC has become the main framework under which global negotiations on addressing climate change occur. See Background on the UNFCCC: The International Response to Climate Change, U.N. FRAMEWORK CONVENTION ON CLIMATE CHANGE, http://unfccc.int/essential background/items/6031.php (last visited July 2, 2015).

<sup>&</sup>lt;sup>4</sup> United Nations Framework Convention on Climate Change, art 1.2, May 9, 1992, S. Treaty Doc No. 102-38, 1771 U.N.T.S. 107 [hereinafter UNFCCC Treaty].

<sup>&</sup>lt;sup>25</sup> *IPCC Fifth Synthesis Report, supra* note 18, at 17.

<sup>&</sup>lt;sup>26</sup> INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE, CLIMATE CHANGE 2007: SYNTHESIS http://www.ipcc.ch/pdf/assessment-report/ar4/syr/ar4 syr spm.pdf Report 5 (2007),[hereinafter IPCC FOURTH SYNTHESIS REPORT].

<sup>&</sup>lt;sup>27</sup> Id. Others have cited higher numbers. For example, WIPO Director Francis Curry stated that developed countries were responsible for 77% total GHG emissions in the past. See Francis Gurry, Dir. Gen., World Intell. Prop. Org., WIPO's Role in Green Technology, Presentation at Conference on IP and Public Policy Issues (July 13-14, 2009), http://www.wipo.int/export/ sites/www/meetings/en/2009/ip gc ge/presentations/gurry.pdf.

<sup>&</sup>lt;sup>28</sup> Similar terms include climate friendly technology, environmentally sound technology,

mitigate or adapt to climate change. Rapid development and deployment of clean technologies is needed to address climate change and to make clean technologies viable market alternatives to traditional high-carbon technologies.

Stakeholders in climate change have agreed that the ability for humans to survive climate change largely depends on the rapid development and global deployment of a wide variety of clean technologies.<sup>29</sup> The UNFCCC recognized clean technologies as an important route for addressing climate change.<sup>30</sup> The United Nations General Assembly also adopted resolutions recognizing the fundamental role played by innovative clean technologies in addressing climate change.<sup>31</sup>

Discussions about addressing climate change have generally focused on mitigation and adaption. The UNFCCC defines mitigation as human intervention to reduce the production or enhance the removal of GHGs, and adaptation as adjustment in natural or human systems in response to actual or expected climatic change, which moderates harm or exploits beneficial opportunities brought by climate change.<sup>32</sup>

Mitigating climate change is crucial. Assessments have suggested that to avoid the catastrophic effects of climate change, global average temperature should rise no more than 2°C above pre-industrial level ("the 2°C goal").<sup>33</sup> In order to

green technology, low-carbon technology, etc.

<sup>&</sup>lt;sup>29</sup> Ahmed Abdel Latif et al., *Overcoming the Impasse on Intellectual Property and Climate Change at the UNFCCC: A Way Forward*, INT'L CTR. TRADE & SUSTAINABLE DEV. POLICY BRIEF NO.11, 1 (Nov. 11, 2011), http://www.ictsd.org/sites/default/files/research/2012/03/ overcoming-the-impasse-on-intellectual-property-and-climate-change-at-the-unfccc-a-way-forward.pdf ("the rapid development and diffusion of these technologies is a key component of the global response to climate change"); Catherine Saez, *Human Survival Depends on Shared Technology, Says New UN Climate Chief*, INTELL. PROP. WATCH (Mar. 9, 2010), http://www.ip-watch.org/2010/09/03/human-survival-depends-on-technology-says-new-un-climate-chief/ ("survival depends on our improvement of technology").

<sup>&</sup>lt;sup>30</sup> See Background on the UNFCCC, supra note 23.

<sup>&</sup>lt;sup>31</sup> E.g., U.N. Secretary-General, *Promotion of New and Renewable Sources of Energy*, U.N. Doc. A/66/100 (Aug. 15, 2011); Protection of Global Climate for Present and Future Generations of Mankind, G.A. Res. 43/53, U.N. Doc. A/RES/43/53 (Dec. 6, 1988).

<sup>&</sup>lt;sup>32</sup> Glossary of Climate Change Acronyms, U.N. FRAMEWORK CONVENTION ON CLIMATE CHANGE, http://unfccc.int/essential\_background/glossary/items/3666.php (last visited July 24, 2015).

<sup>&</sup>lt;sup>33</sup> IPCCC FOURTH SYNTHESIS REPORT, *supra* note 26; *see also* Michael E. Mann, *Earth Will* Cross the Climate Danger Threshold by 2036, SCIENTIFIC AMERICAN (Mar. 18, 2014), http://www.scientificamerican.com/article/earth-will-cross-the-climate-danger-threshold-by-2036/; Jeff Tollefson, Global-Warming Limit of 2°C Hangs in the Balance, NATURE (Mar. 27,

limit temperature increase, GHG concentrations in the atmosphere need to be stabilized so that they will not continue to cause further atmospheric warming. Nations that are parties to the UNFCCC have committed to limit GHG emissions in a way to achieve the 2°C goal.<sup>34</sup> However, achieving this goal would require the development and deployment of a wide range of clean technologies.<sup>35</sup> For example, the IPCC determined that the necessary mitigation technologies include technologies that utilize renewable energy sources -- e.g., solar, wind, biomass, geothermal and hydro energy -- to produce electricity, clean coal technologies that reduce GHG emissions from fossil fuel burning, and technologies to improve energy efficiency.<sup>36</sup>

While mitigation is crucial, adapting to the impact of climate change is also an important, long-term effort. Many GHGs stay in the atmosphere for a hundred years or more.<sup>37</sup> Even if we were to completely stop GHG emissions now, the existing GHG concentration in the atmosphere would still cause a certain amount of future rise in global average temperature. Like mitigation, adaption will also require the development and deployment of certain technologies, such as seeds that can survive flooding caused by rising sea levels, irrigation technologies for resisting droughts, and early-warning or defense systems for extreme weather.<sup>38</sup>

<sup>34</sup> United Nations Framework Convention on Climate Change, Conference of the Parties, Fifteenth Session, Copenhagen, Den., Dec. 7-18, 2009, *Copenhagen Accord*, U.N. Doc. FCCC/CP/2009/L.7 (Dec. 18, 2009); *see also The Cancun Agreements*, U.N. FRAMEWORK CONVENTION ON CLIMATE CHANGE, http://cancun.unfccc.int/ (last visited July 23, 2015).

<sup>35</sup> Hans Joachim Schellnhuber et al., *Technological Options*, *in* AVOIDING DANGEROUS CLIMATE CHANGE 333, 335 (Hans Joachim Schellnhuber et al. eds., 2006).

<sup>36</sup> Frank Ackerman, et al., *Technological and Economic Potential of Greenhouse Gas Emissions Reduction, in* CLIMATE CHANGE 2001: MITIGATION: CONTRIBUTION OF WORKING GROUP III TO THE THIRD ASSESSMENT REPORT OF THE INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE (2001), http://www.ipcc.ch/ipccreports/tar/wg3/index.php?idp=90.

<sup>37</sup> Overview of Greenhouse Gases, U.S. ENVTL. PROT. AGENCY, http://www3.epa.gov/ climatechange/ghgemissions/gases.html (last visited Aug. 1, 2015).

<sup>38</sup> CLIMATE CHANGE SECRETARIAT [U.N. FRAMEWORK CONVENTION ON CLIMATE CHANGE], TECHNOLOGIES FOR ADAPTATION TO CLIMATE CHANGE 9 (2006), http://unfccc.int/resource/docs/publications/tech\_for\_adaptation\_06.pdf.

<sup>2015),</sup> http://www.nature.com/news/global-warming-limit-of-2-c-hangs-in-the-balance-1.17202; William D. Nordhaus, *Strategies for the Control of Carbon Dioxide*, 39-40 (Cowles Found. for Research in Econ., Discussion Paper No. 443, 1977), http://cowles.yale.edu/sites/default/files/files/pub/d04/d0443.pdf. Some scientists have argued that the current 1°C rise has had effects similar to the predicted effects of the 2°C rise, and that a 4°C rise is likely by 2050-2070. Kevin Anderson, *Climate Change: Going Beyond Dangerous... Brutal Numbers & Tenuous Hope or Cognitive Dissonance*? SLIDESHARE (July 5, 2011), http://www.slideshare.net/DFID/professor-kevin-anderson-climate-change-going-beyond-dangerous.

Clean technologies have developed significantly in the past decades. For example, technological advancements have reduced the production cost of wind energy by 80% over the last twenty years and solar power by 90% since the 1970s.<sup>39</sup> However, even with these achievements, there remains a considerable gap between current efforts to develop clean technologies and the level of investment required.

First, multiple sectors of clean technologies will require breakthroughs in development. The UNFCCC indicates that further breakthroughs are needed in the areas of carbon capture and storage, hydrogen and fuel cells, biofuels, power storage systems and micro-generation, clean energy technologies, early warning systems for extreme weather events and biotechnology.<sup>40</sup> For example, waves of retiring fossil-fuel-based power plants are ready to adopt clean coal technologies, such as carbon capture and sequestration.<sup>41</sup> However, carbon capture and sequestration technologies have advanced slowly.<sup>42</sup> In order to meet the 2°C goal, carbon capture and sequestration technologies must double their capture and storage rates by 2025.<sup>43</sup>

Second, further technical advancements are needed to reduce the price of clean technologies and make them viable alternatives to traditional high-carbon technologies. Currently, clean technologies are often more expensive than existing fossil-fuel-based technologies.<sup>44</sup> For example, renewable energy technologies still need significant innovation to compete with traditional hydrocarbon-based technologies at similar price level.<sup>45</sup> The World Bank indicated that energy storage would need further cost reduction and performance improvement for large-scale

<sup>&</sup>lt;sup>39</sup> Diana Propper de Callejon et al., *Clean Technology: A Compelling Investment Opportunity*, LIFESTYLES OF HEALTH AND SUSTAINABILITY, http://www.lohas.com/clean-technology (last visited Aug. 1, 2015).

<sup>&</sup>lt;sup>40</sup> U.N. FRAMEWORK CONVENTION ON CLIMATE CHANGE, FACT SHEET: WHY TECHNOLOGY IS SO IMPORTANT 2 (2009), https://unfccc.int/files/press/backgrounders/application/pdf/fact\_sheet\_ on\_technology.pdf.

<sup>&</sup>lt;sup>41</sup> 'Clean Coal' Technologies, Carbon Capture & Sequestration, WORLD NUCLEAR ASS'N (Aug. 2015), http://www.world-nuclear.org/info/Energy-and-Environment/-Clean-Coal--Technologies/.

<sup>&</sup>lt;sup>42</sup> See Energy Technology Perspectives 2014: Harnessing Electricity's Potential, INT'L ENERGY AGENCY 5 (May 12, 2014), http://www.iea.org/media/140512\_ETP\_slides.pdf.

<sup>&</sup>lt;sup>43</sup> *Id.*, at 8.

<sup>&</sup>lt;sup>44</sup> FACT SHEET, *supra* note 40.

<sup>&</sup>lt;sup>45</sup> PARSONS BRINCKERHOFF, POWER THE NATION UPDATE REPORT 2010 (2010), http://www.pbworld.com/pdfs/regional/uk\_europe/pb\_ptn\_update2010.pdf.

deployment of solar and wind power and electric vehicles.<sup>46</sup> In 2012, the global energy demand for fossil fuels was 82% while the demand for renewable energies was a mere 13%.<sup>47</sup> The consumption of modern renewable energies has risen at an annual growth rate of 4%, while an annual growth rate of 7.5% is needed.<sup>48</sup>

Third, the deployment of clean technologies needs to accelerate. To meet the 2°C goal, the net volume of global anthropogenic GHG emissions will need to be reduced 60% by 2050, using the 2000 global anthropogenic GHG emissions as a base line.<sup>49</sup> However, the traditional model of technology deployment may be too slow to achieve a 60% reduction in global GHG emissions by 2050. Studies show that inventions in the energy sector generally take 20-30 years to reach mass markets, which normally start first in the nations where the inventions are developed.<sup>50</sup> Under the traditional model of deployment, developed nations develop new technologies, which reach developing nations via commercial rollouts.<sup>51</sup> To accelerate the development and deployment of clean technologies, one possible approach is for both developing and developed nations to develop and deploy clean technologies independently and collaboratively, instead of relying on the traditional model of deployment. The recent rapid R&D efforts for clean technologies in Brazil, China, India, and a few other developing nations illustrate the independent effort by developing nations, and the Mediterranean Solar Plan illustrates the collaboration between developed and developing nations on a large scale.<sup>52</sup> However, these exemplary practices are yet to become common practice.

<sup>&</sup>lt;sup>46</sup> WORLD BANK, WORLD DEVELOPMENT REPORT 2010: DEVELOPMENT AND CLIMATE CHANGE 218 (2010), https://openknowledge.worldbank.org/handle/10986/4387.

<sup>&</sup>lt;sup>47</sup> INT'L ENERGY AGENCY, TRACKING CLEAN ENERGY PROGRESS 2015 10 (2015), http://www.iea.org/publications/freepublications/publication/Tracking\_Clean\_Energy\_Progress\_2015.pdf.

<sup>&</sup>lt;sup>48</sup> SUSTAINABLE ENERGY FOR ALL, PROGRESS TOWARDS SUSTAINABLE ENERGY - GLOBAL TRACKING FRAMEWORK 2015 KEY FINDINGS 5 (2015), http://www.se4all.org/wp-content/uploads/2013/09/GTF\_2015-Key\_Findings.pdf.

<sup>&</sup>lt;sup>49</sup> IPCC Fourth Assessment Report: Climate Change 2007 - Emission Trajectories for Stabilisation, INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE, https://www.ipcc.ch/publications\_and\_data/ar4/syr/en/mains5-4.html (last visited Aug. 20, 2015).

<sup>&</sup>lt;sup>50</sup> BERNICE LEE ET AL., WHO OWNS OUR LOW CARBON FUTURE? INTELLECTUAL PROPERTY AND ENERGY TECHNOLOGIES vii (Chatham House 2009), https://www.chathamhouse.org/sites/ files/chathamhouse/public/Research/Energy, Environment and Development/r0909\_ lowcarbonfuture.pdf.

<sup>&</sup>lt;sup>51</sup> WORLD BANK, WORLD DEVELOPMENT REPORT 2010, *supra* note 46, at 220.

<sup>&</sup>lt;sup>52</sup> Mediterranean Solar Plan Links North Africa to Europe, THE AFRICA-EU PARTNERSHIP, http://www.africa-eu-partnership.org/en/success-stories/mediterranean-solar-plan-links-north-africa-europe (last visited Dec. 12, 2015).

### C. International Transfer of Clean Technologies to Developing Nations

While rapid development and deployment of clean technologies is important, widespread transfer of clean technologies to developing nations has been deemed as much so, if not more, important. Developing nations are increasingly in need of clean technologies due to rising energy consumption and the corresponding environmental impact. Since developed nations currently own the majority of the existing clean technologies, transfer of clean technologies from developed nations to developing nations has become a focus of the global climate change efforts. However, during the past two decades, actual transfer of clean technologies to developing nations has been limited.

1. Transferring Clean Technologies to Developing Nations Has Been an Important Focus of International Climate Change Efforts

International instruments such as the IPCC and the UNFCCC have emphasized the transfer of clean technologies from developed to developing nations. This emphasis seems appropriate, given developed nations' ownership of most existing clean technologies under IPR protection and the growing need of developing nations to employ clean technologies to address climate change and to develop their economies.<sup>53</sup>

In developing their economies, developing nations have increased their demand for energy resources, and have thus increased their impact on the environment. For example, in 2014, China became the world's largest overall energy consumer, followed by the U.S., the EU, and India.<sup>54</sup> Historically, developed nations dominated in GHG emissions.<sup>55</sup> However, starting in 2004, developing nations' GHG emissions from energy use surpassed those of developed nations;<sup>56</sup> by 2010, the GHG emissions from developing nations exceeded those of

<sup>&</sup>lt;sup>53</sup> This emphasis on the transfer of clean technologies from developed nations to developing nations seems to assume that these clean technologies are useful to developing nations, as well as easily transferred and adopted. Such assumptions are yet to be verified.

<sup>&</sup>lt;sup>54</sup> *Total Energy Consumption*, ENERDATA, https://yearbook.enerdata.net/ (last visited July 20, 2015).

<sup>&</sup>lt;sup>55</sup> Johannes Friedrich & Thomas Damassa, *The History of Carbon Dioxide Emissions*, WORLD RES. INST. (May 21, 2014), http://www.wri.org/blog/2014/05/history-carbon-dioxide-emissions.

<sup>&</sup>lt;sup>56</sup> Wanna Tanunchaiwatana, Manager, Technology, UNFCCC Secretariat, Role of Patents in Green Technology Transfer in the Context of Climate Change, WIPO Conference on Intellectual Property and Public Policy Issues (July 13, 2009) (on file with the author.)

developed nations by about 40%.<sup>57</sup> Much of this increase may be traced to the rapid growth of China, India and other emerging economies. This figure is expected to increase to 130% by 2040.<sup>58</sup> Therefore, to prevent further aggregation on the climate, it is important that developing nations fully utilize clean technologies in the pursuit of economic development.

On the other hand, developed nations currently own most of the existing clean technologies that are protected by IPR.<sup>59</sup> For example, according to a 2008 international survey, developed nations owned 80% of patents covering relevant clean technologies (though the percentage was a significant reduction from ten years ago, where developed nations owned 95% of the patents on clean technologies.)<sup>60</sup>

Consequently, global climate change technology efforts have focused on the transfer of clean technologies from developed nations to developing nations. As early as 1992, the IPCC pointed out that "as the GHG emissions in developing nations are increasing with their population and economic growth, rapid transfer, on a preferential basis to developing nations, of technologies which help to monitor, limit or adapt to climate change, without hindering their economic development, is an urgent requirement."<sup>61</sup> The UNFCCC, signed in 1992, subsequently listed technology transfer as a main method for addressing climate change. The UNFCCC requires developed nations to take "all practicable steps to promote, facilitate and finance, as appropriate, the transfer of or access to environmentally sound technologies and know-how" to other nations, particularly developing nations.<sup>62</sup> The WTO's Agreement"), signed in 1994, also asks developed nations to promote and encourage technology transfer to the least

<sup>&</sup>lt;sup>57</sup> Developing Countries' Carbon Emissions Will Vastly Outpace Developed Nations, U.S. EIA Says, HUFFINGTON POST (July 25, 2013, 7:25 PM), http://www.huffingtonpost.com/2013/07/25/carbon-emissions-developing-countries\_n\_3651513.html.

<sup>&</sup>lt;sup>58</sup> *Id*.

<sup>&</sup>lt;sup>59</sup> The ownerships of IPR-protected clean technologies are identifiable because of the registration data in national IPR offices. Data on clean technologies not protected by IPR needs to be gathered and made available for the public to access.

<sup>&</sup>lt;sup>60</sup> COPENHAGEN ECONOMICS & THE IPR COMPANY, IS IPR A BARRIER TO THE TRANSFER OF CLIMATE CHANGE TECHNOLOGY? 18 (2009), http://trade.ec.europa.eu/doclib/docs/2009/february/tradoc\_142371.pdf [hereinafter STUDY F].

<sup>&</sup>lt;sup>61</sup> Intergovernmental Panel on Climate Change, *Overview*, *in* FIRST ASSESSMENT REPORT, https://www.ipcc.ch/ipccreports/1992 IPCC Supplement/IPCC\_1990\_and\_1992\_Assessments/ English/ipcc\_90\_92\_assessments\_far\_overview.pdf.

<sup>&</sup>lt;sup>62</sup> UNFCCC Treaty, *supra* note 24, at art. 4.5; *see also id.* at art. 4.1, 4.3, and 4.7.

developed countries ("LDCs") members.<sup>63</sup> Specifically, the TRIPS Agreement asks developed nations to "provide incentives to enterprises and institutions in their territories" so as to promote and encourage technology transfer to the LDCs to "enable them to create a sound and viable technological base."<sup>64</sup>

To facilitate the transfer of clean technologies, the UNFCCC has set up several mechanisms. The first mechanism is a technology transfer framework established in 1992, when the UNFCCC was signed. The framework has several components,<sup>65</sup> including a Technology Needs Assessment component wherein parties of the UNFCCC identify and prioritize the clean technologies needed, as well as determine the major barriers for the inbound transfer of clean technologies.<sup>66</sup> The second is the Clean Development Mechanism (CDM) and Joint Implementation (JI) mechanism established by the UNFCCC Kyoto Protocol<sup>67</sup> in 1997. The CDM and JI mechanisms allow a nation with an emission-reduction or emission-limitation commitment under the Kyoto Protocol to implement an emission-reduction or emission-removal project in developing nations. Such projects can earn scalable emission reduction credits that are counted toward the Kyoto commitment of the providing nation.<sup>68</sup> The third is the Technology Mechanism established by the 2010 Cancun climate change conference, to help nations develop and transfer clean technologies.<sup>69</sup> The Technology Mechanism aims to support and accelerate clean technology diffusion via a nation-driven approach, based on national circumstance and priorities of developing nations.<sup>70</sup>

<sup>&</sup>lt;sup>63</sup> Agreement on of Aspects of Intellectual Property Rights, art. 66.2, Apr. 15, 1994, Marrakesh Agreement Establishing the World Trade Organization, Annex 1C, 1869 U.N.T.S. 183, 33 I.L.M. 1197 [hereinafter TRIPS Agreement]. <sup>64</sup> Id.

<sup>&</sup>lt;sup>65</sup> Technology Transfer Framework, U.N. FRAMEWORK CONVENTION ON CLIMATE CHANGE, http://unfccc.int/ttclear/templates/render\_cms\_page?TTF\_home (last visited Aug. 1, 2015). <sup>66</sup> Id.

<sup>67</sup> Protocol. U.N. FRAMEWORK CONVENTION Kvoto ON CLIMATE CHANGE. http://unfccc.int/kyoto\_protocol/items/2830.php (last visited July 24, 2015).

<sup>&</sup>lt;sup>68</sup> Kyoto Protocol to the United Nations Framework Convention on Climate Change, art. 5-6, Dec. 10, 1997, U.N. Doc. FCCC/CP/1997/7/Add.1, 37 I.L.M. 22 (1998) [hereinafter Kyoto Protocol].

<sup>&</sup>lt;sup>69</sup> The Technology Mechanism of the Convention, U.N. FRAMEWORK CONVENTION ON CLIMATE CHANGE, http://unfccc.int/ttclear/templates/render\_cms\_page?TEM\_home (last visited on July 15, 2015).

<sup>&</sup>lt;sup>70</sup> United Nations Framework Convention on Climate Change, Copenhagen, Denmark, Dec. 7-15, 2009, Report of the Ad Hoc Working Group on Long-Term Cooperative Action Under the Convention on its Eighth Session, at 24-27, U.N. Doc. FCCC/AWGLCA/2009/17 (Feb. 5, 2010).
# 2. Technology Transfer Defined

The IPCC defines technology transfer as "a broad set of processes covering the flows of know-how, experience and equipment for mitigating and adapting to climate change" among and between all nations.<sup>71</sup> The IPCC considers technology transfer to include the adaptation of the transferred technology, "the process of learning to understand, utilize, and replicate the technology, including the capacity to choose and adapt to local conditions and integrate it with indigenous technologies."<sup>72</sup> The Kyoto Protocol of the UNFCCC also has a broad definition of technology transfer, which includes providing developing nations the know-how and best practices associated with a transferred technology.<sup>73</sup>

Channels for technology transfer can be market-based, such as trade, foreign direct investment and technology licensing.<sup>74</sup> Transfer can also be informal. Organizations or individuals may engage in unsanctioned imitation and technical and managerial personnel may bring "know-how" with them as they change employment.<sup>75</sup>

Technology transfer can be initiated by the commercial sector or the public sector. In practice, most technology transfer occurs in the commercial sector.<sup>76</sup> Nevertheless, the role of the public sector is important. Technology transfer

<sup>&</sup>lt;sup>71</sup> INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE, METHODOLOGICAL AND TECHNOLOGICAL ISSUES IN TECHNOLOGY TRANSFER 3 (Bert Metz et al. eds, 2000).

<sup>&</sup>lt;sup>72</sup> *Id*.

<sup>&</sup>lt;sup>73</sup> Kyoto Protocol, *supra* note 70.

<sup>&</sup>lt;sup>74</sup> KEITH MASKUS, PRIVATE RIGHTS AND PUBLIC PROBLEMS: THE GLOBAL ECONOMICS OF INTELLECTUAL PROPERTY IN THE 21<sup>ST</sup> CENTURY 66-69 (2012); *see also* Bernard M. Hoekman et al., *Transfer of Technology to Developing Countries: Unilateral and Multilateral Policy Option*, 33(10) WORLD DEV. 1587, 1588-1590 (2005) (channels of technology transfer include trade in goods, FDI and licensing, labor turnover and movement of people); Bronwyn H. Hall & Christian Helmers, *The Role of Patent Protection in (Clean/Green) Technology Transfer* (Nat'l Bureau Econ. Research, Working Paper No. 16323, 2010), http://www.nber.org/papers /w16323.pdf; Matthew Littleton, *The TRIPS Agreement and Transfer of Climate-Change-Related Technologies to Developing Countries* 2 (United Nations Dep't Econ. & Soc. Affairs, Working Paper No. 71, 2008), U.N. Doc. ST/ESA/2008/DWP/7, http://www.un.org/esa/desa/ papers/2008/wp71\_2008.pdf (Technology transfer includes intra-firm, inter-firm, FDI, and unsanctioned technology transfer through imitation).

<sup>&</sup>lt;sup>75</sup> See generally, MASKUS, PRIVATE RIGHTS AND PUBLIC PROBLEMS, *supra* note 74; Hoekman et al., *supra* note 74.

<sup>&</sup>lt;sup>76</sup> Commercial investments made up at least 70% of total global investments in clean energy technologies. *See* General Electric, *Innovation, Protection and Transfer of Green Technologies,* WORLD INTELL. PROP. ORG. 3, (July 13, 2011), http://www.wipo.int/edocs/mdocs/mdocs/en/wipo\_inn\_ge\_11/wipo\_inn\_ge\_11\_ref\_t.pdf.

normally is neither an automatic nor a costless process, and it can become subject to market failures; in such cases, public interventions such as legal and policy incentives are necessary.<sup>77</sup>

# 3. International Transfer of Clean Technologies to Developing Nations Has Been Limited

In spite of the support mechanisms provided by the UNFCCC system and TRIPS Agreement, the international transfer of clean technologies to developing nations has been limited. In particular, extensive surveys conducted in the past two decades reveal that foreign clean technologies are not reaching developing nations adequately, especially the LDCs.<sup>78</sup>

In 2011, researchers from the London School of Economics and Political Science and the Organization for Economic Cooperation and Development ("OECD") published a global survey on the invention and transfer of climate change mitigation technologies ("Study A").<sup>79</sup> Study A analyzed the geographic distribution of thirteen classes of climate mitigation technologies during 1978-2005, and was based on patent data from over eighty national and international patent offices.<sup>80</sup> As the figure below shows, Study A found that international transfer of clean technologies mostly occurred between developed nations (73% of the overall exported inventions).<sup>81</sup> It also noted that exports of clean technology inventions from developed nations to emerging economies – such as China, Brazil, and India – were growing rapidly (22% of the overall exported inventions).<sup>82</sup> The study further found that the flow of clean technology inventions from developing nations to developed nations made up 4%, while the flow between developing

<sup>&</sup>lt;sup>77</sup> INT'L CTR. FOR TRADE & SUSTAINABLE DEV., CLIMATE CHANGE, TECHNOLOGY TRANSFER AND INTELLECTUAL PROPERTY RIGHTS 2 (2008), https://www.iisd.org/pdf/2008/cph\_trade \_climate\_tech\_transfer\_ipr.pdf.

<sup>&</sup>lt;sup>78</sup> Most of the surveys are based on patent data on clean technologies. Evidential studies on unpatented clean technologies are difficult to accomplish and find.

<sup>&</sup>lt;sup>79</sup> Antoine Dechezleprêtre et al., *Invention and Transfer of Climate Change-Mitigation Technologies: A Global Analysis*, 5(1) REV. ENVTL ECON. & POL'Y 109, 109-10 (2011), http://reep.oxfordjournals.org/content/5/1/109.full.pdf+html [hereinafter *Study A*].

<sup>&</sup>lt;sup>80</sup> *Id.* (These technologies include six renewable energy technologies (wind, solar, geothermal, ocean energy, biomass, and hydropower), waste-to-energy, methane destruction, energy conservation in buildings, climate-friendly cement, motor vehicle fuel injection, and energy-efficient lighting. They involve very diverse sectors such as electricity and heat production, the manufacturing industry, and the residential sector.)

 $<sup>^{81}</sup>$  *Id.* at 122.

<sup>&</sup>lt;sup>82</sup> *Id*.

nations was much less, a mere 1% of the overall flow.<sup>83</sup> This implies that the transfer of clean technologies from developed nations to developing nations that are not emerging economies was almost nonexistent.



A different global patent survey confirms the findings of Study A. In 2010, the UNEP, the European Patent Office and the International Centre for Trade and Sustainable Development conducted a study<sup>84</sup> of the patenting landscape and licensing practices of key clean energy technologies<sup>85</sup> ("Study B"). This study discovered that 58% of its respondents (entities based in developed nations) reported they had not entered into licensing agreements with entities based in a developing nation during the three years before 2010, the time when Study B was conducted.<sup>86</sup>

Conversely, Study B found that the owners of clean technologies were willing to transfer the technologies. Of the respondents in Study B, 73% believed it was important to seek opportunities to license out their technologies, and 82% viewed IPR as vital to licensing transactions.<sup>87</sup> This data indicates that clean technology owners do want to transfer the technologies, and the existence of IPR is critical to facilitating such transfers. Study B also found that clean technology owners, especially academic and public organizations, were generally open to

<sup>&</sup>lt;sup>83</sup> *Id*.

<sup>&</sup>lt;sup>84</sup> U.N. ENVTL. PROGRAMME, EUR. PATENT OFFICE & INT'L CTR. FOR TRADE & SUSTAINABLE DEV., PATENT AND CLEAN ENERGY: BRIDGING THE GAP BETWEEN POLICY AND EVIDENCE, FINAL REPORT 9 (2010), http://documents.epo.org/projects/babylon/eponet.nsf/0/cc5da4b168363477 c12577ad00547289/\$FILE/patents\_clean\_energy\_study\_en.pdf [hereinafter STUDY B].

<sup>&</sup>lt;sup>85</sup> Clean energy technologies are technologies that reduce energy consumption and/or enable the transition to a renewable-based energy economy. *See, Categories*, MIT CLEAN ENERGY PRIZE, http://cep.mit.edu/structure/categories (last visited Dec. 10, 2015).

<sup>&</sup>lt;sup>86</sup> STUDY B, supra note 84, at 58.

<sup>&</sup>lt;sup>87</sup> Id.

providing flexible licensing terms to entities based in developing nations with limited financial resources.<sup>88</sup>

Similar to Study A, Study B also found that emerging economies such as China, Brazil, India and Russia were the main beneficiaries of licensing flows from developed nations.<sup>89</sup> Study B indicated that companies from developing nations experienced some difficulties in obtaining clean technologies from entities based in developed nations, <sup>90</sup> resulting from the high cost of licensing the foreign clean technologies and/or having to resort to obtaining less-advanced substitutes.<sup>91</sup>

A third survey, a 2009 United Nations report, assessed the effect of the CDM – one of the technology transfer mechanisms mentioned in Part I.C.1 ("Study C"). <sup>92</sup> The study noted that only 36% of the 3,296 documented CDM projects involved the transfer of clean technologies.<sup>93</sup> Study C also noted that the CDM projects had been concentrated in only a few developing nations, e.g., Brazil, China, India, Mexico.<sup>94</sup> These, again, are emerging economies. The rest of developing nations had taken up only 25% share of the overall CDM projects.<sup>95</sup>

In summary, the available empirical evidence shows that the international transfer of clean technologies occurs mainly between developed nations. The more infrequent, but growing transfer of clean technologies from developed nations to developing nations flows mainly to emerging economies, such as China, Brazil, India, Mexico, Russia and South Africa. Little transfer occurs between developed nations and the rest of the developing nations, or among developing nations themselves.

<sup>93</sup> *Id*.

<sup>95</sup> *Id*.

<sup>&</sup>lt;sup>88</sup> *Id.* at 60.

<sup>&</sup>lt;sup>89</sup> *Id.* at 58.

<sup>&</sup>lt;sup>90</sup> *Id.* at 23.

<sup>&</sup>lt;sup>91</sup> *Id*.

<sup>&</sup>lt;sup>92</sup> U.N. DEP'T OF ECON & SOC. AFFAIRS, WORLD ECONOMIC AND SOCIAL SURVEY 2009: PROMOTING DEVELOPMENT, SAVING THE PLANET, at 138, U.N. Doc. ST/ESA/319, U.N. Sales No. E.09.II.C.1 (2009) [hereinafter STUDY C].

<sup>&</sup>lt;sup>94</sup> *Id.* (citing Antoine Dechezleprêtre et al., *The Clean Development Mechanism and the International Diffusion of Technologies: An Empirical Study.* 36(4) ENERGY POLICY 1273 (2008)).

## D. How to Increase Transfer of Clean Technologies to Developing Nations – An Ongoing Debate

Developing and developed nations have been discussing how to increase the international transfer of clean technologies to developing nations. However, they disagree over the means to achieve this goal. Developing nations claim that IPR is a major barrier to the international transfer of clean technologies and ask for the reduction or elimination of IPR protections on clean technologies. Developed nations, on the other hand, insist that IPR facilitates development and deployment of clean technologies and assert that the barrier to the international transfer of clean technologies is developing nations' lack of capacity to attract foreign clean technologies.

### 1. Developing Nations

Developing nations regard IPR as an inherent barrier to the international transfer of, and affordable access to, clean technologies in a rapid time frame.<sup>96</sup> According to this view, IPR of clean technologies keeps prices of clean technologies high and limits access. Developing nations have pointed to specific instances to support this view. For example, firms and R&D institutions in developing nations have indicated that commercial firms and public institutions in developed nations refused to license important technologies related to fuel-cells.<sup>97</sup> Local firms in India indicated that they were refused licenses for patented technologies on ozone reduction.<sup>98</sup> Several developing nations have also criticized a small group of multinational companies ("MNC"s) owning clean technologies needed by developing nations. These MNCs were criticized for using their ownership of clean technologies as a means to control production, therefore limiting their transfer to the developing nations who needed these clean technologies.<sup>99</sup>

During recent UNFCCC climate change conferences, developing nations suggested limiting or eliminating IPR for clean technologies. Specifically, Brazil, South Africa, China, India, and Russia have suggested rethinking the existing IPR

<sup>&</sup>lt;sup>96</sup> Id.

<sup>&</sup>lt;sup>97</sup> METHODOLOGICAL AND TECHNOLOGICAL ISSUES IN TECHNOLOGY TRANSFER, *supra* note 71.

<sup>&</sup>lt;sup>98</sup> Keith Maskus, *Encouraging International Technology Transfer*, INT'L CTR. TRADE & SUSTAINABLE DEV. ISSUE PAPER NO. 7 (2004), http://www.iprsonline.org/resources/docs/Maskus - Encouraging International ToT- Blue 7.pdf.

<sup>&</sup>lt;sup>99</sup> THE ENERGY & RESOURCES INST., EMERGING ASIA CONTRIBUTION ON ISSUES OF TECHNOLOGY FOR COPENHAGEN 30 (2009), http://www.indiaenvironmentportal.org.in/files/Paper\_AEI.pdf.

regime, excluding clean technologies from patent protections, introducing a compulsory licensing scheme for clean technologies, and pushing for technology transfer, flexible licensing mechanisms, and institutional mechanisms.<sup>100</sup> The president of Bolivia likewise commanded that "innovation and technology related to climate change must be within the public domain, not under any private monopolistic patent regime that obstructs and makes technology transfer more expensive to developing countries."<sup>101</sup>

In 2013, the WTO TRIPS Council<sup>102</sup> organized a discussion on IP, Climate Change, and Development. Ecuador submitted a proposal ("Ecuador 2013 proposal").<sup>103</sup> In the proposal, Ecuador argued that IPR could "create a monopolistic situation characterised by high prices and a restriction of the dissemination of knowledge" for adapting to climate change and use of clean technologies.<sup>104</sup> Ecuador proposed to exclude clean technologies from patentable subject matter, include in the TRIPS Agreement a new provision on the transfer of expertise or know-how, implement compulsory licensing, and reduce the life term of patents on clean technologies.<sup>105</sup>

A number of developing nations such as Cuba, Bangladesh, Bolivia, Brazil, India, Indonesia, Nepal, Rwanda and the Dominican Republic supported Ecuador's proposal.<sup>106</sup> India especially supported the proposal's stance regarding compulsory licensing and reduction of patent life term.<sup>107</sup> India stated:

<sup>&</sup>lt;sup>100</sup> MATTHEW RIMMER, INTELLECTUAL PROPERTY AND CLIMATE CHANGE – INVENTING CLEAN TECHNOLOGIES 48 (2011) (hereinafter RIMMER, INVENTING CLEAN TECHNOLOGIES).

<sup>&</sup>lt;sup>101</sup> Open Letter, President Evo Morales Ayma, Save the Planet from Capitalism (Nov. 28, 2008), http://links.org.au/node/769.

<sup>&</sup>lt;sup>102</sup> Work of the TRIPS Council, WORLD TRADE ORG., https://www.wto.org/english/ tratop\_e/trips\_e/intel6\_e.htm (last visited on July 25, 2015) ("the Council for TRIPS is the body, open to all members of the WTO, that is responsible for administering the TRIPS Agreement").

<sup>&</sup>lt;sup>103</sup> WORLD TRADE ORG., CONTRIBUTION OF INTELLECTUAL PROPERTY TO FACILITATING THE TRANSFER OF ENVIRONMENTALLY RATIONAL TECHNOLOGY – COMMUNICATION FROM EQUATOR (2013), https://docs.wto.org/dol2fe/Pages/FE\_Search/FE\_S\_S009-DP.aspx?language=E& CatalogueIdList=115118&CurrentCatalogueIdIndex=0&FullTextSearch= (hereinafter "Ecuador 2013 Proposal").

<sup>&</sup>lt;sup>104</sup> *Id*.

 $<sup>^{105}</sup>$  *Id*.

<sup>&</sup>lt;sup>106</sup> World Trade Org., EXTRACT FROM MINUTES OF MEETING HELD ON OCT. 10-11, 2013 OF THE COUNCIL FOR TRADE-RELATED ASPECTS OF INTELLECTUAL PROPERTY RIGHTS 28 (2013), https://www.wto.org/english/tratop\_e/trips\_e/october2013\_on\_climate\_e.pdf.

<sup>&</sup>lt;sup>107</sup> World Trade Org., EXTRACT FROM MINUTES OF MEETING HELD ON JUNE 11-12, 2013 OF THE COUNCIL FOR TRADE-RELATED ASPECTS OF INTELLECTUAL PROPERTY RIGHTS 32 (2013), https://www.wto.org/english/tratop\_e/trips\_e/june2013\_on\_climate\_e.pdf [hereinafter TRIPS]

On any principle of equity, industrialized countries have to bear a large share of the burden. They are historically responsible for the bulk of the accumulated greenhouse gas emissions and this alone suggests a greater responsibility. They also have high per capita incomes, which give them the highest capacity to bear the burden. They are technically the most advanced, and to that extent best placed to provide environmentally sound technology to developing countries at fair and favourable terms and conditions.<sup>108</sup>

India's statement captured the essential position of developing nations toward the proposal.

## 2. Developed Nations

Meanwhile, entities in developed nations have insisted that IPR is not a barrier, but a facilitator for development and deployment (e.g., international transfer) of clean technologies. Their arguments focus on the incentives and legal certainty that IPR provides. For example, General Electric, a large producer of clean technologies, argues that IPR helps incentivize R&D investments in clean technologies, especially by the commercial sectors, which account for 70% of the overall R&D investments.<sup>109</sup> Industry associations, such as Alliance for Clean Technology Innovation, assert that strong IPR protection provides "legal certainty" for technology owners to engage in "voluntary, market-based technology transfer in all its possible forms."<sup>110</sup> Researchers for the International Centre for Trade and Sustainable Development ("ICTSD") stated that IPR provides incentives for clean technology innovations, especially in sectors such as wind, solar, carbon capture and storage, and biofuels that need major R&D investments.<sup>111</sup>

Consequently, governments of developed nations – such as the U.S., Australia, Japan, and the EU – have insisted on strong IPR protection for clean technologies.<sup>112</sup> Todd Stern, the U.S. Special Envoy for Climate Change, stated:

MEETING MINUTES JUNE 11-12, 2013]; see also Matthew Rimmer, WTO Debate on IP, Climate Change, and Development in the TRIPS Council, STORIFY, https://storify.com/DrRimmer/wto-debate-on-ip-climate-change-and-development-in (last visited July 25, 2015).

<sup>108</sup> TRIPS MEETING MINUTES JUNE 11-12, 2013, *supra* note 107.

<sup>109</sup> General Electric, *Innovation, Protection and Transfer of Green Technologies, supra* note 76.

<sup>110</sup> Alliance for Clean Technology Innovation, et al., *IPR-Related Demands in UN Climate Change Negotiations*, U.S. COUNCIL FOR INT'L BUS. (Nov. 26, 2014), http://www.uscib.org/docs/2014\_11\_26\_UNFCCC\_Association\_Letter.pdf.

<sup>&</sup>lt;sup>111</sup> Latif et al., *supra* note 29.

<sup>&</sup>lt;sup>112</sup> RIMMER, INVENTING CLEAN TECHNOLOGIES, *supra* note 100, at 62.

"we must make the development and dissemination of technology a top priority in order to help bring sustainable, low-carbon energy services to people around the world, AND we must do so in a way that recognizes the importance of protecting and enforcing intellectual property rights."<sup>113</sup> The EU, Japan, Canada, New Zealand have expressed similar views.<sup>114</sup> Australia denied that IPR could be a significant barrier to technology cooperation or use. Instead, Australia argued, greater incentives should be provided so that the commercial sectors—responsible for 86% of overall global investment and financial flows—can engage in technology transfer.<sup>115</sup>

Responding to Ecuador's 2013 proposal, which gained support from quite a few developing nations, several developed nations countered with the position that IPR encourages the development of clean technologies and allows their transfer at accessible prices.<sup>116</sup> The EU's response noted that a large quantity of key clean technologies are already in the public domain, the LDCs offer market values insufficient to attract commercial businesses in developed nations, and the LDCs do not provide IPR; therefore the LDCs can use foreign clean technologies for free.<sup>117</sup> Further, the EU argued that without patent protection for products and processes, companies owning the clean technologies in developed nations may be reluctant to engage in technology transfer and associated investments.<sup>118</sup> The EU stated: "IPR, particularly patents, will be a catalyst, not a barrier, to creating and deploying low-carbon technologies....Threat[s] to strong IPR, such as easily-obtained compulsory licensing, are likely to be a strong disincentive to invest."<sup>119</sup> The EU's position likely represents the essential view of developed nations on IPR's role in the international transfer of clean technologies to developing nations.

<sup>&</sup>lt;sup>113</sup> Todd Stern, Special Envoy for Climate Change, U.S. Dept't of State, The Current State of Our Negotiations on a New International Climate Agreement, (Sept.10, 2009), http://www.state.gov/e/oes/rls/remarks/2009/129204.htm (emphasis added).

<sup>&</sup>lt;sup>114</sup> RIMMER, INVENTING CLEAN TECHNOLOGIES, *supra* note 100, at 64.

<sup>&</sup>lt;sup>115</sup> AUSTL., TECHNOLOGY COOPERATION: SUBMISSION TO THE AD-HOC WORKING GROUP FOR LONG TERM COOPERATIVE ACTION UNDER THE UNITED NATIONS FRAMEWORK CONVENTION ON CLIMATE CHANGE (2008), http://unfccc.int/files/kyoto\_protocol/application/pdf/australia\_lca\_ technology.pdf.

<sup>&</sup>lt;sup>116</sup> TRIPS MEETING MINUTES JUNE 11-12, 2013, *supra* note 107.

<sup>&</sup>lt;sup>117</sup> *Id.* at 40 (EU comments on Ecuador's 2013 proposal).

<sup>&</sup>lt;sup>118</sup> *Id*.

<sup>&</sup>lt;sup>119</sup> *Id.* (quoting IAN HARVEY, INTELLECTUAL PROPERTY RIGHTS: THE CATALYST TO DELIVER LOW CARBON TECHNOLOGIES (The Climate Group 2008), http://www.theclimategroup.org/\_assets/files/intellectual-property-rights.pdf).

# ANALYSIS: POSSIBLE REASONS FOR THE LIMITED INTERNATIONAL TRANSFER OF CLEAN TECHNOLOGIES TO DEVELOPING NATIONS

One may ask: why has transfer of clean technologies to developing nations been limited? Is the existence of IPR in fact a major barrier to the international transfer of clean technologies? After reviewing and analyzing currently available data on clean technologies and scholarship regarding international technology transfer, this article finds that the existence of IPR has not been a major barrier to the international transfer of clean technologies. This article also finds that for a nation to attract inbound transfer of foreign technologies, it needs to offer: sufficient IPR protection, the capacity to absorb and adopt foreign technologies, sufficient market size, policy certainty, and transparency.<sup>120</sup>

# A. Is the Existence of IPR a Major Barrier for Transfer of Clean Technologies to Developing Nations?

Examining IPR's role in the development and deployment of clean technologies, and assessing IPR's impact on developing nations in attracting international transfer of clean technologies, this section concludes that the existence of IPR has not been a major barrier to the international transfer of clean technologies.

## 1. IPR and Its Role

IPR has been viewed as an important tool to incentivize investments in innovation; it has also been viewed as increasing the cost of accessing IPR innovation. Though both climate and public health are public goods, IPR has different impacts in corresponding technology industries. Due to the specific nature of the clean technology industries, IPR plays less of a defining role in clean technology industries than in pharmaceutical industries. Therefore, solutions for IPR issues in pharmaceutical industries may not apply directly to IPR issues in clean technology industries.

The term "intellectual property" refers broadly to creations of the human mind.<sup>121</sup> Intellectual property rights ("IPR") protect the interests of the creators by

<sup>&</sup>lt;sup>120</sup> The evidential data and scholarship cited herein are utilized to answer the above questions; the inherent limitations in the evidential data and scholarship will be identified, compensated by rational analysis, (e.g., using the author's own experience in global IPR practice,) or left open for further research and/or to be addressed in future articles.

<sup>&</sup>lt;sup>121</sup> What is Intellectual Property?, WORLD INTELL. PROP. ORG., http://www.wipo.int/about-ip/en/ (last visited July 25, 2015).

giving them property rights over their creations.<sup>122</sup> The major forms of IPR include patents, trade secrets, copyrights and trademarks. Patents generally protect innovative technical improvements, trade secrets generally protect confidential information which can include innovative business or technical know-how, trademarks generally protect the distinctive symbols identifying a product or service, and copyrights generally protect the artistic expressions of ideas.

When discussing the development and deployment of technologies, patent rights are the most relevant form of IPR, followed by trade secrets, which come into play when transfer of the know-how associated with a technology or business practice is involved. From this point forward, unless indicated otherwise, the article will use the term "IPR" to refer to patent protection. Trade secret laws may be discussed in relation to the transfer of confidential business or technical knowhow. Other intellectual property forms such as trademarks and copyrights will be specifically identified and discussed as needed.

Patent rights are territorial, granted by individual national governments and are effective only within the particular geographic regions covered by the national governments.<sup>123</sup> In order to gain patent protection on an innovation in a particular nation, the owner must file for a patent right on the innovation from the government of the particular nation.<sup>124</sup> Therefore, when this article mentions that a technology owner has a patent on a technology, it means the technology owner has applied for patent protection from a specific nation, the nation has granted patent protection on the technology, and the technology owner can enforce the patent within the territory of the nation.

As exemplified by the debate discussed in Part I.D., IPR's role in the development and deployment of technologies has been controversial. Traditionally, IPR has been a policy tool for incentivizing investments – especially commercial investments – in innovation.<sup>125</sup> Once an innovation is granted patent protection by the government of a nation, the owner of the invention can exclude a third party from practicing the innovation in the nation, or grant the permission with a fee, generating license revenue. The prospect of a monopoly or profit-making on a patented invention is presumed to incentivize investments in R&D to create the invention.

<sup>&</sup>lt;sup>122</sup> *Id.* 

<sup>&</sup>lt;sup>123</sup> Patents. WORLD INTELL. PROP. ORG., http://www.wipo.int/patents/en/ (last visited Nov. 2, 2015). <sup>124</sup> Id.

<sup>&</sup>lt;sup>125</sup> Latif et al., *supra* note 29, at 1.

Meanwhile, IPR has been viewed to increase the cost for accessing the IPRprotected technologies or to increase the cost of learning them via imitation.<sup>126</sup> For example, when technology is protected by a patent or a trade secret in a nation, access to the technology in the nation is barred unless the owner of the technology gives permission, which may come attached with restrictive conditions and/or a higher price due to its IPR. IPR may also have the effect of diminishing the speed of innovation, as IPR is alleged to demotivate owners of -protected technologies for continuous innovation, since it grants the owners a monopoly power (albeit temporary) over the protected technologies.<sup>127</sup>

Because both climate and public health are public goods and have global impact, there is a potential parallel between IPR issues regarding clean technologies with IPR issues regarding pharmaceutical technologies.<sup>128</sup> However, this parallelism may not be warranted.

First, IPR may be less significant to clean technologies than to pharmaceutical technologies. Patents on many of the technologies that are fundamental to modern clean technologies have long been expired and these fundamental technologies are in the public domain.<sup>129</sup> Existing patents mostly protect only specific features or incremental improvements over the fundamental technologies in the public domain.<sup>130</sup> These specific features and incremental improvements likely would be easy to design around, and therefore would have multiple alternatives and substitutes on the market. The availability of these alternatives and substitutes will likely bring down the price that might be charged under a monopoly afforded by IPR protection.<sup>131</sup> Meanwhile, patents on clean technologies tend to be diffused and owned by a large number of firms.<sup>132</sup> Hence, the power of patent owners in clean technologies tends to be limited.

<sup>&</sup>lt;sup>126</sup> Hall & Helmers, *supra* note 74, at 6.

<sup>&</sup>lt;sup>127</sup> KEITH MASKUS, GLOBALIZING INFORMATION: THE ECONOMIC OF INTERNATIONAL TECHNOLOGY TRADE 5 (2014).

<sup>&</sup>lt;sup>128</sup> STUDY F, *supra* note 60, at 7.

<sup>&</sup>lt;sup>129</sup> John Barton, Patenting and Access to Clean Energy Technologies in Developing Countries, WIPO MAG., (Mar. 2009), http://www.wipo.int/wipo\_magazine/en/2009 /02/article\_0005.html; see also John Barton, Intellectual Property and Access to Clean Energy Technologies in Developing Countries: An Analysis of Solar Photovoltaic, Biofuel, and Wind Technologies, INT'L CTR. TRADE & SUSTAINABLE DEV. ISSUE PAPER NO. 2 (2007).

<sup>&</sup>lt;sup>130</sup> Barton, Patenting and Access to Clean Energy Technologies in Developing Countries, supra note 129.

<sup>&</sup>lt;sup>131</sup> *Id*.

<sup>&</sup>lt;sup>132</sup> See generally id.

In the pharmaceutical industry, IPR plays a significant role. The general assumption is that the originator pharmaceutical sector is highly dependent on strong patent protection, mainly because of the high cost involved in developing novel medicines and the low cost of reverse engineering these new medicines.<sup>133</sup> The owner of a new medicine needs to rely on the monopoly secured by a patent to recuperate the R&D investments and generate significant economic returns. Also, in the pharmaceutical industry, one firm usually owns the patent of a key pharmaceutical technology, which normally has no alternative or substitute technologies, granting the firm dominant market power.<sup>134</sup>

Furthermore, unlike pharmaceutical technologies, clean technologies involve a variety of different industries, and IPR is less important in some industries than others.<sup>135</sup> For example, clean technologies include sophisticated bio-tech engineering, such as genetically modified seeds for drought resistance, and lowtech mechanical innovations, such as farming techniques.<sup>136</sup> Patent rights are likely more relevant to the drought-resistant seeds, which may require more R&D investments than the mechanical farming techniques.

## 2. Evidential Data

This article will now examine IPR's influence on the development and deployment of clean technologies for developing and developed nations, through analyzing available evidential data on global investments and patenting of clean technologies. Investments such as commercial investments and R&D expenditures are a measure of the input to innovation, while patenting data is a measure of the output to innovation.<sup>137</sup> Meanwhile, patenting data can be one indication of international transfer of technology, as patenting data identifies the location of an invention – e.g., where the patent was filed originally, and also where the invention is transferred – by where else the patent was filed besides the location of the invention.<sup>138</sup> Patenting of foreign technologies likely occurs in nations that have

<sup>&</sup>lt;sup>133</sup> FREDERICK M. ABBOTT, INNOVATION AND TECHNOLOGY TRANSFER TO ADDRESS CLIMATE CHANGE: LESSONS FROM THE GLOBAL DEBATE ON INTELLECTUAL PROPERTY AND PUBLIC HEALTH (Int'l Ctr. For Trade note & Sustainable Dev. 2009), http://ictsd.org/i/publicatons/ 50454.

<sup>&</sup>lt;sup>134</sup> STUDY F, *supra* note 60, at 7.

<sup>&</sup>lt;sup>135</sup> Hall & Helmers, *supra* note 74, at 19.

<sup>&</sup>lt;sup>136</sup> Id.

<sup>&</sup>lt;sup>137</sup> *Study A, supra* note 79, at 111.

<sup>&</sup>lt;sup>138</sup> Id.

well-enforced IPR and have a high capacity to absorb and implement the foreign technologies.<sup>139</sup>

Going forward, this article will group developing nations into three sets according to their stages of economic development. One group is the emerging economies, such as Brazil, Russia, India, China, and South Africa. Another group is the LDCs, such as Cambodia, Nepal, Haiti, and Uganda.<sup>140</sup> The remaining group encompasses the rest of developing nations, whose economic developments are between those of the emerging economies and the LDCs. This article calls them the mid-tier developing nations ("MDCs"); Georgia, Egypt, Cuba, and Argentina may be considered MDCs.

#### i. Investments for Clean Technologies

The examination of evidential data on global investments in clean technologies provides two revelations. First, commercial investments in developing nations have increased rapidly and even surpassed those in developed nations in 2012. This implies that IPR may become increasingly important to developing nations as they can leverage IPR to harvest and protect innovations that result from the increased commercial investments in clean technologies. IPR can also help sustain momentum in commercial investments in clean technologies.

Second, at least in developed nations, commercial investments in clean technologies overshadow government investments. Therefore, governments in developed nations may have a difficult time relaying the developing nations' requests for the removal or weakening of IPR protection on clean technologies to their domestic commercial sectors. This is due to the significant roles these sectors play in the investments in clean technologies and these sectors' preference for strong IPR for clean technologies.

In recent decades, investments in clean technologies have increased rapidly, especially in developing nations. The 2014 Science and Engineering Indicators<sup>141</sup> published by U.S. National Science Foundation ("Study E") illustrates the

<sup>&</sup>lt;sup>139</sup> Antoine Dechezleprêtre et al., What Drives the International Transfer of Climate Change Mitigation Technologies? Empirical Evidence from Patent Data, 54(2) ENVTL. & RESOURCE ECON. 161, 165 (2013) [hereinafter Study G].

<sup>&</sup>lt;sup>140</sup> List of Least Developed Countries, UNITED NATIONS (Dec. 4, 2013), http://www.un.org/ en/development/desa/policy/cdp/ldc/ldc\_list.pdf.

<sup>&</sup>lt;sup>141</sup> NAT'L SCI. Foundation, *Industry Technology and the Global Marketplace, in* SCIENCE AND ENGINEERING INDICATORS 2014 6, 6-21 (2014), http://www.nsf.gov/statistics/seind14/content/ chapter-6/chapter-6.pdf [hereinafter *Study E*].

phenomena well.<sup>142</sup> According to Study E, global commercial investments in clean energy technologies have risen from less than 30 billion USD to 160 billion USD from 2005-2012.<sup>143</sup> The figure below provides further details.



As shown, developing nations' commercial investments in clean technologies rose rapidly from 2004-2012. The input rose from 8 billion USD in 2004 to nearly 100 billion USD in 2012, making up over 61% of the global total. In 2012, China's commercial investments in clean technology totaled about 61 billion USD. Other developing nations, led by emerging economies such as Brazil, India, Indonesia, and Mexico, made up about 36 billion USD.

The rapid increase in commercial investments in clean technologies by developing nations indicates that IPR may be utilized to harvest the inventions from these commercial investments. Currently, governments of developing nations may prefer no or weak IPR on clean technologies. However, increased domestic holdings in clean technologies and an increased desire on the part of domestic industries to apply IPR protection to their own technologies will likely change the current preference.

Meanwhile, during 2004-2012, developed nations' commercial investments in clean technologies rose from about 19 billion USD in 2004 to about 63 billion USD in 2012, comprising 39% of the global total.<sup>144</sup> In 2012, the U.S. and the EU, with 27 billion USD and 29 billion USD respectively, tied as the second-largest

<sup>&</sup>lt;sup>142</sup> *Id.* at 6-49, 6-50.

 $<sup>^{143}</sup>$  *Id*.

<sup>&</sup>lt;sup>144</sup> *Id.* at 6-51 ("Investment has been volatile in the aftermath of the global recession. Investment rebounded in 2010 and reached a new high of \$110 billion in 2011 before plunging to \$63 billion in 2012, its lowest level since 2006. After rising steadily prior to the global recession, U.S. investment fell sharply in 2008 before recovering to \$32 billion in 2010, near its prerecession level.").

sources of clean technology commercial investments. However, both investments were significantly less than the 61 billion USD from China, which led the commercial investments in clean technologies among developing nations. In 2012, commercial investments of the other developed nations were much lower than those of the U.S. and the EU, only amounting to a collective 7 billion USD.<sup>145</sup>

In the meantime, commercial investments in clean technologies in developed nations far exceed investments in clean technologies by governments of these nations. As shown in the figure below, in 2011, the governments of developed nations invested only 13 billion USD in research, development and demonstration ("RD&D") for clean technologies, compared to the total 110 billion USD spent by the commercial sectors in developed nations.<sup>146</sup> Specifically, the U.S. government and the Japanese government invested the most, with each spending 4 billion USD for RD&D in clean technologies in 2011; the EU was the next largest, with 2.6 billion USA. The governments of Canada, Australia, and South Korea each spent 1 billion USD, 600 million USD, and 500 million USD respectively.<sup>147</sup>



As shown in the figure, the distance between government RD&D investments and commercial investments in clean technologies in developed nations has increased consistently over the past years; the ratio (as shown under the horizontal axis of the figure) changed from 1:2 in 2004 to 1:9 in 2011.

In general, there are two types of government support for the development and deployment of technologies. One is the enforcement of private rights, such as IPR, for incentivizing commercial investments.<sup>148</sup> Another is direct government

<sup>&</sup>lt;sup>145</sup> *Id*.

<sup>&</sup>lt;sup>146</sup> *Id.* at 6-51 to 6-52.

<sup>&</sup>lt;sup>147</sup> *Id.* at 6-52.

<sup>&</sup>lt;sup>148</sup> NICOLAS STERN, THE ECONOMICS OF CLIMATE CHANGE: THE STERN REVIEW 398 (2007).

funding of innovation.<sup>149</sup> The data above reveal the significant role commercial investments play in the development and deployment of clean technologies in developed nations. It thus implies that incentives such as IPR, which motivate commercial investments in clean technologies, probably should not be easily abridged. The governments of developed nations will have a difficult time supporting proposals to remove or weaken IPR on clean technologies, as such a proposals likely would not be accepted by the commercial sectors in developed nations.

## ii. Patent Ownership for Clean Technologies

The examination of global patenting data on clean technologies identified three specific findings. First, developed nations own a majority of the patents on existing clean technologies. Second, the emerging economies are catching up rapidly in the number of clean technology patents, though patents on foreign clean technologies have taken up a significant share of these clean technology patents, Third, the rest of the developing nations have had few patents of clean technologies by domestic or foreign entities. The findings imply that IPR may be an issue for emerging economies' access to some foreign clean technologies due to the existence of local patents, but not an issue for the rest of the developing nations' access, since there are few local patents on foreign clean technologies.

Study A, cited in Part I.C, examined the original filings of patents during 1978-2005 in thirteen climate change mitigation technologies.<sup>150</sup> Original filings of patents typically indicate where the patented inventions were developed. Study A found that 60% of the inventions patented worldwide in 1978-2005 originated from three developed nations: Japan, the U.S., and Germany.<sup>151</sup> Emerging economies represent 15% of the total inventions covered by Study A.<sup>152</sup>

A 2009 study on patent ownership of clean technologies by European economic consultancy Copenhagen Economics ("Study F")<sup>153</sup> confirms the pattern found by Study A. As shown in the figure below, Study F found that from 1998 to 2008, the ratio between developing and developed nations' patent holdings on

<sup>&</sup>lt;sup>149</sup> Id.

<sup>&</sup>lt;sup>150</sup> Study A, supra note 79.

<sup>&</sup>lt;sup>151</sup> *Id.* at 124.

<sup>&</sup>lt;sup>152</sup> *Id.* at 116 (demonstrating that inventions from these countries had a lower export rate, indicating lower values in these innovations).

<sup>&</sup>lt;sup>153</sup> STUDY F, *supra* note 60.

seven key clean technologies<sup>154</sup> grew from 1:20 to 1:5.<sup>155</sup> The improvement is significant, though the gap in patent ownership of clean technologies between developing nations and developed nations remains considerable.



A closer look at the data in Study F reveals a larger contrast of patent ownership between the emerging economies and the other developing nations – i.e., the MDCs and the LDCs. Study F found that in 2008, the emerging economies accounted for 99.4% of all protected patents filed by developing nations in the seven key clean technology areas reviewed, while the MDCs and the LDCs accounted for only the remaining 0.6%.<sup>156</sup> As shown in the figure below, this means that emerging economies owned 19.88% of the patents filed globally in the seven clean technology areas in 2008, while the MDCs and the LDCs owned a mere 0.12%. Furthermore, Study F found that two thirds of these patents owned by the emerging economies were filed by foreigners and one third by local residents.<sup>157</sup>



<sup>&</sup>lt;sup>154</sup> Id. at 4 (reviewing patent ownerships in these clean technology areas: waste and biomass energy, solar, fuel cell, ocean, geothermal and wind power.)

<sup>&</sup>lt;sup>156</sup> *Id.* at 4-5.

<sup>&</sup>lt;sup>157</sup> *Id.* at 22.

The above-identified findings of Study F are consistent with findings from Study B, which was discussed in Part I.C. Study B also found that patents on clean energy technologies in low-income nations – e.g., the LDCs and at least some MDCs – are relatively rare.<sup>158</sup> Study B further found that six developed nations – Japan, the U.S., Germany, South Korea, the United Kingdom, and France – accounted for almost 80% of patent filings in clean energy generation technologies.<sup>159</sup> Some of the emerging economies, such as Argentina, Brazil, China, India, Russia, the Philippines, and the Ukraine, have dramatically increased their patenting on clean technologies to such an extent that some of them filed 4,000 patent applications on clean technologies annually.<sup>160</sup> Meanwhile, current scholarship also indicates proprietary clean technologies do not enjoy protection in a number of jurisdictions, particularly in the most vulnerable economies.<sup>161</sup>

The fact that the MDCs and the LDCs held few patents in clean technologies indicates that owners of foreign clean technologies were not filing patents in these developing nations. This is consistent with the finding in Part I.C that the MDCs and the LDCs had little inbound transfer of foreign clean technologies. The fact that emerging economies have had the most share of the clean technology patents filed in developing nations and that two thirds of these patents were filed by foreigners has at least two implications. First, emerging economies have developed and owned certain clean technologies, and second, owners of foreign clean technologies value the emerging markets and thus applied for patent protections for clean technologies there.

## 3. Assessment

This article will now assess IPR's impact on the international transfer of clean technologies to developing nations, based on the evidence identified above, the author's professional experience in global IPR practice, and current scholarship on IPR and technology transfer. Multiple factors impact the international transfer of clean technologies. The existence of proper IPR protection in a receiving nation is a positive factor; other factors include the market and policy conditions in the receiving nation. As of now, the existence of IPR in the emerging economies has helped to attract foreign clean technologies to the emerging economies. The lack of IPR or weak IPR may have further deterred foreign clean technologies from dispersing to the remaining developing nations.

<sup>&</sup>lt;sup>158</sup> STUDY B, *supra* note 84, at 58.

<sup>159</sup> Id. at 4.

<sup>&</sup>lt;sup>160</sup> Latif et al., *supra* note 29, at 4.

<sup>&</sup>lt;sup>161</sup> *Id.*; *see also* ABBOTT, *supra* note 133.

IPR systems in developed and developing nations possess varying levels of maturity and sophistication. Developed nations have developed their IPR systems over a long time.<sup>162</sup> The emerging economies likely have established the formal structures of an IPR system within the past century, and can improve upon IPR enforcement.<sup>163</sup> The MDCs and especially the LDCs in general tend to have limited or non-existent IPR systems.<sup>164</sup>

Patents may, at best, be one of many factors encouraging investment in technology research and development.<sup>165</sup> Studies have found that in most circumstances, the promise of patent protection is not an important ex ante inducement to investments in technologies, though firms do register patents ex post to protect their inventions.<sup>166</sup> Evidence indicates that commercial investment in developing new clean technologies depends on more factors than just IPR, such as anticipated market demand, relative prices of alternative energy sources, regulatory demands, the costs of investment, and public research subsidies and tax inducements.<sup>167</sup>

However, patents play a stronger role in international technology transfer. Foreign technology owners want to be sure that the technologies will be protected from unwanted leaks caused by unsanctioned imitation or movements of personnel.<sup>168</sup> Empirical studies have shown that the volume and technology content of licensing contracts from U.S.-based firms to partners with developing nations

<sup>&</sup>lt;sup>162</sup> The first formal patent system came from the Western Hemisphere in 1474 in Venice. Patent laws in England and the U.S. were formally established in the 1620's and 1790's, respectively. *See* DANIEL C.K. CHOW & EDWARD LEE, INTERNATIONAL INTELLECTUAL PROPERTY 252-3 (2d ed. 2012).

<sup>&</sup>lt;sup>163</sup> For example, the modern Indian patent law was established in 1970. See Jeffrey Colin, Coming into Compliance with TRIPS: A Discussion of India's New Patent Laws, 25 CARDOZO ARTS & ENT. L.J. 877, 880 (2013). Similarly, the modern Chinese patent law was established in 1984. See Joy Y. Xiang, How Wide Should the Gate of Technology Be? Patentability of Business Methods in China, 11 PAC. RIM L. & POL'Y J. 795, 801 (2002).

<sup>&</sup>lt;sup>164</sup> Understanding the WTO: Developing Countries, WORLD TRADE ORG., http://www.wto.org/english/thewto\_e/whatis\_e/tif\_e/dev1\_e.htm (last visited July 25, 2015).

<sup>&</sup>lt;sup>165</sup> Keith Maskus, Differentiated Intellectual Property Regimes for Environmental and Climate Technologies 16 (OECD Envir., Working Paper No. 17, 2010), http://dx.doi.org/10.1787/5kmfwjvc83vk-en [hereinafter Maskus, Differentiated IP Regimes].

<sup>&</sup>lt;sup>166</sup> Levin, Richard C. et al., Appropriating the Returns from Industrial Research & Development, BROOKINGS PAPERS ON ECON. ACTIVITY, SPECIAL ISSUE, 783, 812-818 (1987), http://www.brookings.edu/~/media/projects/bpea/1987%203/1987c\_bpea\_levin\_klevorick\_nelso n\_winter\_gilbert\_griliches.pdf.

<sup>&</sup>lt;sup>167</sup> Maskus, *Differentiated IP Regimes*, supra note 165.

<sup>&</sup>lt;sup>168</sup> KEITH E. MASKUS, INTELLECTUAL PROPERTY RIGHTS IN THE GLOBAL ECONOMY 136-141 (2000).

rises significantly when developing nations strengthen their patent rights.<sup>169</sup> Furthermore, strong patent reforms in developing nations have been demonstrated to bring more imports of capital goods and high-tech goods from developed nations.<sup>170</sup>

Meanwhile, studies further suggest that the ability of IPR to support international technology transfer may depend on other factors such as the market and policy conditions in the receiving nations.<sup>171</sup> This explains why positive impacts of IPR on international technology transfer have been found only in emerging economies, but not in the MDCs and especially not in the LDCs. Technology owners tend not to transfer technologies to the LDCs, because the LDCs tend to have small domestic markets along with relative low capacity for local absorption of technologies, skilled labor, weak governance, and infrastructure.<sup>172</sup>

#### i. The Emerging Economies

Though IPR may have increased the cost for the emerging economies to access foreign clean technologies, that does not justify why IPR has been a major barrier for emerging economies to access foreign clean technologies.

In contrast with the MDCs and the LDCs, the emerging economies have established more mature IPR systems.<sup>173</sup> Therefore, owners of clean technologies from developed nations may prefer to apply for patent protection for their clean technologies in the emerging economies than in the MDCs or the LDCs.<sup>174</sup> The cost of transferring such clean technologies from developed nations may include the cost of securing IPR on these technologies in the emerging economies.

However, IPR that protects foreign clean technologies in the emerging economies should not pose an overwhelming threat to the emerging economies'

<sup>&</sup>lt;sup>169</sup> Lee G. Branstetter et al., *Do Stronger Intellectual Property Rights Increase International Technology Transfer? Empirical Evidence from U.S. Firm-level Panel Data*, 121 Q.J. ECON. 321, 321 (2006).

<sup>&</sup>lt;sup>170</sup> Olena Ivus, Do Stronger Patent Rights Raise High-Tech Exports to the Developing World? 81 J. INT'L ECON. 38, 45 (2010).

<sup>&</sup>lt;sup>171</sup> Maskus, Differentiated Intellectual Property Regimes for Environmental and Climate Technologies, supra note 165.

 $<sup>^{172}</sup>$  Id.

<sup>&</sup>lt;sup>173</sup> See discussion supra notes 163-164.

<sup>&</sup>lt;sup>174</sup> See supra Part II.A.2 (emerging economies have had most of the patent filings in developing nations, and patents on foreign clean technologies have taken about two thirds of the clean technologies patents owned by the emerging economies.)

access to clean technologies. As discussed in Part II.A.1, the basic technical solutions of climate change have long expired from patent protection; rather, incremental improvements or individual features are being patented.<sup>175</sup> Second, a clean technology tends to have different alternatives and substitutes in the market; weakening a single patent holder's control over the market.<sup>176</sup> Both facts imply that a singular IPR-protected clean technology may not have significant dominance in the relevant market.

Meanwhile, the emerging economies benefit from IPR for clean technologies. First, given the emerging economies' increasing commercial investments in clean technologies,<sup>177</sup> they need IPR for clean technologies to capture these investments and build up their own IP portfolios in the clean technologies. In addition, in order for the emerging economies to attract more inbound transfer of foreign clean technologies and to stimulate local innovations, they need to enhance their IPR systems rather than weaken them. International trade flows respond positively to increases in patent protections in the emerging economies, especially in industries that rely heavily on patent protection.<sup>178</sup>

#### ii. The LDCs

IPR should not be a major barrier for the LDCs to access foreign clean technologies. Few foreign clean technology owners have applied for patents in the LDCs.<sup>179</sup> Conversely, as the above review of data on global patenting of clean technologies shows, the LDCs administer few patents on clean technologies.<sup>180</sup> These consequences are likely multiplied by factors such as limited market sizes and potential profit returns that the LDCs offer to foreign firms, and/or their lack of confidence in the investment environment offered by the LDCs.<sup>181</sup>

On the contrary, the LDCs' lack of or limited IPR protection may be one of the reasons for the almost non-existent rate of inbound transfer of foreign clean technologies. Lack of or limited IPR protection in the LDCs enables users in the LDCs to imitate, reverse engineer, and use foreign clean technologies for free. Hence, foreign firms owning clean technologies may choose not to transfer the

<sup>&</sup>lt;sup>175</sup> Barton, Intellectual Property and Access to Clean Energy Technologies in Developing Countries, supra note 129, at 13.

<sup>&</sup>lt;sup>176</sup> *Id*.

<sup>&</sup>lt;sup>177</sup> See discussion supra Part II.A.2.i.

<sup>&</sup>lt;sup>178</sup> Maskus, Encouraging International Technology Transfer, supra note 98, at 10.

<sup>&</sup>lt;sup>179</sup> See discussion supra Part II.A.2.ii (on patent ownership for clean technologies). <sup>180</sup> See discussion supra Part II.A.2.ii.

<sup>&</sup>lt;sup>181</sup> See TRIPS MEETING MINUTES JUNE 11-12, 2013, supra note 107.

technologies to the LDCs voluntarily, fearing the loss of control over the technologies.<sup>182</sup>

# iii. The Other Developing Nations – i.e., the Mid-tier Developing Nations

When an MDC is building up its economy to become more like an emerging economy, IPR will likely help the MDC attract owners of foreign clean technologies to apply for IPR protection of their technologies in the MDC. In such a situation, IPR may increase the price of the MDC's access to the IPR-protected foreign clean technologies.

On the other hand, IPR should not be part of the cost for an MDC's access to foreign clean technologies, especially if the MDC remains at status quo or recedes to become more like an LDC. As data on the global patenting of clean technologies have shown, the MDCs along with the LDCs owned few clean technology patents.<sup>183</sup> Lack of or limited IPR protection in the MDCs may be one reason for this phenomena.

# B. What Are the Potential Underlying Reasons for the Limited Transfer of Clean Technologies to Developing Nations?

While the existence of IPR has not been a major barrier to the international transfer of clean technologies to developing nations, this begs the question: what is? To find the answer, this article analyzes available evidential data such as data supplied by developing nations themselves on what constitutes major barriers to the inbound transfer of clean technologies. This article then supplements the analysis with a review of current scholarship regarding international technology transfer.

# 1. Evidential Data

Data from developing nations collected by the United Nations identify a number of barriers to the inbound transfer of foreign clean technologies. Though IPR was initially listed as a barrier, it has not been considered one since 2009. Data from different surveys on international transfer of clean technologies suggest that IPR helps a developing nation to attract foreign clean technologies. Such data also indicates that IPR is not the sole determinant; other conditions include a developing nation's market size and its capacity to absorb and implement foreign clean technologies.

<sup>&</sup>lt;sup>182</sup> *Study G, supra* note 139, at 167.

<sup>&</sup>lt;sup>183</sup> See discussion supra Part II.A.2.ii (on patent ownership for clean technologies).

## i. Developing Nations' Own Assessments

As introduced earlier in Part I.C, one mechanism that the UNFCCC established via its international technology transfer framework is the Technology Needs Assessment ("TNA") reports. These reports are for developing nations that are parties to the UNFCCC, to identify both their needs for specific clean technologies and the barriers these nations perceive to the inbound transfer of clean technologies.<sup>184</sup> Thus far, these nations have submitted three sets of TNA reports: the first in 2006 with 23 participating developing nation parties, the second in 2009 with 70 participating developing nation parties, and the third in 2013 with 31 participating developing nation parties.<sup>185</sup> The TNA reports by developing nations from 2006 to 2013 identify a number of barriers for inbound transfer of foreign clean technologies. Whereas IPR is listed as a barrier in the 2006 TNA reports, it is not in later reports. The TNA reports do not seem to support the claim that the existence of IPR has been a major barrier to the transfer of clean technologies to developing nations.

The three sets of TNA reports identified very similar patterns on what constituted major barriers to the inbound transfer of clean technologies to developing nations. In all the three sets of TNA reports, developing nations highlighted economic and market barriers as one of the major barriers to the inbound transfer of clean technologies.<sup>186</sup> Specifically, 83%, 82%, and 90% of the

<sup>&</sup>lt;sup>184</sup> Synthesis of Technology Needs Assessments, U.N. FRAMEWORK CONVENTION ON CLIMATE CHANGE, http://unfccc.int/ttclear/templates/render\_cms\_page?TNA\_ida (last visited July 26, 2015).

 <sup>2015).
 &</sup>lt;sup>185</sup> Data extracted from the 2006, 2009, and 2013 TNA synthesis reports. United Nations Framework Convention on Climate Change, Subsidiary Body for Scientific and Technological Advice, Twenty-Fourth Session, Bonn, Ger., May 18-26, 2006, *Synthesis Report on Technology Needs Identified by Parties not Included in Annex I to the Convention*, U.N. Doc. FCCC/SBSTA/2006/INF.1 (Apr. 21, 2006) [hereinafter 2006 TNA Reports]; United Nations Framework Convention on Climate Change, Subsidiary Body for Scientific and Technological Advice, Thirtieth Session, Bonn, Ger., June 1-10, 2009, *Second Synthesis Report on Technology Needs Identified by Parties not Included in Annex I to the Convention*, U.N. Doc. FCCC/SBSTA/2009/INF.1 (May 29, 2009) [hereinafter 2009 TNA Reports]; United Nations Framework Convention on Climate Change, Subsidiary Body for Scientific and Technological Advice, Thirty-Ninth Session, Warsaw, Pol., Nov. 11-16, 2013, *Third Synthesis Report on Technological Advice*, Thirty-Ninth Session, Warsaw, Pol., Nov. 11-16, 2013, *Third Synthesis Report on Technology Needs Identified by Parties not Included in Annex I to the Convention*, U.N. Doc. FCCC/SBSTA/2013/INF.7 (Oct. 21, 2013) [hereinafter 2013 TNA Reports].

<sup>&</sup>lt;sup>186</sup> 2006 TNA Reports, *supra* note 185. 2009 TNA Reports, *supra* note 185; 2013 TNA Reports, *supra* note 185.

reporting nations in the 2006, 2009, and 2013 TNA reports did so, respectively.<sup>187</sup> The figure below ranks the major barriers reported in 2006, according to the percentage of reporting nations who cited these major barriers in their 2006 TNA reports.<sup>188</sup>



In these three sets of TNA reports, the reporting nations also identified what constituted economic and market barriers. The figure below shows such data from the 2006 TNA reports.<sup>189</sup> As shown, here, IPR issues were identified as one of the barriers, though by the fewest reporting nations.



<sup>&</sup>lt;sup>187</sup> 2006 TNA Reports, *supra* note 185. 2009 TNA Reports, *supra* note 185; 2013 TNA Reports, *supra* note 185.

<sup>&</sup>lt;sup>188</sup> 2006 TNA Reports, *supra* note 185.
<sup>189</sup> *Id*.

However, the 2009 and 2013 TNA reports made no mention of IPR issues. The 2009 report, for instance, as shown below, identified "underdeveloped economic infrastructure," "lack of support from national banks, "low affordability by population," and "high costs/limited state resources" as economic and market barriers, and did not include IPR on the list.<sup>190</sup>



One possible reason for the disappearance of IPR issues from the TNA reports is that the reporting nations no longer considered IPR issues a barrier to the international transfer of clean technologies. Alternatively, the reporting nations may have merged IPR issues with another barrier, for instance the barriers relating to high costs or incompatible prices. Only high costs consistently appeared in all three sets of TNA reports. Developing nation parties of the UNFCCC have consistently cited high costs and/or lack of financial resources as an economic and market barrier to the inbound transfer of clean technologies and it has consistently ranked the highest in term of the number of reporting nations citing it as a barrier.<sup>191</sup>

These reports, however, did not identify what caused the high investment cost or high cost for transfer for clean technologies. They also did not mention IPR an element of these high costs. Could IPR price be a necessary part of the cited

<sup>&</sup>lt;sup>190</sup> 2009 TNA Reports, *supra* note 185, at 29-30.

<sup>&</sup>lt;sup>191</sup> For example, 30% of the reporting nations in the 2006 TNA reports cite high investment costs as an economic and market barrier, 50% of the reporting nations in the 2009 TNA reports cite high costs and limited state resources as an economic and market barrier; and 85% of the reporting nations in the 2013 TNA reports cite lack of or inadequate access to financial resources as an economic and market barrier to the development and transfer of mitigation technologies within the energy sector. *See* 2006 TNA Reports, *supra* note 185; 2013 TNA Reports, *supra* note 185. The 2013 reports have separated reporting regarding developing nations' needs on mitigation technologies from those of adaptation technologies. The 2006 and 2009 TNA reports did not make such a distinction.

high costs or high investment cost for inbound transfer of clean technologies for developing nations?

The answer depends on a developing nation's ability to attract technologies with IPR. If a developing nation is able to attract foreign firms to apply for and obtain IPR locally on the firms' clean technologies, the high cost of technology transfer may include the price premium added by local IPR on the foreign clean technology. Otherwise, when foreign firms do not apply for IPR protection for their clean technologies in developing nation, the high cost of the transfer of clean technologies likely does not include IPR costs.

The high costs facing the MDCs and the LDCs for inbound transfer of foreign clean technologies are not likely the result of IPR protection. The MDCs and the LDCs have few patents on clean technologies.<sup>192</sup> These nations may not have provided sophisticated IPR systems that foreign technology owners can rely on. Furthermore, foreign technology owners may choose not to transfer their technologies to these nations due to their limited market sizes and low potentials for financial profits.<sup>193</sup>

On the other hand, IPR might have contributed to the high costs for inbound transfer of foreign clean technologies to emerging economies. As the analysis of the patent data in Part II.A shows, the emerging economies have held most of the clean technology patents in developing nations, and two-thirds of these patents were on foreign clean technologies. Because of the market size and potential profitability emerging economies can offer, foreign technology owners may be attracted to transfer their technologies to the emerging economies. Meanwhile, the emerging economies tend to have established IPR systems which allow the foreign technology owners to secure local IPR protection on their technologies.

ii. Other Evidential Data

Other evidential data<sup>194</sup> supplement the findings from the TNA reports, which suggest that IPR helps attract foreign clean technologies to developing nations. The data also indicates that IPR is not the sole determinant; other conditions that attract these technologies include adequate market size and the capacity to absorb and implement foreign clean technologies. The additional evidence correlates with developing nations' TNA reports, which identified multiple domestic barriers such as economic and market, public policy, human

<sup>&</sup>lt;sup>192</sup> See discussion supra Part II.A.

<sup>&</sup>lt;sup>193</sup> See TRIPS MEETING MINUTES JUNE 11-12, 2013, supra note 107.

<sup>&</sup>lt;sup>194</sup> See Study G, supra note 139; STUDY B, supra note 84.

capital, institutional, infrastructure, etc., for attracting inbound transfer of clean technologies.

Surveys have found that IPR is good for the international transfer of clean technologies to developing nations. For example, a 2010 study examining factors driving international transfer of clean technologies ("Study G") using patent data from sixty-six nations during 1990-2003 found that strong IPR has a positive impact on in-bound transfer of clean technologies.<sup>195</sup> Further, Study B (cited in Part I.C) found that the patent system can support and enhance technology transfer, because without patents to protect the foreign companies' products and processes, the foreign companies may be reluctant to engage in technology transfer and associated investments.<sup>196</sup>

However, studies also discovered that IPR is not the only factor in attracting foreign clean technologies to developing nations. For example, Study G finds that a nation's capacity to absorb foreign clean technologies is determinative for local patent filing and thus the inbound transfer of foreign clean technologies.<sup>197</sup> For example, Study G found that patent filings on foreign technologies increase in nations that have active R&D in the same technology field,<sup>198</sup> and restrictions on international trade negatively affect international technology transfer.<sup>199</sup>

Furthermore, Study B found that the main factors that impede international transfer of clean technologies include access to trade secrets, developing nations' ability to provide suitable skilled staff, scientific infrastructure, and favorable market conditions.<sup>200</sup> These are collectively known as access to know-how from the foreign companies. Meanwhile, Study B enlisted necessary complementary factors such as infrastructure, effective government policies and regulations, knowledge institutions, and access to credit and venture capital, skilled human capital, and networks for research collaboration.<sup>201</sup> These factors correlate with the major barriers identified by developing nations in the TNA reports discussed above.

<sup>&</sup>lt;sup>195</sup> *Study G, supra* note 139, at 180.

<sup>&</sup>lt;sup>196</sup> STUDY B, *supra* note 84, at 9.

<sup>&</sup>lt;sup>197</sup> Study G, supra note 139.

<sup>&</sup>lt;sup>198</sup> *Id.* at 180.

<sup>&</sup>lt;sup>199</sup> *Id.* at 181 (However, Study G finds that restrictions to FDI promote technology transfer. Study G reasons that this may be because the restrictions ask for technology transfer, or force foreign technology owners rely more on patents as an alternative or to secure their FDI.)

 $<sup>^{200}</sup>$  STUDY B, *supra* note 84, at 50.

 $<sup>^{201}</sup>$  *Id*.

### 2. Assessment

The analysis below examines what impacts the transfer of clean technologies to developing nations via each of the three market-based venues i.e., international technology licensing, FDI, and international trade. The analysis leverages current scholarship on international technology transfer, finding that IPR protection, capacity to absorb and adopt foreign technologies, market size and policy certainty and transparency are likely conditions for a nation attracting inbound transfer of foreign technologies. Further, although IPR helps attract foreign technologies, strong IPR likely stifle the development of local industries for some developing nations – such as the LDCs – that are at the beginning stages of technology development and rely on learning via duplicative imitation.

# i. International Technology Licensing

Technology licensing occurs when an owner of a proprietary technology consents to another party's use of the technology in exchange for value.<sup>202</sup> International technology licensing is a particularly important source for the transfer of standalone technologies, e.g., technical information or know-how that is not embodied in equipment or hardware.<sup>203</sup>The main criteria for a nation to attract foreign technologies via international technology licensing include market size, policy certainty and transparency, capacity to absorb and implement foreign technologies, and sufficient IPR protection. For example, studies shows that nations with substantial engineering skills and R&D programs for adaptation and learning attract more international technology licensing than other nations.<sup>204</sup>

IPR is another important factor for international technology transfer via technology licensing. When developing nations with the capacities to absorb and use foreign technologies strengthen their IPR protections, developed nations are more likely to license their technologies to these developing nations due to their low wage and production cost.<sup>205</sup> Study B, cited in Part I.B, also found that the state of IPR in the nation of the licensee was an important factor in a licensor's decision to enter into a licensing agreement; and that licensing-intensive respondents viewed IPR as a more important factor than others in the nation of the

<sup>&</sup>lt;sup>202</sup> WORLD INTELL. PROP. ORG., SUCCESSFUL TECHNOLOGY LICENSING 5 (2015), http://www.wipo.int/edocs/pubdocs/en/licensing/903/wipo\_pub\_903.pdf.

<sup>&</sup>lt;sup>203</sup> See Hoekman et al., supra note 74, at 1589.

<sup>&</sup>lt;sup>204</sup> Guifang Yang & Keith E. Maskus, *IPR*, *Licensing and Innovation in an Endogenous Product-Cycle Model* (World Bank, Working Paper No. 2973, 2003), https://openknowledge. worldbank.org/bitstream/handle/10986/19156/multi0page.pdf?sequence=1.

<sup>&</sup>lt;sup>205</sup> MASKUS, GLOBALIZING INFORMATION, *supra* note 127.

licensee such as scientific infrastructure, human capital, favorable market conditions, and investment climates.<sup>206</sup>

ii. Foreign Direct Investment

Foreign direct investment ("FDI") refers to when one nation's commercial entity invests cross-border in another nation.<sup>207</sup> Such an investment can be the commercial entity establishing business operations, acquiring assets, or taking up stakes in businesses in the other nation.<sup>208</sup> The investment may involve the transfer of capital, management, technology, and organizational skills.<sup>209</sup> FDI likely contributes positively to international transfer of technologies to developing nations. Factors such as the market size, policy clarity and transparency, human capital, and availability of IPR protection of the recipient nation all would enhance inbound FDI.

FDI by commercial entities, such as the MNCs, provides developing nations with more access to foreign technologies. Developing nations may also benefit from FDI's spillover effects, i.e., the demonstrations of foreign technical and business operations, labor turnover by personnel movements, and interactions among businesses in the chain of moving a product or service to the end users.<sup>210</sup>

Multiple factors affect a nation's ability to receive FDI. Similar to international technology licensing, market size, policy clarity and transparency of the recipient nations affect FDI.<sup>211</sup> A study testing the effects of inbound FDI on growth in 69 developing nations found that inbound FDI contribute more to domestic growth than domestic investments do, but only when the recipient nation has a minimum threshold stock of human capital.<sup>212</sup> Multiple studies show a positive correlation between perceived strength of IPR protection in developing nations

<sup>&</sup>lt;sup>206</sup> Latif et al., *supra* note 29; STUDY B, *supra* note 84, at 50-58.

<sup>&</sup>lt;sup>207</sup> Foreign Direct Investment Definition, FIN. TIMES, http://lexicon.ft.com/Term?term=foreign-direct-investment (last visited July 12, 2015).

 $<sup>^{208}</sup>$  Id.

<sup>&</sup>lt;sup>209</sup> *Id*.

<sup>&</sup>lt;sup>210</sup> Hoekman et al., *supra* note 74, at 1588.

 $<sup>^{211}</sup>$  *Id*.

<sup>&</sup>lt;sup>212</sup> E. Borensztein et al., *How Does Foreign Direct Investment Affect Economic Growth?* 45(1) J. INT'L ECON. 115, 117 (1998).

<sup>&</sup>lt;sup>213</sup> See, e.g., Branstetter et al., *supra* note 169, at 322; Jeong-Yeon Lee & Edwin Mansfield, *Intellectual Property Protection and U.S. Foreign Direct Investment*, 78(2) REV. OF ECON. AND STAT. 181, 181 (1996); Edwin Mansfield, *Intellectual Property Protection, Direct Investment*, *and Technology Transfer*, (Int'l Fin. Corp., Discussion Paper No. 27, 1995).

failed to provide patent protection for foreign inventions, foreign firms resorted to use "less than best-practice technologies" in developing nation.<sup>214</sup>

iii. International Trade

International trade likely increases developing nations' access to foreign technologies. IPR protection and the capacity to absorb and adapt foreign technologies will attract trade inflows. However, for LDCs or other developing nations that are still at the beginning stages of their domestic technology development, strong IPR will likely be restrictive for the development of local industries.

International trade is the cross-border exchange of capital, goods, and services.<sup>215</sup> Similar to the spillover effects caused by FDI, openness in trade facilitates international technology transfer by allowing the recipient nations to access foreign technologies via exposure to new equipment, foreign business and technical operations.

Besides being open to international trade, developing nations' capacity for absorbing and adapting foreign technologies is important for foreign technologies to effect local technical change. <sup>216</sup> When a developing nation lacks such capacity, it may utilize open trade to learn of foreign practices and/or use FDI to acquire technology.<sup>217</sup>

Meanwhile, IPR likely attracts the inflow of trade, at least for some developing nations. An empirical study of international trade flows from 1984, when there were still huge gaps in IPR systems among different nations, shows that stronger IPR significantly expands bilateral imports.<sup>218</sup> A more recent study on the impact of IPR on China's import industries indicated that strong IPR stimulates imports, especially for knowledge-intensive products.<sup>219</sup>

However, IPR's positive effect on technology transfer via trade may not apply to all developing nations. Through open trade, developing nations can rise up

<sup>&</sup>lt;sup>214</sup> M. Scott Taylor, *TRIPS, Trade, and Technology Transfer*, 26(3) CAN. J. ECON. 625, 637 (1993).

<sup>&</sup>lt;sup>215</sup> Reem Heakal, *What Is International Trade?*, INVESTOPEDIA, http://www.investopedia. com/articles/03/112503.asp (last visited Aug. 18, 2015)

<sup>&</sup>lt;sup>216</sup> Hoekman et al., *supra* note 74, at 1588.

<sup>&</sup>lt;sup>217</sup> *Id*.

<sup>&</sup>lt;sup>218</sup> MASKUS, GLOBALIZING INFORMATION, *supra* note 127, at 5.

<sup>&</sup>lt;sup>219</sup> Titus O. Awokuse & Hong Yin, *More Bilateral Trade? Evidence from China's Imports*, 38(8) WORLD DEV. 1094, 1104 (2010).

the "duplicative imitation, creative imitation and inventing" ladder of technology development by imitating and reverse engineering advanced foreign technical and related business operations.<sup>220</sup> If a developing nation is in the duplicative imitation stage, in the absence of technology licensing, strong IPR would raise developing nation's imitation costs, restrict technology diffusion, and reduce long-term incentives to innovate. Currently, many developing nations are at the duplicative imitation stage, hoping to absorb foreign technologies into labor-intensive export production and evolve into higher value-added stages such as creative imitation or inventing over time. In particular, the LDCs have barely stepped onto this ladder of technology learning.<sup>221</sup> Therefore, for these developing nations, differentiated IPR systems reflecting these developmental realities likely make more sense than the strong IPR systems used in developed nations. Such developing nations probably would also benefit from having access to mechanisms – e.g., international aid, subsidies or differential pricing schemes – that reduce the cost of importing IPR-protected goods or services.<sup>222</sup>

### C. Summary

As discussed in Part I.B, addressing climate change is a pressing issue; in order to meet the 2°C goal, we need to reduce 60% of the anthropogenic GHG emissions by 2050, using 2000 as a base line.<sup>223</sup> Rapid development and deployment of clean technologies to meet this goal requires developed and developing nations to act independently and collaboratively.

The stalemate between developing nations and developed nations regarding IPR's role in improving international transfer of clean technologies must cease. As the analysis in Part II.A shows, the existence of IPR has not been a major roadblock for the transfer of clean technologies to developing nations.<sup>224</sup> Instead, lack of proper IPR protection for clean technologies may impede the international transfer of clean technologies. Commercial sectors in developed nations play a significant role in the development and transfer of clean technologies, and they are concerned about losing their control of the technologies to be transferred if developing nations do not offer proper IPR protections. Therefore, developing nations need to offer IPR in order to attract inbound transfer of clean technologies.

<sup>&</sup>lt;sup>220</sup> Hoekman et al., *supra* note 74, at 1593.

 $<sup>^{221}</sup>$  *Id*.

<sup>&</sup>lt;sup>222</sup> *Id*.

<sup>&</sup>lt;sup>223</sup> See IPCC Fourth Assessment Report, supra note 49.

<sup>&</sup>lt;sup>224</sup> See analysis supra Part II.A.

However, developing nations should be allowed to customize their IPR protections to address the realities of their countries' economic development. Strong IPR protections may not benefit all developing nations equally. For developing nations that currently rely on duplicative imitation of foreign practices for technology development, strong IPR protections will likely inhibit such practice and hence the growth of domestic industries.

Meanwhile, IPR is just one of the conditions enabling developing nations to attract inbound transfer of clean technologies. According to the analysis in Part II.B, in order to attract inbound transfer of foreign clean technologies, a developing nation also needs to have certain capacity. Such capacity includes a good investment environment (such as market conditions, policy clarity and transparency) openness to trade for attracting international technology transfer, and domestic scientific infrastructure and human capital for absorbing and implementing foreign technologies into the local production process.

Likely due to a lack of some of such capacity, most developing nations especially the MDCs and the LDCs—have had difficulties attracting foreign clean technologies. Meanwhile, as the examination in Part I.C shows, emerging economies have been attracting most of the limited international transfer of clean technologies to developing nations. This is likely due to the fact that emerging economies have most of such capacity, e.g., market sizes and profitability, more established IPR systems and domestic ability to absorb and implement foreign clean technologies. The MDCs and the LDCs have yet to build up such capacity to attract inbound transfer of foreign clean technologies.

Developed nations can help developing nations—especially the MDCs and the LDCs--build up such capacity. Because of climate change's global impact and developed nations' historical contributions to climate change, developed nations have the self-interest and moral duty to help developing nations address climate change, e.g., via international aid. Furthermore, the governments of developed nations can set up domestic initiatives and mechanisms to encourage their commercial sectors to transfer clean technologies to developing nations.

#### III

# PROPOSAL: FOCUS ON DOMESTIC INNOVATION, INTERNATIONAL AID, AND INTERNATIONAL TECHNOLOGY COLLABORATION

This article proposes that domestic innovation, international aid and international technology collaboration should be the focus, rather than international transfer of clean technologies, in order to effectively address climate change via clean technologies. The proposal aims to encourage the rapid and sustainable development and deployment of clean technologies, while addressing the factors that likely have induced the limited amount of transfer of clean technologies to developing nations during the past two decades.

The proposed solution has three prongs. First, both developed nations and developing nations should stimulate domestic innovations on clean technologies by leveraging diverse tools for encouraging innovations. This includes developed nations optimizing their IPR systems to encourage advancements in clean technologies, along with developing nations building customized IPR systems reflecting their national realities. Second, developed nations and even the emerging economies should provide financial and technical aid to developing nations, especially the MDCs and the LDCs, to help them combat climate change and build the sustainable national capacity to attract, absorb and implement foreign clean technologies. Third, when applicable, developed nations and developing nations should construct collaboration platforms for clean technology developments that would benefit both parties.

#### A. Domestic Innovation

Both developed nations and developing nations should focus on encouraging domestic innovations in clean technologies by leveraging diverse means for cultivating innovation. Such means include optimizing existing IPR systems (e.g., in developed nations) or building up customized IPR systems that reflect the nation's developmental realities (e.g., in developing nations). They may also include utilizing, where appropriate, open source movement, open innovation, prizes, patent pools and patent commons.

#### 1. Developed Nations

Developed nations should focus on advancing the development of clean technologies, as discussed in Part I.B, to make the needed technical breakthroughs and provide clean technologies as attractive and affordable alternatives to the traditional high-carbon technologies. Developed nations have the resources and human capital to invest in advancing clean technology innovations, and are thus well suited to take leadership in driving them. To do so may require that developed nations optimize their existing IPR systems for rapid development and deployment of clean technologies. It also may require leveraging other tools for promoting innovations.

Ideally, developed nations will optimize their existing IPR systems so as to encourage advanced development of clean technologies and facilitate outbound transfer of clean technologies to developing nations. Different proposals have been put forth regarding how to optimize the existing IPR systems to facilitate development of clean technologies.<sup>225</sup> Accelerated patent examination, reduction, waiver or cancellation of administration fees for patent applications on clean technologies, earlier publication of clean technology patent applications, priority for clean technology patents at the opposition and infringement stage, and better classification of the clean technologies are a few possible approaches for encouraging the patenting of clean technologies.

Quite a few nations have implemented special IPR treatments for clean technologies. For example, patent offices in the U.K., the U.S., Japan, Australia, China, Korea, Israel, and Brazil have instituted fast-track examinations for clean technology patents applications.<sup>226</sup> Expediting the examination process for patent applications on clean technologies means less delays in granting protection to a patentable clean technology. Under the U.K. fast track program for patent applications of clean technologies,<sup>227</sup> the examination time is reduced from 2-3 years to 9 months - a 75% reduction of examination time.<sup>228</sup> Such reduced delay brings earlier awareness of and access to the patented technologies by the general public, including developing nations.

Optimizing the IPR system is just one approach to advance development of clean technologies. Other means should be explored as well. For example, the open source movement for the software industry may work for fostering development in a specific clean technology field. Prizes for specific clean technology sectors may inspire the breakthrough innovations needed for these sectors. Patent pools and patent commons can also be formed to ease access to proprietary clean technologies.

## 2. Developing Nations

Developing nations should focus on building environments that foster domestic development of clean technologies while attracting inbound transfers of foreign clean technologies. Most importantly, for their own sustainable

<sup>&</sup>lt;sup>225</sup> RIMMER, INVENTING CLEAN TECHNOLOGIES *supra* note 100; Joshua D. Sarnoff, *The Patent System and Climate Change*, 16 VA. J.L. & TECH. 301 (2011).

<sup>&</sup>lt;sup>226</sup> Antoine Dechezleprêtre, *Fast-Tracking Green Patent Applications: An Empirical Analysis*, INT'L CTR. TRADE & SUSTAINABLE DEV. ISSUE PAPER NO. 37 (2013), http://www.ictsd.org/downloads/2013/02/fast-tracking-green-patent-applications-an-empirical-analysis.pdf.

<sup>&</sup>lt;sup>227</sup> Patents: Accelerated Processing, U.K. INTELL. PROP. OFFICE (June 13, 2014), https://www.gov.uk/patents-accelerated-processing#green-channel.

<sup>&</sup>lt;sup>228</sup> Dechezleprêtre, Fast Tracking Green Patent Applications, supra note 227.

development, developing nations need to build up an environment fostering domestic development of clean technologies. This way, developing nations can build their own portfolios in clean technologies, empowering themselves for a low-carbon economy and to have better negotiation positions with entities from developed nations.<sup>229</sup>

Similar to developed nations, developing nations need to leverage diverse tools for promoting domestic innovation of clean technologies. In addition, developing nation's internal knowledge of the geographic regions, traditional technology and indigenous practice may also provide a holistic approach for addressing climate change when integrated with modern clean technologies. In order to increase inbound transfer of foreign clean technologies, developing nations need to build the national capacity identified in Part II.B for attracting, absorbing and implementing foreign technologies. Offering IPR protection is part of such national capacity. IPR may also encourage domestic innovation, when appropriately adapted to a nation's developmental reality.

i. Building National IPR Systems That Reflect Developmental Realities

The reality of today's global economy suggests the necessity of a domestic IPR system for a developing nation. Developed nations have had their dominant imprints on the operations of the global economy, including in integrating their IPR standards into the WTO TRIPS Agreement, with which all WTO member nations are required to comply. Further, as data on global investments in clean technologies discussed in Part II.A show, commercial sectors in developed nations far outpace governments insofar as investments in clean technologies. Such disparity means the governments of developed nations will likely have difficulties in requesting the commercial sectors to forego their preferences for strong IPR, as developing nations' demand of weakened or no IPR on clean technologies would require. Hence, the use of IPR will most likely persist in global trade. Instead of resisting it, developing nations should utilize IPR for their long-term economic development and build domestic IPR systems that address and reflect national developmental realities.

The global economy may offer developing nations additional leverage for technology development besides the traditional model of "duplicative imitation, creative imitation, and inventing." Instead of relying mainly on imitating advanced

<sup>&</sup>lt;sup>229</sup> Some developing nations such as the emerging economies are more or less doing so. Different national priorities and barriers such as the ones identified by developing nations in the TNA reports may have deterred other developing nations from making domestic development of clean technologies a priority.

foreign practices to jumpstart local technology development, integrating a developing nation's local economy into the global economy and opening it up to global trade may speed up its technology development via the inflow of capital and modern business or technical practices. Such integration likely requires membership in the WTO.<sup>230</sup> The WTO, meanwhile, requires its member nations to comply with the TRIPS Agreement, which sets up minimum IPR requirements.<sup>231</sup>

Joining the WTO and complying with the TRIPS Agreement probably would not prevent a developing nation from having a customized IPR system, which could reflect a developing nation's own needs in technology development.<sup>232</sup> While the TRIPS Agreement establishes minimum requirements for IPR protection in a WTO member nation, it also offers flexibilities that can be leveraged at member nations' discretions.<sup>233</sup> In particular, it recognizes the LDCs' need to have "maximum flexibility" in implementing the requirements of the agreement.<sup>234</sup>

The TRIPS Agreement provides individual WTO member nations policy space for regulating patentability of clean technologies or denying patent protection for certain technologies. For example, it does not define what constitutes an "invention" nor the criteria for patentability,<sup>235</sup> thus each national government can provide its own criteria regulating what inventions can be granted patent protection. The TRIPS Agreement also leaves room for each member nation to deny patent protection to technologies that are necessary to "protect *ordre public* or morality, including to protect human, animal or plant life or health or to avoid

<sup>&</sup>lt;sup>230</sup> As of July 2015, there are 196 countries in the world, 161 of them are WTO member nations. *See Understanding WTO, the Organization,* WORLD TRADE ORG., https://www.wto.org/english/thewto\_e/whatis\_e/tif\_e/org6\_e.htm (last visited July 13, 2015).

<sup>&</sup>lt;sup>231</sup> VANDANA SHIVA, PROTECT OR PLUNDER? UNDERSTANDING INTELLECTUAL PROPERTY RIGHTS 51 (2001).

<sup>&</sup>lt;sup>232</sup> The costs and benefits associated with joining the WTO are not within the scope of this Article. Instead, the discussion here is limited to whether joining the WTO would prevent a nation from having a customized IPR system reflecting the nation's reality in technology development.

<sup>&</sup>lt;sup>233</sup> Advice on Flexibilities Under the TRIPS Agreement, WORLD INTELL. PROP. ORG., http://www.wipo.int/ip-development/en/legislative\_assistance/advice\_trips.html (last visited Nov. 3, 2015).

<sup>&</sup>lt;sup>234</sup> TRIPS Agreement, *supra* note 63, at Preamble.

<sup>&</sup>lt;sup>235</sup> Typical patentability criteria include novelty, inventiveness, and industrial utility. For example, the U.S. requires an invention to be novel and non-obvious, besides being patent eligible and useful. Note the difference between patentability and patent eligibility; the latter means patentable subject matter. TRIPS art. 27 allows "all fields of technology" to be patentable subject matter; but TRIPS did not define patentability, i.e., what is novelty, inventiveness, etc. *See id.* at art. 27.
serious prejudice to the environment."<sup>236</sup> Thus, when necessary, polluting technologies can be construed as posing serious harm to the environment, the health of human, animal or plant life and be denied patent protection, even when such technologies satisfy the patentability criteria.

The TRIPS Agreement also provides a WTO member nation the means to regulate the use of a patented invention. For example, the TRIPS Agreement allows compulsory licensing.<sup>237</sup> However, this article recommends judicious use of compulsory licensing, as it does not bring in the know-how and trade secrets associated with the patented invention and may discourage domestic innovation, FDI, and inbound technology transfer.

Further, the TRIPS Agreement provides competition measures wherein a national government can address IPR licensing practices or conditions that "may have adverse effects on trade and may impede the transfer and dissemination of technology."<sup>238</sup> This means that for technologies locally protected by IPR, a WTO member nation can regulate abusive licensing practices or conditions related to such technologies, including foreign technologies. Therefore, developing nations may leverage domestic competition regulations to address anti-competition practices involving the transfer of foreign clean technologies.

Furthermore, the security provision in the TRIPS Agreement enables a WTO member nation to identify threats to essential national security – e.g., famine, mass migration, and war – and to take proper actions.<sup>239</sup> As predicted by the IPCC, climate change has the potential to cause mass human migration, to threaten national security, and even to cause civil wars when access to key living resources such as water and food becomes an issue.<sup>240</sup> Developing nations may frame climate change as a threat to national security or energy security and take necessary actions to address it.

Hence, even in light of the minimum IPR requirements of the TRIPS Agreement, a developing nation still has the flexibility to determine whether certain clean technologies have IPR protection, as well as whether to leverage compulsory license, competition and/or security measures to regulate the use of IPR-protected clean technologies.

<sup>&</sup>lt;sup>236</sup> *Id.* at art. 27.2.

<sup>&</sup>lt;sup>237</sup> *Id.* at art. 31.

<sup>&</sup>lt;sup>238</sup> *Id.* at art. 8.2, art. 40.1.

<sup>&</sup>lt;sup>239</sup> *Id.* at art. 73.

<sup>&</sup>lt;sup>240</sup> IPCC Fourth Synthesis Report, supra note 26.

Meanwhile, in building a customized IPR system reflecting a developing nation's own realities, the developing nation needs to balance stimulating domestic innovations and attracting inbound transfer of clean technologies. As indicated in Part II.B, strong IPR helps to attract foreign technologies, but unduly strong IPR may stifle a developing nation's domestic technology development.<sup>241</sup>

ii. Building up National Capacity to Attract Inbound Transfer of Clean Technologies

While fostering domestic innovation in clean technologies, developing nations should also incorporate clean technologies already developed by the global community. To do so, as discussed in Part II.B, developing nations need to build up the national capacities necessary for attracting, absorbing and implementing foreign clean technologies. For example, developing nations can remove entry barriers to make technology transfer more attractive to foreign firms.<sup>242</sup> In practice, many nations seek to attract foreign investments through special economic zones, subsidies, tax holidays and other grants.<sup>243</sup> In addition, developing nations can also use subsidies or similar incentives to encourage domestic firms to adopt risky foreign clean technologies, and/or impose stricter environmental regulations to increase domestic demand for clean technologies. <sup>244</sup> Policy interventions, including implicit and explicit subsidies, paved the way for the miraculous economic development in South Korea and Taiwan.<sup>245</sup>

Meanwhile, developing nations may further invest in local human capital. Human capital, such as well-trained technical staff and technology managers, are essential for local absorption and implementation of foreign clean technologies.<sup>246</sup>

# B. International Aid

Developed nations have both an ethical imperative to and self-interest in finding ways to help developing nations combat climate change.<sup>247</sup> Historically, developed nations contributed largely to the climate change. As suggested by developing nations, developed nations should address such negative externality produced by their pursuit of economic development. At the same time, helping

<sup>&</sup>lt;sup>241</sup> See discussion supra Part II.B.

<sup>&</sup>lt;sup>242</sup> Maskus, *Encouraging International Technology Transfer, supra* note 98.

<sup>&</sup>lt;sup>243</sup> WORLD BANK, WORLD DEVELOPMENT REPORT 2005: A BETTER INVESTMENT CLIMATE FOR EVERYONE (2005), https://openknowledge.worldbank.org/handle/10986/5987.

<sup>&</sup>lt;sup>244</sup> MASKUS, GLOBALIZING INFORMATION, *supra* note 127, at 173-176.

<sup>&</sup>lt;sup>245</sup> Id.

<sup>&</sup>lt;sup>246</sup> Littleton, *supra* note 74, at 20.

<sup>&</sup>lt;sup>247</sup> *Id.* at 21.

developing nations address climate change is in the interest of developed nations, as they will receive the global impact on environment by developing nations' increasing energy consumption as a result of their economic developments.

Meanwhile, developing nations – especially the LDCs and the MDCs – do need help in combatting climate change. In particular, LDCs that are most vulnerable to climate change require special assistance, since they experience the impact of climate change most acutely while contributing to climate change the least. Further, trade and investment flows to these nations are not as responsive to IPR protection as to the emerging economies.<sup>248</sup> Developing nations request support from developed nations to address climate change via financial aid, technology transfer and capacity building.<sup>249</sup>

The proposal considers that developed nations are able to assist developing nations via capacity building, financial aid, and technology transfer. First, developed nations can contribute the most by helping the MDCs and the LDCs build up sustainable national capacities to attract, absorb and implement foreign clean technologies. Such assistance would benefit developed nations as well. It would enable developing nations to build low-carbon economies so as to reduce their future impact on the global climate and enhance their contributions to the global community. It would also expand the international markets that are suitable for the deployment of the clean technologies owned by developed nations' commercial sectors.

Second, developed nations should also pool resources together to help developing nations address climate change. Financial aid can be an important factor in helping developing nations to access, develop, and deploy clean technologies. The UNFCCC stipulates that developed nations must provide financial resources for developing nations to address climate change.<sup>250</sup> As the discussion of the TNA reports in Part II.B shows, the majority of developing nations perceive the high cost of foreign clean technologies as a barrier to accessing such clean technologies. This article therefore suggests that at a minimum, a global fund such as the Green Climate Fund ("GCF") should be maintained and expanded to facilitate international transfer of clean technologies. Such a fund can be used to pay for the high costs encountered by developing

<sup>&</sup>lt;sup>248</sup> *Id.* at 15.

<sup>&</sup>lt;sup>249</sup> Summary of Climate Summit 2014, INTERN'L INST. SUSTAINABLE DEV. (September 23, 2014), http://www.iisd.ca/climate/cs/2014/html/crsvol172num18e.html (for example, statements by leaders from India, Equatorial Guinea, Malaw, Guinea-Bissau, Fiji, Lesotho, Mauritania, Namibia, Sweden, Tanzania).

<sup>&</sup>lt;sup>250</sup> *Id.* at art. 4.3.

nations in importing foreign clean technologies.<sup>251</sup> Developed nations can supply the balance of the fund to fulfill their obligations detailed in the UNFCCC and other international treaties. Other venues for funding can come from carbon tax or auction incomes in the carbon-trade systems.<sup>252</sup>

On the financial aid front, there has been positive progress recently. The GCF reached its 10 billion USD threshold during the Lima climate change conference held in December 2014.<sup>253</sup> This is an encouraging step toward the ultimate goal of developed nations providing financial aid in the amount of 100 billion USD per year by 2020.<sup>254</sup> Thus far, both developed nations and emerging economies have contributed to the fund.<sup>255</sup> In 2014, the U.S. pledged 2.3 billion USD, Germany and France each pledged 1 billion USD, and China pledged 500 million USD.<sup>256</sup> During the latest climate change conference, which occurred in Paris in December 2015, the commitment of 100 billion USD per year by 2020 is reaffirmed, with an aspiration to go beyond this commitment by 2025.<sup>257</sup>

The third approach for developed nations to assist developing nations involves technology transfer. Under the stipulations of international treaties such as the WTO TRIPS Agreement and the UNFCCC, developed nations have committed to facilitate technology transfer to developing nations, especially the LDCs.<sup>258</sup> The governments of developed nations can do so by, e.g., implementing domestic

<sup>&</sup>lt;sup>251</sup> Climate Change Update: Technology, ICTSD (May 1, 2008), http://www.ictsd.org/ bridges-news/biores/news/climate-change-update-technology-ip-issues-on-the-table ("under the Montreal Protocol, the technology funds included money to pay for the necessary license fees").
<sup>252</sup> Id.

<sup>&</sup>lt;sup>253</sup> *Green Climate Fund Exceeds* \$10 *Billion*, U.N. FRAMEWORK CONVENTION ON CLIMATE CHANGE (Dec. 10, 2014), http://newsroom.unfccc.int/financial-flows/green-climate-fund-exceeds-10billion.

<sup>&</sup>lt;sup>254</sup> United Nations Framework Convention on Climate Change, Conference of the Parties, Copenhagen, Den., Dec. 7-19, 2009, *Report of the Conference of the Parties on Its Fifteenth Session - Addendum Part II: Actions Taken by the Parties at Its Fifteenth Session*, U.N. Doc. FCCC/CP/2009/11/Add.1 (Mar. 10, 2013) (Green Climate Fund established in COP17, to mobilize USD100 billion per year by 2020 by developed nations to address the needs of developing nations for addressing climate change).

<sup>&</sup>lt;sup>255</sup> Summary of Climate Summit 2014, supra note 251.

<sup>&</sup>lt;sup>256</sup> *Id.* 

<sup>&</sup>lt;sup>257</sup> Historic Paris Agreement on Climate Change: 195 Nations Set Path to Keep Temperature Rise Well Below 2 Degrees Celsius, UNFCCC (Dec. 12, 2015), http://newsroom.unfccc.int/ unfccc-newsroom/finale-cop21/.

<sup>&</sup>lt;sup>258</sup> TRIPS Agreement, *supra* note 62, at art. 66.2; UNFCCC Treaty, *supra* note 24, at art. 4.1, 4.7, 4.3, 4.5.

initiatives for encouraging transfer of clean technologies.<sup>259</sup> More specifically, the governments of developed nations can award preferential tax treatment for R&D performed in developing nations by firms from developed nations,<sup>260</sup> or for the firms' transfer of clean technologies to developing nations, or making these technologies publically available.<sup>261</sup>

# C. International Technology Collaboration

The UNFCCC requires all participating parties to "promote and cooperate in the development, application and diffusion, including transfer, of technologies" relevant to GHG emissions.<sup>262</sup> While international aid may focus primarily on the MDCs and the LDCs, international technology collaboration will likely occur between a developed nation and an emerging economy. The reason is that the emerging economies likely have the necessary IPR systems and national capacities to support mutually-benefiting joint development or deployment of clean technologies.

As described in Part I.C, the 2010 Cancun global climate change conference established the Technology Mechanism to enhance action on clean technology development and deployment in developing nations.<sup>263</sup> This mechanism is expected to be a good platform for bringing developed nations and developing nations together to accelerate development and deployment of clean technologies.<sup>264</sup> For example, a developing nation may identify its needs for certain clean technology development. Technology Mechanism may help identify a developed nation that is interested in working with the developing nation to co-develop the clean technology needed or adapt and deploy the clean technology if the developed nation has already developed it.

Meanwhile, bilateral collaborations on developing clean technologies have started among some nations and should be expanded to a larger scale. For example, the U.S. Department of Energy has established bilateral collaborations with China and India to develop clean energy technologies.<sup>265</sup> It is predicted that such

<sup>&</sup>lt;sup>259</sup> Cameron Hutchison, *Does TRIPS Facilitate or Impede Climate Change Technology Transfer into Developing Nations?*, 3 UNIV. OTTAWA L. & TECH. J. 517-537 (2006).

<sup>&</sup>lt;sup>260</sup> Maskus, Encouraging International Technology Transfer, supra note 98.

<sup>&</sup>lt;sup>261</sup> Littleton, *supra* note 74, at 20.

<sup>&</sup>lt;sup>262</sup> UNFCCC Treaty, *supra* note 24, at art. 4.1.

<sup>&</sup>lt;sup>263</sup> The Cancun Agreement, supra note 34.

<sup>&</sup>lt;sup>264</sup> Latif et al., *supra* note 29, at 2.

<sup>&</sup>lt;sup>265</sup> U.S.-China Clean Energy Research Center, U.S. DEP'T OF ENERGY, http://energy.gov/ia/initiatives/us-china-clean-energy-research-center-cerc (last visited Nov. 13,

collaboration between developed nations and the emerging economies can be a "win-win solution."  $^{266}$ 

Additional international collaboration for the development and deployment of clean technologies can occur at the global community level. Some examples might include the formation of global patent pools, a global clean technology information repository, or a global patent clearing house.

#### IV

#### APPRAISAL: ADVANTAGE AND CONCERNS REGARDING THE PROPOSAL

As discussed throughout this Article, in spite of the emphasis by international instruments such as the UNFCCC and the TRIPS agreement, international transfer of clean technologies to developing nations has been limited in the past two decades. This article proposes that we focus on domestic innovation, international aid and international technology collaboration instead, so to facilitate the much needed rapid development and global deployment (including international transfer) of clean technologies. The proposal offers several advantages and may raise addressable concerns as well.

#### A. Advantages

The proposal de-emphasizes the focus on international transfer of clean technologies to developing nations, which has not been effective in the past two decades or more. Instead, the proposal addresses the possible reasons for the failure, and re-focuses attention on the critical need for a global collective effort in sustainable development and deployment of clean technologies.

The proposal is based on four major insights gained from empirical analysis of evidential data on clean technologies and international transfer of clean technologies. First, rapid development and wide deployment of clean technologies is critical for addressing climate change. Second, IPR has not been a major barrier, but is a necessary element for attracting foreign clean technologies to developing nations. Third, to increase inbound transfer of clean technologies, developing nations need to have national capacities for attracting, absorbing, and implementing foreign clean technologies. Fourth, developed nations have the

<sup>2015);</sup> U.S.-India Clean Energy Cooperation, U.S. DEP'T OF ENERGY, http://energy.gov/ia/initiatives/us-india-energy-cooperation (last visited Nov. 13, 2015).

<sup>&</sup>lt;sup>266</sup> Maria van der Hoeven & Didier Houssin, *Energy Technology Perspectives 2015: Mobilising Innovation to Accelerate Climate Action*, INTN'L ENERGY AGENCY (May 4, 2015), http://www.iea.org/newsroomandevents/speeches/150504\_ETP\_slides.pdf.

obligation and self-interest to aid and/or collaborate with developing nations in addressing climate change.

The proposal is constructed to address the more plausible reasons that the current transfer of clean technologies to developing nations is limited. It addresses developing nations' lack of pulling power on inbound transfer of foreign clean technologies by suggesting that developing nations build up sustainable national capacities for attracting, absorbing, and implementing foreign clean technologies. The proposal also asks that developed nations facilitate better international transfer of clean technologies by helping developing nations build up such national capacities, and by installing domestic initiatives to encourage outbound transfer of clean technologies to developing nations. The approach also explores the potential of expanding international technology collaborations that benefit both a developing nation and a developed nation.

Considering the importance of rapid development of clean technologies on a global scale, the proposal further suggests all nations focus on domestic innovation of clean technologies. Realizing the significant weight commercial sectors carry in the development and deployment of clean technologies, the proposal suggests that IPR remain as one of the incentivizing tools to stimulate domestic innovation in clean technologies in each nation and to attract inbound transfer of clean technologies.

#### B. Concerns

One concern for the proposal is that some developing nations, such as the LDCs, lack resources such as capital and IPR assets, and therefore that they may lack the bargaining powers for meaningful technology collaboration with developed nations. The proposal addresses this concern by suggesting that developed nations provide international aid particularly to such developing nations to assist them in combatting climate change and in building up their sustainable national capacities for attracting foreign clean technologies. Developed nations have the obligation and the self-interest to provide such aid.<sup>267</sup> The more advanced developing nations, i.e., the emerging economies, may join developed nations in providing such aid. As the proposal suggests, international technology collaborations will likely occur between developed nations and developing nations that can offer certain resources such as established IPR systems, or human/financial capital.<sup>268</sup>

<sup>&</sup>lt;sup>267</sup> See discussion supra Part III.B.

<sup>&</sup>lt;sup>268</sup> See discussion supra Part III.C.

A second concern is that some developing nations may not want to employ clean technologies, since traditional technologies may have already been in place and are cheaper to use. These nations may prefer to pursue economic development regardless of its environmental costs, since developed nations did not pay attention to environmental issues in the early stages of their own economic development. This article recognizes this concern but doubts that such developing nations will persist in this inclination. Currently, it seems like all nations are engaged in the recent global climate change conferences. For example, all 196 nations attended the Lima and the Paris climate change conferences, which occurred in December 2014 and December 2015 respectively. This attendance rate indicates that all nations are engaged with the climate change issues and are interested in addressing it together as a global community. Such an interest, coupled with persuasion, pressure, and aid from the international community would gradually push a disinclined nation toward pursuing economic development regardless of its environmental costs.

A third concern is that international financial aid and government subsidies that aim to encourage the development and deployment of clean technologies may be used as a means to sustain the high costs of accessing clean technologies, therefore distorting the operations of the market economy. This article agrees with this concern. Yet, as of now, under the operation of the free market mechanism, the MDCs and the LDCs essentially are not receiving the needed clean technologies,<sup>269</sup> which is a market failure. When there is a market failure, intervention is necessary. Interventions such as international aid and government subsidies may help the MDCs and the LDCs to develop or gain access to the needed clean technologies.

Another possible intervention is to weaken or remove IPR protection for clean technologies in general, as proposed by developing nations, but such an intervention seems unrealistic. First, the commercial sectors, whether in developing or developed nations, won't respond well to such an intervention. As discussed in Part II.A, IPR is an important tool for incentivizing commercial investments in clean technologies. Second, also shown in Part II.A, in developed nations, commercial investments in clean technologies far overweigh government investments, which means governments in developed nations won't be able to heavily influence their commercial sectors' preferences on IPR, i.e., the preference for strong IPR for clean technologies.

<sup>&</sup>lt;sup>269</sup> See discussion supra Part I.C.3.

#### CONCLUSION

The focus on the international transfer of clean technologies to developing nations in order to address climate change has not worked well during the past two decades. This article analyzes evidential data on clean technologies and their transfer and finds that the existence of IPR has not been a major barrier to such transfer, as suggested by developing nations during the debates with developed nations on how to improve the situation. This article also studies possible reasons for the currently limited transfer of clean technologies to developing nations and concludes that developing and developing nations need to work together to improve the situation. Specifically, developing nations need to improve their national capacities in attracting, absorbing, and implementing foreign clean technologies, and developed nations have the moral duty and self-interest to provide concrete and effective assistance to developing nations in building such capacities and in helping developing nations address climate change. By understanding and addressing these possible reasons, this article proposes that we focus on domestic innovation of clean technologies, international aid and collaboration, instead of international transfer of clean technologies. This approach makes possible and sustainable the needed rapid development and deployment including international transfer – of clean technologies, which is essential for us to successfully address climate change.

# NEW YORK UNIVERSITY JOURNAL OF INTELLECTUAL PROPERTY AND ENTERTAINMENT LAW

VOLUME 5	Fall 2015	NUMBER 1

# LOST AND FOUND: INTELLECTUAL PROPERTY OF THE FRAGRANCE INDUSTRY; FROM TRADE SECRET TO TRADE DRESS

CHARLES CRONIN<sup>\*</sup>

INTR	INTRODUCTION	
I.	THE FRAGRANCE INDUSTRY AND THE CHALLENGE OF REVERSE	
	Engineering	263
	A. Regulation of Reverse Engineering in the United States and the	
	European Union	263
	B. Challenges to the Fragrance Industry's Traditional Reliance on	
	Trade Secrets	267
	C. The Impact of Gas Chromatography-Mass Spectrometry (GC-MS)	
	Technologies on the Fragrance Industry	270
II. I	PATENT AND COPYRIGHT PROTECTION FOR FRAGRANCES	
	A. Patent	273
	B. Copyright	
	C. France and the Netherlands: Odor in the Courts	
III.	FRAGRANCE AND TRADEMARK PROTECTION	283
	A. The Expanding Scope of Trademark Protection	283
	B. Growing Significance of Multisensory Trade Dress	
	C. U.S. Trademark Protection for Trade Dress	
	D. Fragrance as Trade Dress	
CON	CLUSION	

<sup>&</sup>lt;sup>\*</sup> B.M. Oberlin; J.D. American Univ.; M.A., Ph.D. Stanford; M.I.M.S., Berkeley; Lecturer, USC Law School (ccronin@law.usc.edu). Un grand merci to Claire Guillemin, collègue hambourgeoise, for sustaining my interest in this curious industry.

#### INTRODUCTION

The foundations of the modern fragrance industry can be traced to fragrance producers established in the south of France during the sixteenth century.<sup>1</sup> France's Mediterranean coast offers excellent conditions for cultivating plants whose flowers, fruit, stems, and roots are used to produce fragrances.<sup>2</sup> For centuries fragrance manufacturers located themselves near growers in order to obtain and process the plant materials as soon as possible after their harvest.<sup>3</sup> By the nineteenth century many of the essences produced by these manufacturers were shipped to Paris to be purchased by hundreds of small perfume houses there that mixed them and sold the compounds in branded retail products like fine fragrances, soaps, and cosmetics.<sup>4</sup>

Throughout the nineteenth century, the farms, essential oil producers, and manufacturers of branded fragrances, were family enterprises.<sup>5</sup> With small staffs, often comprised of related individuals who spent their entire careers with the same firm, it was relatively easy for these businesses to maintain proprietary information about distillation techniques, the composition of branded perfumes, and other elements of the production process.

During the twentieth century, the fragrance industry underwent radical changes. Increasing real estate values in the area of Grasse, coupled with rising labor costs, prompted the sale of land once used to cultivate jasmine and other flowers for more profitable uses like condominium developments.<sup>6</sup> Today, most of the crops used in fragrance manufacture are grown and processed in countries like Algeria and India where land and labor are relatively inexpensive.<sup>7</sup>

Most of the small perfumeries in Paris have disappeared or have been consolidated. By the end of the twentieth century, five fragrance and flavor companies – none of them French – had come to supply over half of the world

<sup>&</sup>lt;sup>1</sup> See Richard Stamelman, Perfume: Joy, Obsession Scandal Sin; A Cultural History of Fragrance from 1750 to the Present 94 (2006).

 $<sup>^{2}</sup>$  Id.

<sup>&</sup>lt;sup>3</sup> See Eugénie Briot, From Industry to Luxury: French Perfume in the Nineteenth Century, 85 BUS. HIST. REV. 273, 277 (2011).

<sup>&</sup>lt;sup>4</sup> *Id*.

<sup>&</sup>lt;sup>5</sup> See id. at 277-79.

<sup>&</sup>lt;sup>6</sup> See generally SUE MINTER, Fragrant Plants, in THE CULTURAL HISTORY OF PLANTS ch. 13 (2005). The small city of Grasse is situated a few miles north of Cannes on the Ligurian sea.

<sup>&</sup>lt;sup>7</sup> See id. See also STAMELMAN, supra note 1, at 95 (noting that the production of jasmine in Grasse peaked in the 1920s and 1930s but subsequently declined dramatically).

fragrance market.<sup>8</sup> Whereas the perfumeries in Paris in the nineteenth century created their own branded proprietary blends, today most perfumes are developed and manufactured by a few large corporations with branches all over the world.<sup>9</sup>

The inexorable consolidation in the fragrance manufacturing industry over the past century has made the remaining fragrance houses more vulnerable to misappropriation of their intellectual property, particularly of fragrance formulas that they develop at significant expense. Members of the close-knit cadres of the small fragrance houses of the nineteenth century worked in one location, and on behalf of one enterprise, their entire career. Today, perfumers, like professionals in other high technology industries, commonly change not only their locations, but also their employers. This itinerancy has engendered an element of unease among fragrance houses as to the security of their most valuable assets: formulas and other trade secrets that can now be readily obtained, copied, and shared by employees with access to the relevant information stored on the company's servers.<sup>10</sup>

Another late-twentieth-century development that has unnerved fragrance manufacturers is the improving accuracy of analytic technologies in revealing a fragrance's chemical composition. Unlike digital technologies that have unsettled the media industry by enabling surreptitious copyright infringement, chemical analytic technologies do not enable the illegal acquisition or distribution of intellectual property. It is generally considered lawful to use these technologies, not only to obtain the fragrance formulas of competitors, but also to develop competing products.<sup>11</sup>

The fragrance business is by no means the only industry that has had to cope with developing analytic and reproduction technologies, or increasingly itinerant employees. For centuries, many industries have struggled to maintain the confidentiality of proprietary business information, and the ongoing viability of these industries has depended in part on negotiating these challenges. Chartreuse liqueur, and Meissen porcelain manufacturers, for instance, effectively confronted such provocations, and may offer perspectives on how the fragrance industry might best come to terms with its weakened capacity to maintain proprietary knowledge.

<sup>&</sup>lt;sup>8</sup> See LEFFINGWELL & ASSOCIATES, 1999–2002 Flavor and Fragrance Industry Leaders, http://www.leffingwell.com/top\_10\_2.htm (last visited Jan. 12, 2016).

<sup>&#</sup>x27; See id.

<sup>&</sup>lt;sup>10</sup> See infra text accompanying note 57.

<sup>&</sup>lt;sup>11</sup> See infra text accompanying note 38.

Since the early seventeenth century, monks of the Carthusian Order have produced Chartreuse.<sup>12</sup> In 1903 the French government appropriated the order's monastery, exiling the monks to Tarragona, Spain, where they reestablished their eponymous liqueur manufactory.<sup>13</sup> The government sold the monks' distillery in France, along with the Chartreuse trademark, to private investors who attempted to produce the monks' cordial.<sup>14</sup> In a demonstration of divine justice, the "new" Chartreuse failed utterly in the market because its makers could not determine the complex formula; the Carthusians were careful to leave no trace of their secret recipe and methodology when they were expelled from France.<sup>15</sup>

Today the Carthusians thrive in France once again, thanks, in part, to their effective maintenance of this centuries-old trade secret.<sup>16</sup> Their ability to do so stems from the order's remarkable avoidance of verbal communication, and extremely limited transfer of proprietary information; each monk vows to a life of silence, and only two monks know the formula for Chartreuse at any time.<sup>17</sup>

<sup>&</sup>lt;sup>12</sup> In the eleventh century, on a mountainside north of Grenoble, Saint Bruno of Cologne established the Carthusian monastic order. *See* JOHN F. FINK, 100 IMPORTANT EVENTS IN CATHOLIC HISTORY: FROM POPE PETER TO POPE FRANCIS 43 (2013). The region's harsh climate, however, accommodated the cultivation of little more than medicinal herbs. *See La Vallée du Secret*, VSD MAGAZINE (Jun. 18, 2014). *Faute de mieux*, the Carthusians grew herbs that they eventually used in the manufacture of the "elixir" that in the eighteenth century they began to distribute beyond the monastery as "Chartreuse". *See id*.

<sup>&</sup>lt;sup>13</sup> Their expulsion appears to have been motivated by the French government's resentment of the order's financial prosperity. *See France Banishes Carthusian Monks*, N.Y. TIMES, Mar. 27, 1903, at 3.

<sup>&</sup>lt;sup>14</sup> See History of the Chartreuse Liqueurs, CHARTREUSE.FR, http://www.chartreuse.fr/en/ histoire/history-of-the-chartreuse-liqueurs/ (last visited Jan. 12, 2016).

<sup>&</sup>lt;sup>15</sup> See id. Meanwhile, the Carthusians in Spain continued to produce the original liqueur that they then called "Tarragone" because the French government forbade their use of the trademark "Chartreuse" on products sold in France. Id. Accordingly, until 1929, when the trademark "Chartreuse" was restored to the Carthusians, those drinking Chartreuse in cafes and restaurants in France would order "a Tarragone". *Id.* 

<sup>&</sup>lt;sup>16</sup> See generally, INTO GREAT SILENCE (Zeitgeist Films 2005).

<sup>&</sup>lt;sup>17</sup> See The Carthusian Order, Quick Presentation, http://www.chartreux.org/en/quickpresentation.php (last visited Jan. 11, 2016). Carthusian monks avow a life of silence, which is spent at one monastery. Many aspects of their life are hermetic, but the Carthusians are a coenobitic order in which all monks work for the communal good, with no ambition for personal financial gain. *Id.* Only two monks know the formula for Chartreuse at any time. See History of the Chartreuse Liqueurs, supra note 14. Like wine, Chartreuse is a volatile drink, the quality of which typically improves over time. Accordingly, even if one successfully reverse engineered the molecular composition of Chartreuse, one would need also to discover the techniques by which to nurse the liqueur to maturity over many years, to match the quality of that of the monks'. See id. Moreover, there are over 100 ingredients in Chartreuse, many of which grow

LOST AND FOUND

Messien porcelain provides another perspective for how the fragrance industry might face threats to its trade secrets. Early in the eighteenth century Johann Böttiger, an alchemist working for the Saxon king in Meissen, discovered how to make porcelain.<sup>18</sup> Soon thereafter, Böttiger relocated his workshop to Albrechtsberg Castle, atop a high hill, which protected his trade secrets from the predacious eyes of competitors prowling the streets of Meissen.<sup>19</sup> Despite Böttiger's precautions, his secrets of the materials and manufacturing techniques for porcelain were appropriated, and widely disseminated, within decades of his breakthrough.<sup>20</sup> Böttiger's motley crew of laborers, artists, and chemists, were notoriously disloyal, tempted by potential financial windfalls from disclosing his secrets, or by establishing competing enterprises implementing them.<sup>21</sup>

<sup>19</sup> See text panels for exhibition: The Arnhold Collection of Meissen Porcelain, 1710 - 50 (Frick Collection, 2008) (copy on file with author). I am grateful to Frick curator Charlotte Vignon who provided me a copy of these text panels.

<sup>20</sup> See GLEESON, supra note 18, at 295 (noting how "the efforts of discontented employees and wandering arcanists had demolished its monopoly and spread the secret arcanum for porcelain far and wide"). Moreover, the manufacture of Böttiger's porcelain depended upon a rare white clay called kaolin, available at the time from a sole provider in the Saxon town of Aue. When the Aue clay merchant realized that Böttiger no longer monopolized porcelain manufacture, he increased the price for clay that he charged Böttiger. He also began to sell his clay to Böttiger's competitors, despite the fact that he was contractually bound to supply only Böttiger's enterprise. See id. at 106.

 $^{21}$  *Id.* In the eighteenth century the nation we now call Germany was comprised of many independent states like Saxony, Bavaria, and Württemberg. Each state had its own legal regime and there was little chance of being prosecuted for a malfeasance like trade secret misappropriation outside the jurisdiction of the owner of the trade secret. *See* JAMES SHEEHAN, GERMAN HISTORY, 1770 – 1866 14 (1989) (noting that the "Reich came from a historical world in which nationality had no political meaning and states did not command total sovereignty.").

only in Alpine locations like that of the Carthusians' motherhouse. *See* Christina Rebuffet-Broadus, *Chartreuse*, FRANCE TODAY (Apr. 9, 2013), http://www.francetoday.com/articles/2013/04/09/chartreuse.html. Over time there have been a number of attempts to market counterfeit Chartreuse, the bottles of which are displayed at the museum of the Caves de la Chartreuse in Voiron, located near La Grande Chartreuse. WIKIMEDIA COMMONS, *File:Chartreuse-fake.jpg*, https://commons.wikimedia.org/wiki/File:Chartreuse-fake.jpg (last visited Jan. 22, 2016).

<sup>&</sup>lt;sup>18</sup> See JANET GLEESON, THE ARCANUM 56 (1998). After Vasco da Gama discovered a sea route between Europe and the Orient in the late-fifteenth century, Europeans began to collect Chinese porcelain. As porcelain became popular in Europe, huge quantities were obtained at great cost from China because Europeans did not possess the information needed to manufacture it. *Id.* at 45 (noting porcelain's imperviousness to the water damage that threatened other luxuries like tea, silk, and spices shipped from the Orient).

Despite the loss of its most precious asset, Böttiger's enterprise still survives as "Meissen Couture" a luxury products manufacturer and retailer that sells an enormous range of products ranging from porcelain to clothing to furniture.<sup>22</sup> This diversification was essential for the survival of the enterprise. It was made possible, however, only by associating thousands of unrelated products to the porcelain on which the company was founded, and for which it is renowned.<sup>23</sup> All Meissen products are branded with the logo of crossed swords with which the company has marked its porcelain since the 1720s.

 $\infty$ 

The fragrance industry now faces a dilemma similar to that confronting the Meissen porcelain business 250 years ago, when Böttiger's trade secrets were lost through breaches of physical security measures, and collegial disloyalty. To stanch a similar loss of their proprietary information, fragrance manufacturers *could* attempt to replicate the Carthusians' success with Chartreuse. They could adopt the monks' code of secrecy and silence, and relocate their manufactories to remote locations where they also cultivate the crops used to create new proprietary blends.<sup>24</sup> This solution, however, would be practically, agriculturally, and legally infeasible. Unlike the small cadre of monks whose conduct is governed by regulations that transcend the secular world, the fragrance industry, employs hundreds of thousands of direct and indirect workers, making secrecy practically impossible.<sup>25</sup> Legally, such restrictions would be indefensible, due to the

<sup>&</sup>lt;sup>22</sup> See MEISSEN COUTURE, Our Famous Brands, http://www.meissen.com/en/world-meissen-couture/maison-meissen-couture/our-famous-brand (last visited Jan. 11, 2016).

<sup>&</sup>lt;sup>23</sup> *Id.* Martin Lindstrom refers to this association as the "Organizational Selling Proposition" in which not a physical product, but rather "the organization or corporation behind the brand in fact became the brand." *See* MARTIN LINDSTROM, BRAND SENSE: BUILD POWERFUL BRANDS THROUGH TOUCH, TASTE, SMELL, SIGHT, AND SOUND 4 (2005).

 $<sup>^{24}</sup>$  The quality of a fragrance, like a culinary dish, depends upon not only the formula or recipe, but also the particular ingredients used to instantiate it. If Chanel were to use jasmine from India rather than that from France to manufacture *No. 5* the scent of this perfume would differ slightly from that of *No. 5* – made from jasmine grown in the south of France – despite the fact that the same chemical formula would be used in creating it. Accordingly, even if one successfully reverse engineers the formula for a fragrance, one still may not be able to replicate exactly the original without access to the same source of ingredients used in the original. Cathy Newman offers a bird's-eye view of fragrance manufacturing in her book *Perfume: The Art and Science of Scent.* (1998).

<sup>&</sup>lt;sup>25</sup> See Int'l Fragrance Ass'n, The Socio-Economic Impact of Fragrance in Europe 7 (2012).

extraordinary constraints on employees' speech and movement.<sup>26</sup> Therefore, Chartreuse does not offer an apposite potential new business model for the fragrance industry.

Meissen porcelain, however, may provide the fragrance industry an encouraging example of the value of reorienting its intellectual property focus. Despite the loss of its greatest asset, the Meissen porcelain business survived, not only by diversifying its merchandise, but also by invigilating over another significant intellectual property asset it has never lost: the crossed swords mark with which it has always branded its goods.<sup>27</sup>

Like the secrets of porcelain manufacture, those used to create fragrances have been revealed, or are increasingly vulnerable to discovery, through reverse engineering and disclosure regulation.<sup>28</sup> Meanwhile, fragrances are increasingly being used as a component of trade dress in branding goods and services.<sup>29</sup> It is the corporate customers of the fragrance industry, rather than the fragrance manufacturers themselves, who benefit financially from fragrance trade dress. However, the increasingly widespread application of fragrances in this manner has added value to an expanding number of goods and services, and the fragrance manufacturers should reasonably expect to share in profits generated thereby.<sup>30</sup>

This article proposes that while trade secret protections for fragrances have lost much of their efficacy, trademark and unfair competition law may offer currently unrealized legal protection of the *use* of fragrances as trade dress. Part I chronicles how reverse engineering has undermined the fragrance industry's reliance, from time immemorial, on secrecy to protect its intellectual property. Part II considers the limited efficacy of copyright and patent protection for fragrances. Part III canvasses the growing practice of using of fragrance as a component of multisensory trade dress, and the potential legal protection of such uses through trademark and unfair competition law. The article concludes by drawing an

<sup>&</sup>lt;sup>26</sup> The tension between employees' rights of free expression and employment mobility, and employers' right to control the dissemination of information they consider proprietary underlies most trade secret misappropriation claims today. *See* ROGER MILGRIM, MILGRIM ON TRADE SECRETS § 5.01 (1994) (noting that "as reliance on trade secret protection increases, controversies between former employers and ex-employees … will not only increase in number, they will be contested for significantly higher stakes").

<sup>&</sup>lt;sup>27</sup> See MEISSEN COUTURE, supra note 22.

<sup>&</sup>lt;sup>28</sup> See infra Part I.B.

<sup>&</sup>lt;sup>29</sup> See infra text accompanying note 189.

<sup>&</sup>lt;sup>30</sup> Most fragrance manufacturers do not produce retail products but rather develop and produce proprietary blends that are sold to consumer goods producers like Unilever, Proctor & Gamble, and brands like Dior. *See infra* note 75 and accompanying discussion.

analogy between the dissemination of fragrances and the performance of musical works, to enhance commercial spaces. It suggests that the fragrance industry might temper the economic injury incurred from the loss of intellectual property protection it once enjoyed by seeking a portion of the economic dividends generated by these enhancements of public and commercial venues.

#### Ι

#### THE FRAGRANCE INDUSTRY AND THE CHALLENGE OF REVERSE ENGINEERING

# A. Regulation of Reverse Engineering in the United States and the European Union

In the twenty-first century, trade secrets have become increasingly vulnerable to disclosure, not only because of the ease with which information can be shared, but also because of advances in analytic technologies enabling reverse engineering.<sup>31</sup> Legislatures in both the United States and European Union are aware of this increased vulnerability affecting a broad range of industries, as evidenced in recent legislative proposals.<sup>32</sup>

To obtain legal protection as a trade secret, information must be commercially valuable, not generally known, and subject to reasonable efforts to maintain its secrecy.<sup>33</sup> While trade secrets in the United States are not broadly protected under federal statute, they are regarded as intellectual property alongside information protected by patents, copyrights, and trademarks.<sup>34</sup> The recently

<sup>&</sup>lt;sup>31</sup> See Tracy Lewis & Jerome Reichman, Using Liability Rules to Stimulate Local Innovation in Developing Countries: Application to Traditional Knowledge, in INTERNATIONAL PUBLIC GOODS AND TRANSFER OF TECHNOLOGY UNDER A GLOBALIZED INTELLECTUAL PROPERTY REGIME 342 (Keith Maskus & Jerome Reichman eds., 2005).

<sup>&</sup>lt;sup>32</sup> See infra notes 44, 46 and accompanying text.

<sup>&</sup>lt;sup>33</sup> See UNIF. TRADE SECRETS ACT (amended 1985), 14 U.L.A. 433 (1990). This Act has now been adopted by 47 of the United States. UNIF. LAW COMM., Legislative Fact Sheet – Trade Secrets Act, http://www.uniformlaws.org/LegislativeFactSheet.aspx?title=Trade%20Secrets %20Act. The same criteria define trade secrets in the pending European Union trade secret legislation. See Commission Proposal for a Directive of the European Parliament and of the Council on the Protection of Undisclosed Know-How and Business Information (Trade Secrets) Against their Unlawful Acquisition, Use and Disclosure, COM (2013) 813 final (Nov. 28, 2013) [hereinafter Commission Proposal].

<sup>&</sup>lt;sup>34</sup> The United States Economic Espionage Act criminalizes the misappropriation of trade secrets on behalf of a foreign government. *See* 18 U.S.C. §§ 1831–1839 (2012). In 2015, for the third time, United States legislators have introduced a bill that would create allow civil trade secret claims to be brought in federal court. *See* Defend Trade Secrets Act of 2015, S. 1890, 114<sup>th</sup> Cong. (2015). The United States Patent & Trademark Office identifies trade secrets as "a fourth type of intellectual property, in addition to patents, trademarks, and copyrights." *See* 

proposed European Union Trade Secrets Directive, on the other hand, suggests that trade secrets, while intellectual "assets", should not be protected as "formal" intellectual property rights like patents, etc., but rather as a "complement" or "alternative" to these "classical IP rights."<sup>35</sup>

Unlike owners of patents, copyrights, and trademarks, who are provided the right to prohibit most unauthorized uses of their protected intellectual property,<sup>36</sup> owners of trade secrets, do not enjoy this privilege. While trade secret law may protect a trade secret indefinitely, if another individual or organization acquires the information in question, it is no longer secret, and its original owner cannot prevent others from using it. Moreover, another person may independently develop secret know-how or, more commonly, will learn it through reverse engineering, i.e., by analyzing the composition of an object implementing the trade secret.<sup>37</sup>

A trade secret's vulnerability to reverse engineering depends on both the complexity of the secret and the nature of the product it implements. A material object, like a fragrance, is more tractable to reverse engineering than an intangible product or service, because it provides palpable and otherwise perceptible information. While it may be easier to "crack" trade secrets used in the production of material goods than of immaterial services, it may be more difficult to implement the acquired information, because the value of physical products depends – to varying degrees – upon the materials used in their manufacture. For example, the secret formula for a fine fragrance is more valuable to a company with established ties to suppliers of top-tier natural raw materials than to a start-up sourcing from an unknown grower selling adulterated plant essences.

USPTO, *Trade Secrecy Policy*, http://www.uspto.gov/patents-getting-started/international-protection/office-policy-and-external-affairs-patent-trade (last visited Jan. 12, 2016).

<sup>&</sup>lt;sup>35</sup> "Although not protected as a classical IPR, trade secrets are nevertheless a key complementary instrument for the required appropriation of intellectual assets that are the drivers of the knowledge economy of the 21st century. The holder of a trade secret does not have exclusive rights over the information covered by the trade secret." *Commission Proposal, supra* note 33, at 3.

<sup>&</sup>lt;sup>36</sup> Under U.S. law the rights of copyright owners are limited by statutory provisions allowing for unauthorized uses of copyrighted information by journalists, educators, et al. *See* 17 U.S.C. §§ 107, 108 (2012).

<sup>&</sup>lt;sup>37</sup> Many manufacturers anticipate and avert such losses through sales contract provisions that prohibit customers from reverse engineering products acquired from the manufacturer.

It is generally legally permissible in the United States to acquire trade secrets through reverse engineering.<sup>38</sup> This permissibility is desirable because it forestalls the possibility that trade secret law would provide monopolist protection for innovations, a right under the exclusive purview of federal patent law.<sup>39</sup> Federal legislation has, nevertheless, restricted unauthorized use of information acquired through reverse engineering of certain products.

Congress has effected these limitations on reverse engineering by amending the copyright statute to provide sui generis protection for certain products like semiconductor chips, digital content anti-circumvention technologies, and original boat hull designs.<sup>40</sup> These protections constitute legislative "carve outs" from the broad right to reverse engineer a product and use the information learned thereby. In providing these protections, Congress' purpose was to avert potentially gross unfairness that may occasion market failure, resulting from the easy replication of a technological advancement that may have cost another years of work and hundreds of thousands of R&D dollars.<sup>41</sup>

On the other hand, the European Union's proposed Directive on trade secrets would establish a liberal policy toward the acquisition of trade secrets through reverse engineering, akin to that found under United States law.<sup>42</sup> This approach is

<sup>&</sup>lt;sup>38</sup> See Kewanee Oil Co. v. Bicron Corp., 416 U.S. 470, 490–493 (1974) (distinguishing patent protection that operates "against the world" from trade secret protection that does not protect against independent creation or reverse engineering).

<sup>&</sup>lt;sup>39</sup> See Chicago Lock Co. v. Fanberg, 676 F.2d 400, 405 (9th Cir. 1982) (finding that federal patent law would preempt any state-conferred monopoly through absolute protection of a trade secret).

<sup>&</sup>lt;sup>40</sup> See Semiconductor Chip Protection Act of 1984, 17 U.S.C. §§ 901–914. (2012) (providing ten years protection for registered computer chip topographies); Digital Millennium Copyright Act, Pub. L. No. 105-304, 112 Stat. 2860 (codified in scattered sections of 5, 17, and 28 U.S.C.) (restricting the production and use of devices whose purpose is to circumvent digital rights management technologies). *See* Vessel Hull Design Protection Act, 17 U.S.C. §§ 1301–1332 (2012). The fashion industry has attempted, so far unsuccessfully, to obtain similar *sui generis* federal protection for apparel designs. *See* Innovative Design Protection and Piracy Prevention Act, H.R. 2511, 112th Cong. (2011).

<sup>&</sup>lt;sup>41</sup> See J.H. Reichman, Legal Hybrids Between the Patent and Copyright Paradigms, 94 COLUM. L. REV. 2432, 2443 (1994) (discussing the economic and social underpinnings of sui generis intellectual property protection enacted in the United States and Europe "owing to the advent of new, information-based technologies, including computer science … whose industrial applications were costly to develop but vulnerable to rapid duplication.").

<sup>&</sup>lt;sup>42</sup> Article 4 of the Directive states: "The acquisition of trade secrets shall be considered lawful when obtained by any of the following means: (a) independent discovery or creation; (b) observation, study, disassembly or test of a product or object that has been made available to the public or that it is lawfully in the possession of the acquirer of the information; (c) exercise of the

somewhat paradoxical: while the fundamental objective of the Directive is to harmonize and *strengthen* the legal protection of trade secrets across all member states, its permissive approach to reverse engineering would likely *weaken* extant trade secret protection available under the domestic law of some European Union members, such as Italy.<sup>43</sup> For example, while some states, such as Italy, consider trade secret law as a distinct form of intellectual property, the Directive transforms it into a component of unfair competition law.<sup>44</sup>

Furthermore, as argued in a critique from the Max Planck Institute, the Directive's liberal stance on reverse engineering is particularly troublesome to industries that depend upon innovative products embodying intellectual investment that is not protected as intellectual property.<sup>45</sup> The Institute's Comments identify fragrance manufacturing as a prime example of such an industry, and suggest that the Directive's lax approach to the acquisition of trade secrets eventually could

right of workers representatives to information and consultation in accordance with Union and national law and/or practices; (d) any other practice which, under the circumstances, is in conformity with honest commercial practices." Commission Proposal, supra note 33. The underlying motivation for the proposed Directive was the lack of harmonization among the trade secret laws of the twenty-eight member states of the European Union. See Study on Trade Secrets and Confidential Business Information in the Internal Market, at 15-16 (Apr. 2013), http://ec.europa.eu/growth/tools-databases/newsroom/cf/itemdetail.cfm?item\_id=8269. In June 2015 the EU Parliament approved the key features of the draft prepared by the EU Commission and EU Council. See Report on the Proposal for a Directive of the European Parliament and of the Council on the Protection of Undisclosed Know-How and Business Information (Trade Secrets) Against Their Unlawful Acquisition, Use and Disclosure, COM (2013) 813 final (Jun. 25, 2015), http://www.europarl.europa.eu/sides/getDoc.do?pubRef=-//EP//TEXT+REPORT+A8-2015-0199+0+DOC+XML+V0//EN&language=en - title1. The Directive is now being reviewed by the EU Council that will finalize a draft that will be become EU law and ultimately the basis of member states domestic legislation for trade secrets. See Mark P. Wine, One Step Closer: European Parliament Legal Affairs Committee Approves Trade Secret Directive, ORRICK TRADE SECRETS WATCH (Jun. 26, 2015), http://blogs.orrick.com/trade-secrets-watch/2015/06/26/onestep-closer-european-parliament-legal-affairs-committee-approves-trade-secret-directive/.

<sup>43</sup> See Roland Knaak, et al., Comments of the Max Planck Institute for Innovation and Competition On the Proposal of the European Commission for a Directive on the Protection of Undisclosed Know-how and Business Information (Trade Secrets) Against Their Unlawful Acquisition, Use and Disclosure of 28 November 2013, COM (2013) 813 Final, Max Plank Institute for Innovation and Competition Research Paper No. 14-11, ¶ 11 (2014) (noting that the Directive does not consider trade secret protection an exclusive right but rather one obtained under unfair competition law, whereas Italian law considers trade secrets to be an intellectual property right).

<sup>44</sup> *Id.* <sup>45</sup> See id.  $\P$  37. result in the evisceration of innovation in this industry and lead to the failure of this market.<sup>46</sup>

# B. Challenges to the Fragrance Industry's Traditional Reliance on Trade Secrets

The modern fragrance industry has a longstanding reputation for exceptional secrecy.<sup>47</sup> Its clandestine nature is an outgrowth of its origins in early medical and pharmaceutical endeavors in France, in which the creators of curative potions and elixirs carefully guarded their formulas.<sup>48</sup> By the nineteenth century, fragrance manufacturing had become largely independent of the pharmaceutical business.<sup>49</sup> Many enterprises had been established in the area of Grasse exclusively for the production of fragrances, particularly perfumes to be applied to the body.<sup>50</sup>

Unlike most retail products incorporating materials produced by the fragrance industry today, these goods were considered luxuries to be enjoyed by a few affluent consumers, and produced in small quantities by family-owned enterprises.<sup>51</sup> It was relatively easy to keep manufacturing know-how and formulas secret among the small staffs of these enterprises.<sup>52</sup> Moreover, these teams were often comprised of related employees, most of whom who would spend their entire careers at the company.<sup>53</sup>

<sup>50</sup> *Id*.

<sup>&</sup>lt;sup>46</sup> *Id*.

<sup>&</sup>lt;sup>47</sup> "Perfumers work in the strictest secrecy, jealously guarding the mysteries of their art. Since the beginning of perfume, formulas have been kept hidden from prying eyes...." ELIZABETH BARILLÉ & CATHERINE LAROZE, THE BOOK OF PERFUME 45 (1995).

<sup>&</sup>lt;sup>48</sup> The still-secret formula for the liqueur Chartreuse was originally used to create a more potent potable used as medicine. *See History of the Chartreuse Liqueurs, supra* note 14.

<sup>&</sup>lt;sup>49</sup> Napoleon III, Emperor of France between 1852 and 1870, was perhaps indirectly responsible for the separation of the fragrance and pharmaceutical industries by promulgating a regulation requiring makers of pharmaceuticals to disclose on the labels of their products the ingredients they contained. To preserve the secrecy of their formulas, perfume manufacturers disassociated themselves and their products with pharmacists and pharmaceuticals. *See* STAMELMAN, *supra* note 1, at 95.

<sup>&</sup>lt;sup>51</sup> "Hubigant legend ... is that Marie Antoinette, in disguise on her flight to Varennes, was wearing a Houbigant fragrance, which caused her to be identified as royalty when her coach was stopped, because none but royalty would have possessed such a magnificent perfume!" *Lightyears Collection: Houbigant*, PERFUMEPROJECTS.COM, http://www.perfumeprojects.com/museum/marketers/Houbigant.php (last visited Jan. 19, 2016).

<sup>&</sup>lt;sup>52</sup> See Briot, supra note 3, at 276 (reporting that by the end of the nineteenth century there were over 300 perfume producers in France and around 2000 small perfume shops in Paris).

<sup>&</sup>lt;sup>53</sup> See, e.g., Anna Chesters, A Brief History of Guerlain, THE GUARDIAN (Mar. 26, 2012), http://www.theguardian.com/fashion/fashion-blog/2012/mar/26/brief-history-guerlain (discussing the origins of Guerlain, long a family enterprise).

2015]

While the industry still produces luxury products, like fine fragrances, today it is highly consolidated and creates scents used for innumerable consumer products like laundry detergent and hair gel.<sup>54</sup> The largest of these fragrance manufacturers have thousands of employees who commonly move among companies over the course of their careers.<sup>55</sup>

The enormous expansion of both the fragrance industry's now-itinerant workforce, as well as the number of consumer products it affects, has made it much more difficult for fragrance producers today to maintain their trade secrets.<sup>56</sup> This difficulty has been reflected in a flurry of trade secret misappropriation claims made by former employers of perfumers and flavorists who joined competing firms.<sup>57</sup>

One of the most acrimonious of these disputes involves the ongoing prosecution by Givaudan, a large Swiss-based fragrance manufacturer, of a claim against its former perfumer James Krivda.<sup>58</sup> The circumstances surrounding this ongoing dispute illustrate both a company's vulnerability to misappropriation of proprietary information given employees' itinerancy, and the difficulty of establishing misappropriation without disclosing the secrets themselves.

<sup>&</sup>lt;sup>54</sup> Eighty percent of the fragrances sold today are incorporated into personal care and household care products. *See* INT'L FRAGRANCE ASS'N, *supra* note 25, at 14-17.

<sup>&</sup>lt;sup>55</sup> In 2013, Givaudan, the world's largest producer of flavors and fragrances had 9,331 employees distributed throughout eighty-eight locations in five continents. GIVAUDAN, ANNUAL REPORT 3 (2013).

<sup>&</sup>lt;sup>56</sup> The same factors have simultaneously challenged many other high technology industries that rely on trade secrets, resulting in an enormous increase in trade secret litigation in federal courts. *See* David Almeling, et al., *A Statistical Analysis of Trade Secret Litigation in Federal Courts*, 45 GONZ. L. REV. 291, 293 (2009/10).

<sup>&</sup>lt;sup>57</sup> One such example is IPRA Fragrances' (France) claim in 2012 against employees who joined a competitor. *See* Mathilde Tranoy, *Deux Salairiés Accusés d'avoir Vendu des Formules Aromatiques Secrètes*, NICE MATIN (Mar. 30, 2012, 7:37 AM), http://archives.nicematin.com/faits-divers/deux-salaries-accuses-d%E2%80%99avoir-vendu-des-formules-aromatiques-

secretes-a-grasse.830888.html. Another example is Estée Lauder's claim against ex-employee Shashi Batra for sharing its trade secrets with a direct competitor. *See* Estée Lauder Cos. Inc v. Batra, 430 F. Supp. 2d 158, 160 (S.D.N.Y. 2006). A third example is, Intarome Fragrance & Flavor's prosecution of fired employee Michael Zarkades for sharing trade secrets with E.T. Horn, a flavor manufacturer. *See* Intarome Fragrance & Flavor Corp. v. Zarkades, No. 07-873, 2007 U.S. Dist. LEXIS 22780, \*4 (D.N.J. Mar. 29, 2007).

<sup>&</sup>lt;sup>58</sup> Givaudan Fragrances Corp. v. Krivda, No. 08-04409, 2013 U.S. Dist. LEXIS 153437, \*1 (D.N.J. Oct. 25, 2013).

In 2008 Krivda left a vice-president position at Givaudan for a similar appointment at Mane USA, Inc., a direct competitor.<sup>59</sup> Givaudan asserts that in the days immediately prior to resigning, Krivda downloaded and printed from the company's secure database over 600 proprietary formulas that he brought with him to Mane.<sup>60</sup>

At trial Givaudan offered detailed evidence that Mane had capitalized on thirty-four of the formulas that it claimed Krivda misappropriated, by marketing fragrances identical to Givaudan's under new names.<sup>61</sup> The trial court, however, granted in part the defendants' motion for summary judgment based on a finding of insufficient disclosure by Givaudan of information about 600 of the additional formulas that Givaudan claimed the defendants had misappropriated. <sup>62</sup> Accordingly, testimony at trial was limited to a small fraction of the information Givaudan claimed Krivda misappropriated. In February 2014 a federal district court jury in New Jersey exonerated Krivda and Mane of all liability, and Givaudan is now seeking a new trial.<sup>63</sup>

In prosecuting this claim Givaudan faced a commonplace dilemma of plaintiffs in trade secret litigation. To establish a meaningful claim of trade secret misappropriation, an owner must convey information about the secret both to the court and to the defendant. Once this information is voluntarily disclosed, however, it may no longer be protectable as a trade secret, because its secrecy has been unquestionably compromised.<sup>64</sup>

What rattled Givaudan most about Krivda's alleged theft was that Mane obtained the information without any cost. By purportedly absconding with hundreds of Givaudan's formulas, Krivda provided its competitor a windfall of valuable information without the reverse engineering costs that would be incurred through legal acquisition. Krivda *could* have purchased hundreds of products incorporating Givaudan's fragrances, and worked with Mane's chemical analysts

 $^{64}$  Apparently Givaudan did not trust the efficacy of the court's protective order that would have purportedly prevented the disclosure of over 600 Givaudan formulas through their inclusion in the docket for this litigation. Because Givaudan would not fully disclose these formulas to the defendant and the court, the court dismissed the case based on its determination that the plaintiff failed to provide defendant adequate notice of the allegedly misappropriated trade secrets. *See id.* at 7–8.

<sup>&</sup>lt;sup>59</sup> See id.

<sup>&</sup>lt;sup>60</sup> *Id.* at \*4.

 $<sup>^{61}</sup>$  *Id.* at \*6.

<sup>&</sup>lt;sup>62</sup> See id.

<sup>&</sup>lt;sup>63</sup> See generally Motion for New Trial by Givaudan Fragrances Corporation, Givaudan Fragrances Corp. v. Krivda, No. 08-04409 (D.N.J. Mar. 7, 2014).

on the painstaking task of isolating and dissecting them. Given the brief life cycle of most fragrances, however, the market success of an innovative product depends significantly on the potentially dissuasive expense and time lag incurred in reverse engineering and developing a competing product. Therefore, if Krivda provided to Mane the trade secrets Givaudan claims he stole, Mane could not only avoid the temporal and financial cost of reverse engineering, but also produce, within the period of market viability, competing merchandise offered at a lower price. Moreover, because reverse engineering technologies cannot always provide exact and complete information about the chemical composition of a fragrance, a competitor can avoid any potential ambiguities by simply lifting the formula itself.

# C. The Impact of Gas Chromatography-Mass Spectrometry (GC-MS) Technologies on the Fragrance Industry

In the popular imagination, consumers have held to the romantic notion that fragrances, particularly perfumes applied to the body, are created from closely held and undetectable formulas. For instance, the conceit of Patrick Süskind's novel *Perfume* centers on its murderous protagonist's prodigious capacity to analyze scents.<sup>65</sup> Tom Robbin's *Jitterbug Perfume*, on the other hand, tells the picaresque tale of the arduous quest to discover the formula of an ancient fragrance ultimately revealed to have contained the *recherché* ingredient of beet blossom essence.<sup>66</sup>

In fact, using contemporary GC-MS technologies, one can learn with remarkable accuracy the formula of any fragrance.<sup>67</sup> GC-MS is a technique for separating the components of a vapor by observing the different speed by which each chemical component is expelled from a long tube through which a sample of the vapor is swept.<sup>68</sup> Once the components have been separated, a mass spectrometry apparatus identifies the various separated molecules and their relative volumes in the composition of the vapor.<sup>69</sup>

GC-MS technology has disconcerted fragrance houses because it enables practically anyone to obtain a fragrance's formula swiftly and inexpensively.<sup>70</sup> The most costly component of a fragrance, the formula is typically developed from

<sup>&</sup>lt;sup>65</sup> See generally PATRICK SÜSKIND, PERFUME: THE STORY OF A MURDERER (1985).

<sup>&</sup>lt;sup>66</sup> See generally TIM ROBBINS, JITTERBUG PERFUME (1984).

<sup>&</sup>lt;sup>67</sup> See Arian van Asten, *The Importance of GC and GC-MS in Perfume Analysis*, 21 TRENDS IN ANALYTICAL CHEMISTRY 698, 699 (2002) (noting that there is little discussion in the open literature about the work of analytic chemists in the fragrance industry because "that is usually not in the best interest of the companies operating in this highly competitive market.").

<sup>&</sup>lt;sup>68</sup> See JOHN DAINTITH, A DICTIONARY OF CHEMISTRY (6th ed. 2008).

<sup>&</sup>lt;sup>69</sup> See id.

<sup>&</sup>lt;sup>70</sup> See Arian van Asten, supra note 67, at 701.

months, or even years, of research costing hundreds of thousands of dollars.<sup>71</sup> Unsurprisingly, as GC-MS technologies have become increasingly affordable and effective, a parasitical industry has emerged, that manufactures and distributes lower cost "smell-alike" versions of well-known fragrances.<sup>72</sup>

Five multinational corporations, four of which originated in Western Europe, dominate the world fragrance market.<sup>73</sup> For years this industrial concentration fostered a tacit agreement among the industry's largest players. Under this informal understanding, the major fragrance houses would not cannibalize each other by manufacturing competing products based on formulas of a competitor acquired through reverse engineering.<sup>74</sup> Otherwise, a competitor could undercut an innovator's market by selling products at prices that did not reflect the innovator's R&D expenditures.

The increasing accessibility and accuracy of GC-MS technologies in recent years has tested the stability of this "gentleman's agreement" among fragrance manufacturers. Moreover, this understanding never extended to the client base of the major fragrance producers, ranging from consumer products giants like Unilever to couture houses like Dior (LVMH), that attach their brands to fine fragrances that are developed and manufactured by large external suppliers.<sup>75</sup>

Moreover, GC-MS technologies have provided these clients a new means of negotiating lower prices for the development of new fragrances, as well as those

<sup>&</sup>lt;sup>71</sup> See INT'L FRAGRANCE ASS'N, supra note 25, at 22-23.

<sup>&</sup>lt;sup>72</sup> For example, Pirate Parfum, the self-proclaimed producer of "[t]he greatest perfumes, at impertinent prices," is a significant player in this industry. It does not sell counterfeits of well-known perfumes, but rather copies of them that are branded with different names, and sold in uniform and non-descript packaging with no resemblance to that of the original products. *See* PIRATE PARFUM: MASTER PERFUMER, https://us.pirate-parfum.com (last visited Jan. 19, 2016).

<sup>&</sup>lt;sup>73</sup> See LEFFINGWELL & ASSOCIATES, 2010–2014 Flavor and Fragrance Industry Leaders, http://www.leffingwell.com/top\_10.htm (last visited Jan. 12, 2016). International Flavors & Fragrances (IFF) is headquartered in the United States, but originated in the Netherlands. See IFF, History Timeline, http://www.iff.com/company/history-timeline - /timeline(last visited Jan. 19, 2016).

<sup>&</sup>lt;sup>74</sup> See CLAIRE GUILLEMIN, LAW AND ODEUR: FRAGRANCE PROTECTION IN THE FIELDS OF PERFUMERY AND COSMETICS Part I, § 3 (forthcoming 2016) (discussing the origins of this understanding in the quasi-familial ethos of the fragrance industry through the early twentieth century).

<sup>&</sup>lt;sup>75</sup> See Nicole Vulser, Le Groupe LVMH se Réapproprie la Fabrication de ses Parfums, LE MONDE 16 (May 28, 2011) (noting that LVMH owns the Sephora chain, one of the largest retail outlets for perfume). See also, Fabien Pigalle, Grasse: Louis Vuitton se (Re)met au Parfum, NICE-MATIN 36 (Apr. 13, 2012) (discussing LVMH's plans to open in 2014 a workshop for fragrance development in Grasse).

for ongoing supplies of already commissioned products. If a fragrance house balks at the price negotiated by a client for ongoing supplies of a product that it developed for the client, the client could reverse engineer the fragrance, and then buy supplies of it at a lower price from a competitor of the initial supplier. The competitor would have legitimately obtained the formula without incurring the cost of creating it.<sup>76</sup>

GC-MS technologies also make it more feasible for clients themselves to produce supplies of perfumes developed at their behest by fragrance houses. This discomfiting potential was realized in 2011, when the luxury conglomerate LVMH built a fragrance compounding facility outside Paris and began producing supplies of concentrates for their popular scents like "Miss Dior Chérie", "Dior Homme", and "Kenzo Flowers".<sup>77</sup> Previously, they had obtained these supplies from Givaudan, Firmenich, and IFF, after these companies had developed the respective formulas.<sup>78</sup> LVMH claimed that the blends that they produced for these brands embodied subtle modifications of those that had been produced by Givaudan, et al., presumably a tactic to avert liability for breaching any contractual obligation to purchase concentrates from the companies that developed the original fragrances.<sup>79</sup> LVMH's actions were particularly distressing to fragrance houses because they involved the production of successful and well-established perfumes.<sup>80</sup> Profits derived from sale of the liquid blends to produce these goods cover not only the costs of their development, but also the formulation of a constant stream of new proprietary blends that manufacturers use to compete for new business.<sup>81</sup>

As the owner of fragrance brands like Givenchy and Dior, LVMH is one of the most significant players in the retail fragrance industry.<sup>82</sup> Moreover, the company is one of the most important clients for fragrance houses, continually commissioning the development of new products that capitalize on their deep R&D expertise. Therefore, fragrance houses are naturally reluctant to alienate themselves from such a powerful client. These companies could contractually preclude clients

<sup>&</sup>lt;sup>76</sup> Vulser, *supra* note 75.

<sup>&</sup>lt;sup>77</sup> Id.

<sup>&</sup>lt;sup>78</sup> Id.

<sup>&</sup>lt;sup>79</sup> Id.

<sup>&</sup>lt;sup>80</sup> "We were presented with a fait accompli. Dior did not warn us that it would no longer market one of our flagship products," said Frédéric Rivoire, CEO of Givaudan Fine Fragrances Europe. The shortfall for the company, even though it is working for other brands, amounts to several million euros of turnover." *Id.* 

<sup>&</sup>lt;sup>81</sup> See INT'L FRAGRANCE ASS'N, supra note 25, at 44.

<sup>&</sup>lt;sup>82</sup> See LVMH, Perfumes & Cosmetics, http://www.lvmh.com/houses/perfumes-cosmetics/ (last visited Jan. 19, 2016).

such as LVMH from certain uses of newly developed formulas, or from obtaining supplies of certain fragrance compounds from other sources. Such terms, however, would be difficult to negotiate in light of the bargaining advantage that analytic technologies now provide to these industry clients. Given the feasibility of legally reverse engineering and independently producing a fragrance, clients would agree not to do so only in exchange for price concessions, or guarantees regarding the ongoing manufacture and quality of a product, *e.g.*, the sourcing of ingredients from a particular supplier.

To summarize, over the past few decades, the availability and enhanced capacity of GC-MS technologies have significantly challenged the fragrance industry's business model. The industry's most valuable assets, proprietary formulas, can now be legally acquired by anyone with access to a well-equipped laboratory. The effects of the loss of trade secret protection, resulting from use of these technologies, have been compounded by unprecedented calls for greater government regulation of the industry's products, which could require the public disclosure of the ingredients, or even the formulas, of proprietary fragrance compounds.<sup>83</sup> Now that trade secret protection has been compromised for the fragrance industry, are there other forms of intellectual property for which this industry should seek protection instead?

## Π

#### PATENT AND COPYRIGHT PROTECTION FOR FRAGRANCES

#### A. Patent

U.S. and E.U. law provides patent holders with a twenty-year monopoly on the manufacture, use, and sale of their inventions.<sup>84</sup> Even those who independently develop or reverse engineer an invention covered by patent are prohibited from unauthorized manufacture, use, and sale of products or services that implement it. However, this sweeping prohibition is tempered by the patent holder's obligation to disclose, at the time of registration, the composition and functioning of his

<sup>&</sup>lt;sup>83</sup> See, e.g., Commission Regulation 1367/2006 of Sept. 6, 2006, The Application of the Provisions of the Aarhus Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters to Community Institutions and Bodies, 2006 O.J. (L 264) 13, 14 (granting a public right of access to information held by EU agencies relating to "emissions into the environment").

<sup>&</sup>lt;sup>84</sup> See 35 U.S.C. § 154 (2012); Convention on the Grant of European Patents, Oct. 5, 1973, 1065 U.N.T.S. 199.

invention, which information enters the public domain when the patent term expires.<sup>85</sup>

Despite the strength of patent protection, the fragrance industry does not rely heavily upon this form of intellectual property for the protection of fragrance formulas, and those of fine fragrances in particular.<sup>86</sup> An invention must be useful to be patentable.<sup>87</sup> Like the jewelry business, the fragrance industry promotes highend perfumes as pure luxuries. Ascribing utility to these goods tarnishes their *cachet* of exclusivity, and thereby the economic value associated with entirely discretionary products.<sup>88</sup>

Moreover, the fragrance industry eschews the trade-off between patent's twenty-year term of monopolistic control and full disclosure of the patented invention. This is not only because the market for many of the industry's high-end products lasts more than twenty years, but also because longevity in the marketplace of some of these products actually makes them *more* valuable over time.<sup>89</sup>

While the fragrance industry does not primarily rely on patents to protect the formulas used to produce fragrances, there have been thousands of applications in

wastefulness and lack of utility of certain products. "The superior gratification derived from the use and contemplation of costly and supposedly beautiful products is, commonly in great measure a gratification of our sense of costliness masquerading under the name of beauty." THORSTEIN VEBLIN, THE THEORY OF THE LEISURE CLASS 128 (Prometheus Books 1998) (1899).

<sup>89</sup> The prestige and prices of Chanel's *No. 5* and Patou's *Joy* for instance, are bolstered by the fact that both products have endured since 1929 and 1921 respectively, in a market in which hundreds of new fragrances are launched (and typically fail) annually. On the other hand, most new seasonal or "celebrity" fragrances have such a limited shelf life that they need no IP protection whatever.

<sup>&</sup>lt;sup>85</sup> See 35 U.S.C. § 112 (2012).

<sup>&</sup>lt;sup>86</sup> Within the fragrance industry "fine fragrances" refers to stand-alone perfumes that are worn on the body for aesthetic purposes.

<sup>&</sup>lt;sup>87</sup> See 35 U.S.C. § 101 (2012).

<sup>&</sup>lt;sup>88</sup> The appeal and economic value of a perfume are actually enhanced by its lack of utility. Lysol underscores the utility of its stolidly named aerosol *Sanitizing Spray* as an economical and effective product to control "bathroom, pet, garbage, and diaper odors," whereas Patou fosters an attitude of hedonic and heedless extravagance in advertising *Joy* as "the costliest perfume in the world." *See* LYSOL, *Lysol Neutra Air Sanitizing Spray*, http://www.lysol.com/products/neutra-air/lysol-neutra-air-sanitizing-spray/ (last visited Jan. 22, 2016); *Two Sides of Dear: Demystifying Patou's Joy Perfume Promotion*, PERFUME SHRINE (May 13, 2014), http://perfumeshrine.blogspot.com/2014/05/two-sides-of-dear-demystifying-patous.html. Economist Thorstein Veblen (1857-1929) pointed out the value associated with conspicuous wastafulness and lack of utility of certain products.

U.S. Patent Class 512 covering "perfume compositions".<sup>90</sup> However, most of these applications are for innovative means for extracting, manufacturing, or delivering fragrances.<sup>91</sup> The relatively few registered patents that protect the formulas of fragrant compounds are grounded in claims of the product's useful capacity to supplant noxious odors or – more dubitably – to promote physical and mental health.<sup>92</sup>

Fragrance companies also rely upon patents to protect some of their most valuable assets: new fragrance molecules that they have developed, known as "captives".<sup>93</sup> These proprietary molecules typically are not valuable because of the beauty of their scent, but rather for their capacity to create original, safer, or less costly fragrances.<sup>94</sup> The handful of fragrance companies that dominate the world market create and own most captives because only these companies can afford the significant R&D investment required for their creation.<sup>95</sup> Companies that develop patentable molecules may initially manufacture fragrances employing these captives, but much of their profit is derived from selling or licensing them to other fragrance manufacturers that more exhaustively explore and capitalize on their potential.<sup>96</sup>

<sup>93</sup> See Erin McAvoy, Chemical Romance: How did Chemists Become the Greatest Force in Fragrance? THE INDEPENDENT (Dec. 10, 2010), http://www.independent.co.uk/life-style/fashion/features/chemical-romance-how-did-chemists-become-the-greatest-force-in-fragrance-2155817.html (noting that "synthetic raw materials, usually single molecules, enable perfumers to create entirely new smells....").

<sup>94</sup> See id. See also Emma Davies, *The Sweet Scent of Success*, 2009 CHEMISTRY WORLD 40 (Feb. 2009) (discussing the deployment of several of the most significant proprietary perfume molecules in fragrances like Dior's *Poison* and Donna Karan's *Be Delicious*).

<sup>95</sup> See LEFFINGWELL & ASSOCIATES, supra note 73.

<sup>96</sup> See generally Wendy Wolfson, In the Fragrance Business, the Right Molecule Smells like

<sup>&</sup>lt;sup>90</sup> See USPTO, USPC INDEX: CLASS 512 PERFUME COMPOSITIONS (2011), http://www.uspto.gov/web/patents/classification/uspc512/sched512.htm.

<sup>&</sup>lt;sup>91</sup> *Id.* (providing an interactive index of applications).

 $<sup>^{92}</sup>$  E.g., U.S. Patent No. 7,169,746 col 1 l. 6–7 (filed Mar. 26, 2002) (Shiseido's patent for a "perfume for effecting mental control through psycho-sedation or psycho-stimulation."). United States regulation of fragrances has been relatively sparing. The United States Fair Packaging and Labeling Act requires disclosure of ingredients used in consumer products unless such disclosure would reveal trade secrets. 15 U.S.C. § 1453 (2006). Because fragrance manufacturers assert that their compositions constitute trade secrets, their incorporation into a product is typically indicated not with a list of constituent chemicals but rather simply the term "fragrance". The United States Food and Drug Administration (USFDA), however, classifies fragrances that are marketed for their aroma-therapeutic capacities as drugs that are subject to the Administration's more stringent regulation. *See* USFDA, AROMATHERAPY (2015), http://www.fda.gov/Cosmetics/Products/Products/Products/ucm127054.htm.

### 2015]

# B. Copyright

Copyright registration is easier to acquire than patent, <sup>97</sup> because the registering author must simply claim that his work is more than *de minimus* original expression.<sup>98</sup> In other words, an author may register expression already copyrighted or in the public domain, as long as it is *his* expression produced independently of the preexisting work.<sup>99</sup>

Copyright owners enjoy a "bundle of rights" in a protected work, including those to reproduce and perform it, and to create derivative works.<sup>100</sup> The term of copyright is significantly longer than that of a patent, although the protection copyright offers is moderated – particularly in the United States – by "fair use" and other exemptions permitting certain unauthorized uses of copyrighted works for educational and archival purposes.<sup>101</sup>

Globally, the scope of copyrightable expression has grown exponentially since enactment of the Statute of Anne in 1710, which established authors' rights in their books.<sup>102</sup> The margins of protection have expanded, accommodated by evolving copyright statutes that provide illustrative, but not exhaustive, examples of copyrightable works. The French copyright statute, for instance, delineates

<sup>98</sup> One must register an invention to obtain a patent for it; an author automatically obtains a copyright, however, simply by recording his original expression as text, sound, images or other copyrightable content. 17 U.S.C. § 102 (2012).

<sup>99</sup> In the timeworn words of Judge Learned Hand: "if by some magic a man who had never known it were to compose anew Keat's *Ode on a Grecian Urn*, he would be an 'author,' and, if he copyrighted it, others might not copy the poem, though they might of course copy Keats's." Sheldon v. Metro-Goldwyn-Mayer Pictures Corp., 81 F.2d 49, 54 (2d Cir. 1936).

<sup>100</sup> See 17 U.S.C. § 106 (2012); WIPO, Summary of the Berne Convention for the Protection of Literary and Artistic Works (1866), http://www.wipo.int/treaties/en/ip/berne/summary\_berne.html (last visited Jan. 19, 2016).

<sup>101</sup> See 17 U.S.C. §§ 107-110 (2012). Germany's copyright law, for instance, has no general fair use provision, and specifies all limitations on authors' rights under the statute. See Wencke Bäsler, Technological Protection Measures in the United States, the European Union and Germany: How Much Fair Use do We Need in the "Digital World"?, 8 VA. J.L. & TECH. 13, ¶ 4 (2003).

<sup>102</sup> 8 Anne, c. 19 (1710).

*Money*, 12 CHEMISTRY & BIOLOGY 857 (2005) (discussing Flexitrol's attempt to become a clearinghouse for scent molecule licensing).

<sup>&</sup>lt;sup>97</sup> A patent is costly and difficult to obtain because the claimant must establish that his invention effectuates new information for a useful purpose. *See* 35 U.S.C. §§ 101–103 (2012). Patent prosecution is costly in large part because it involves the work of highly trained examiners who investigate claims of novelty against the state of the art in a given class of goods. *See* MPEP § 2131 (9th ed. 2014).

fourteen exemplary categories of works typically considered works of protectable authorship, but prefaces this list with a broad statement extending copyright protection to all intellectual creations, "regardless of their embodiment, merit, or purpose."<sup>103</sup> The United States Copyright Statute offers a similarly broad definition of copyrightable authorship, followed by an illustrative list of eight categories of copyrightable works.<sup>104</sup>

Because copyrights are easy to obtain and provide lengthy terms of protection, they would appear to be an attractive means of protection for the fragrance industry. Copyrights, like patents, provide owners near monopolies on the use of their protected information, so one could not reverse engineer and reproduce a copyrighted fragrance without authorization from the copyright owner.<sup>105</sup> Moreover, the term of protection offered by copyright is now several times that of a patent, typically providing owners control over their works for the better part of a century.<sup>106</sup>

Fragrances are ultimately embodied and perceived as particular combinations of airborne molecules. Nevertheless, fragrances, like pharmaceuticals, may ultimately be reduced to works of information fixed in visual symbols comprising a formula. In this respect – and in others – they are akin to music scores whose visual information is used to produce a performance by which a work of music is typically broadly disseminated, and ultimately perceived as sound.

A skilled and patient musician can "reverse engineer" and reproduce a music score from repeatedly listening to a performance.<sup>107</sup> Digital audio technologies can

<sup>&</sup>lt;sup>103</sup> Code de la Propriété Intellectuelle [Intellectual Property Code] Art. L. 112-1 (the last of the fourteen categories covers articles of haute couture).

<sup>&</sup>lt;sup>104</sup> The House Report on the Copyright Act of 1976 states: "The bill does not intend either to freeze the scope of copyrightable subject matter at the present stage of communications technology or to allow unlimited expansion into areas completely outside the present congressional intent. Section 102 implies neither that the subject matter is unlimited nor that new forms of expression within that general area of subject matter would necessarily be unprotected." H.R. REP. NO. 94-1476, at 51 (1976), *as reprinted in* 1976 U.S.C.C.A.N. 5659, 5664.

<sup>&</sup>lt;sup>105</sup> Theoretically, another fragrance manufacturer could independently and legitimately recreate the copyrighted fragrance as long as this effort were done without access to the original fragrance. *See* discussion *supra* note 99.

<sup>&</sup>lt;sup>106</sup> See 17 U.S.C. § 302 (2012).

<sup>&</sup>lt;sup>107</sup> The most famous example of such a transcription from memory is Mozart's of the score of Gregorio Allegri's "Miserere" after hearing two performances of it at the Vatican in 1770. The Vatican owned the only score and parts to Allegri's work that was performed only twice a year, during Holy Week, in the Sistine Chapel. Performers with access to the score and parts were

dissect the sounds of performances of even relatively complex musical works and render increasingly accurate scores in traditional music notation.<sup>108</sup> Just as an audio recording of the reading of a book is a copy of a literary work, a music score derived from the sounds of a performance is a copy of the musical work underlying both the performance and the score.<sup>109</sup> Likewise, if we consider man-made fragrances to be copyrightable works of authorship, the dissection and reconstruction of a fragrance, whether by a human with preternatural olfaction or by a mechanical apparatus for molecular analysis, results in a copy of that fragrance, which only the copyright owner is authorized to make.

There is no indication, until the latter half of the twentieth century, that perfumers regarded copyright as a means to protect their original blends of fragrances.<sup>110</sup> Apart from the fact that the original focus of copyright protection was literary texts, there was no need for such protection given the difficulty of copying a fragrance by separating the components and determining their role in a particular blend. <sup>111</sup> Given this impediment, fragrance formulas could enjoy perpetual protection as trade secrets rather than merely a term of perhaps fourteen or twenty-eight years as copyrighted works of authorship.<sup>112</sup>

By the end of the twentieth century, the breadth of copyrightable subject matter had grown to include works as disparate as fictional characters, and computer programs, far beyond the contemplation of those who promoted authors'

threatened with excommunication if they were found to have copied or distributed the work outside the Vatican. "The Papacy, realising that it owned a composition of exceptional appeal, shrewdly heightened its reputation by refusing to allow any copy to leave the Sistine Chapel. This ban was supported by threats of severe punishment." PETER PHILLIPS, BROCHURE NOTES TO THE TALLIS SCHOLARS RECORDING OF ALLEGRI'S MISERERE (Gimell Records 1985).

<sup>&</sup>lt;sup>108</sup> Makers of Sibelius music notation software, for instance, claim that their program can convert the sound of "up to 16 instruments or notes at a time into multiple staves, with up to four voices per staff." *AudioScore Ultimate* 8, SIBELIUS, http://www.sibelius.com/products/ audioscore/ultimate.html (last visited Jan. 13, 2016).

<sup>&</sup>lt;sup>109</sup> See generally U.S. COPYRIGHT OFFICE, CIRCULAR NO. 50, COPYRIGHT REGISTRATION FOR MUSICAL COMPOSITIONS 1 (2012).

<sup>&</sup>lt;sup>110</sup> See infra note 120 and accompanying text.

<sup>&</sup>lt;sup>111</sup> This difficulty is nicely illustrated in one of the opening scenes of the film adaptation of Patrick Süskind's novel *Perfume: The Story of a Murderer,* in which the hapless perfumer played by Dustin Hoffman struggles vainly to analyze a popular fragrance of one of his competitors. PERFUME: THE STORY OF A MURDERER (Dreamworks Pictures 2006).

<sup>&</sup>lt;sup>112</sup> The 1909 Copyright Act that was effective until 1978, provided an initial term of twentyeight years, which could be renewed. Act of Mar. 4, 1909, Pub. L. No. 60-349, 35 Stat. 1035, as amended (formerly codified at 17 U.S.C. § 1 *et seq.*). When copyright (and patent) terms expire, the once-protected work enters the public domain and can be used by anyone.

rights in the eighteenth century.<sup>113</sup> At the same time, technologies for molecular analysis had become so advanced and accessible that perfumers could no longer depend upon secrecy to prevent competitors from learning the formulas of their fragrances. Copyright surfaced, therefore, as a potential new means of protecting fragrance formulas, attractive to an increasing number of perfumers who consider themselves authors and artists creating original aesthetic works.<sup>114</sup>

Although France is no longer a leading fragrance producer, it remains an influential force in the fragrance industry.<sup>115</sup> Though France has lost much of the agriculture and extraction work associated with the industry, it has retained the expertise for manufacturing fragrances and creating new blends. French ventures have capitalized upon this element of national patrimony, offering education and degrees for the study of fragrance creation.<sup>116</sup> Even today many perfumers at major fragrance companies have trained, at least in part, in France.<sup>117</sup> Not surprisingly then, the most significant *débat* on whether fragrances are copyrightable expression occurred in France.<sup>118</sup>

<sup>&</sup>lt;sup>113</sup> See Sid & Marty Krofft Television Productions, Inc. v. McDonald's Corp., 562 F.2d 1157 (9<sup>th</sup> Cir. 1977) (finding that characters used in a McDonald's television commercial copied not merely the plaintiffs' idea of fanciful characters in action, but substantially also their specific means of conveying the idea); Apple Computer, Inc. v. Franklin Computer Corp., 714 F.2d 1240 (3d Cir. 1983) (finding that if "other programs can be written or created which perform the same function as an Apple's operating system program, then that program is an expression of the idea and hence copyrightable").

<sup>&</sup>lt;sup>114</sup> See About Us, EDITIONS DE PARFUMS-FRÉDÉRICK MALLE, http://www.fredericmalle.com/ about-us/frederic-malle (last visited Jan. 13, 2016).

<sup>&</sup>lt;sup>115</sup> E.g., the American company International Flavors & Fragrances designated the Frencheducated Carlos Benaim as its first "master perfumer". *IFF Names Carlos Benaim Master Perfumer*, PERFUMER & FLAVORIST (Jan. 18, 2013), http://www.perfumerflavorist.com/ networking/news/people/IFF-Names-Carlos-Benaim-Master-Perfumer-187443131.html.

<sup>&</sup>lt;sup>116</sup> See, e.g., Perfumery School, GIVAUDAN, https://www.givaudan.com/fragrances/ perfumery-school (last visited Jan. 13, 2016); Perfumery School in Grasse, GRASSE INST. OF PERFUMERY, http://www.grasse-perfumery.com/perfumery-school-in-grasse/ (last visited Jan. 13, 2016).

<sup>&</sup>lt;sup>117</sup> See generally Perfumery School, supra note 116; Perfumery School in Grasse, supra note 116.

 <sup>116.
 &</sup>lt;sup>118</sup> See GUILLEMIN, supra note 74, at Part IV (providing exhaustive coverage of French and Dutch copyright litigation involving fragrances).

# C. France and the Netherlands: Odor in the Courts<sup>119</sup>

In the early 1970's, the French fragrance manufacturer De Laire contracted with the couture house Rochas to create several new fragrances.<sup>120</sup> De Laire agreed to divulge the formulas of these fragrances to Rochas in exchange for Rochas's promise to purchase from De Laire all concentrates of any new fragrances that the fashion house chose to add to its perfume line. After providing Rochas the formula for one or two perfumes, but subsequently receiving no orders to produce them, De Laire sued, claiming that Rochas had infringed its copyright by producing a fragrance using De Laire's formula.

De Laire's claim failed when an appeals court upheld a lower court's finding that perfumes are practical works and therefore eligible only for patent protection.<sup>121</sup> Moreover, because perfumes are not tractable to meaningful and consistent description by those who perceive them, they cannot be considered copyrightable "works of intellect".<sup>122</sup> The holding reflects a view that perfumes cannot be considered original expression because human olfaction is too crude to perceive and describe fragrances except in broad terms.

Fifteen years after the *Rochas* dispute the French perfume house Molinard created a fragrance marketed as a "smell-alike" of "Angel," the popular perfume created by Olivier Cresp for Quest International, commissioned by fashion designer Thierry Mugler. <sup>123</sup> When Mugler sued Molinard for copyright infringement, the Paris Tribunal de Commerce discounted the defendant's argument based on *Rochas* that as products of industrial technique, perfumes couldn't qualify as original works of personal intellection. <sup>124</sup> Comparing the

<sup>&</sup>lt;sup>119</sup> Olivia Su, Odor in the Courts! Extending Copyright Protection to Perfumes May Not Be so Nonscentsical: An Investigation of the Legal Bulwarks Available for Fine Fragrances Amid Advancing Reverse Engineering Technology, 23 S. CAL. INTERDISC. L.J. 663 (2014).

<sup>&</sup>lt;sup>120</sup> See Rochas v. de Laire, Cour d'appel [CA] [regional court of appeal] Paris, 4e ch., July 3, 1975, Gaz. Pal. 1976.

 $<sup>^{121}</sup>$  See *id*.

<sup>&</sup>lt;sup>122</sup> "Oeuvres de l'esprit." *Id*.

<sup>&</sup>lt;sup>123</sup> Mugler v. Molinard, Tribunal de commerce [T. Com.] [court of commerce] Paris, 15e ch., Sept. 24, 1999, Gaz. Pal. 2001, 17-18.01, at 5. Quest International was subsequently acquired by Givaudan in 2006. *See* Sam Cage, *Givaudan Buys Quest from ICI*, REUTERS BUSINESS NEWS (Nov. 22, 2006), http://uk.reuters.com/article/2006/11/22/uk-chemicals-givaudan-idUKL2288 827020061122.

<sup>&</sup>lt;sup>124</sup> See Mugler v. Molinard, Gaz. Pal. 2001, 17-18.01, at 5. Historically, in civil law regimes, like that of France, courts pay less obeisance to case law precedence than their common law counterparts; see generally Vincy Fon & Francesco Parisi, Judicial Precedents in Civil Law Systems: A Dynamic Analysis, 26 INT'L REV. L. & ECON. 519 (2006). Accordingly, the Mugler

formula of a perfume to a music score, the *Mugler* court suggested that variations among perceptions and reactions to a scent are akin to idiosyncratic receptions among those listening to the same musical work, and do not indicate ineligibility for copyright protection.<sup>125</sup>

Several years after *Mugler* the cosmetic giant L'Oréal sued Bellure, an importer of "smell-alike" fragrances, claiming it was infringing L'Oréal's copyright in *Trésor*.<sup>126</sup> Deciding the dispute in favor of L'Oréal, the Paris Cour d'appel noted that the fact that the French Intellectual Property Code does not include fragrances among its list of copyrightable works was not dispositive on the issue of copyrightability.<sup>127</sup> All works of intellect are eligible for copyright protection, even those that might also be patentable, or are not fixed, if they are perceptible and reveal the imprint of the creator's personality.<sup>128</sup>

At the same time L'Oréal was prosecuting its claim against Bellure in France, its subsidiary Lancôme initiated a copyright infringement action against the Dutch perfume seller Kecofa in the Netherlands.<sup>129</sup> Lancôme claimed Kecofa's *Female Treasure* was not only a counterfeit of *Trésor*, but also infringed its copyright. The dispute advanced to the Netherlands' Supreme Court, which ultimately confirmed the lower courts' findings that fragrances are copyrightable.<sup>130</sup> The Court also noted that the Dutch copyright statute has a catholic scope of protection, and cannot be read as excluding fragrances that are perceptible, original (i.e., bearing the personal imprint of their creator) and not purely technical (i.e., useful).<sup>131</sup>

Back in France, shortly after the conclusion of the *Kecofa* litigation in the Netherlands, the same Paris appeals court that determined L'Oréal's *Trésor* could be protected by copyright reached a consistent conclusion in a claim involving designer Jean-Paul Gaultier's perfume *Le Mâle*.<sup>132</sup> Gaultier's perfume

<sup>127</sup> See id.

 $\frac{128}{120}$  *Id*.

<sup>130</sup> *See id.* 

<sup>131</sup> *Id.* 

<sup>132</sup> See Beauté Prestige Int'l v. Senteur Mazal, Cour d'appel [CA] [regional court of appeal] Paris, 4e ch., Feb. 14, 2007, D. 2007, at 735, J. Daleau.

court evidently felt no compunction about rendering a decision incompatible with that of the earlier *Rochas* decision by a higher court.

<sup>&</sup>lt;sup>125</sup> See Mugler v. Molinard, Gaz. Pal. 2001, 17-18.01.

<sup>&</sup>lt;sup>126</sup> See Bellure v. L'Oréal, Cour d'appel [CA] [regional court of appeal] Paris, 4e ch. A, Jan. 25, 2006, D. 2006, at 580, J. Daleau, *aff'g* Bellure v. L'Oréal, Tribunal de Grande Instance [TGI] [ordinary court of original jurisdiction] Paris, May 26, 2004, D. 2004, at 2641, note Galloux.

<sup>&</sup>lt;sup>129</sup> HR 16 juni 2006, NJ 2006, 585 m.nt. JHS (Lancôme/Kecofa) (Neth.).

manufacturer, Beauté Prestige International, sued a competitor, Senteur Mazal for infringing the copyrights and trademarks of Gaultier's perfumes by which it marketed "smell-alikes" sold at prices much lower than those of the Gaultier products.<sup>133</sup>

Like the court in the earlier *Mugler* decision, the *Gaultier* court discounted the defendant's argument that variances in human perception of fragrances make it impossible to establish that a perfume possesses the originality required for copyright protection.<sup>134</sup> Responding to this argument the court noted that literary, graphical, and musical works are also perceived variously, but these variations in perception do not undermine the originality of these works.<sup>135</sup>

The opinions in these Dutch and French cases, which emphasize the role of the perfume creator, give short shrift to that of the user in determining whether fragrance may be copyrightable. The decision in L'Oréal's case against Bellure, for instance, expressly found that a perfume could reveal the personality of its creator, and thereby be an original work.<sup>136</sup> Neither *L'Oréal*, nor any of the other cases, however, addressed the issue of what constitutes the "revelation" of a work, a question that necessarily implicates those perceiving the "revealed" work.<sup>137</sup>

The shortcoming of these decisions lies not in their determination that the work of perfumers can be a complex intellectual and aesthetic endeavor akin to writing and painting, but rather in the fact that they do not consider the lack of human olfactory capacity to perceive the complexity of the work rendered from this intellectual investment. The ultimate issue in all of the cases involving the copyrightability of fragrance, therefore, is *how perceptible* must expression be to be protectable by copyright.

Despite the pro-copyright outcomes of the *Kecofa*, *Mugler*, and *Gaultier* cases, the Cour de cassation recently delivered a severe check to those advocating copyright eligibility for fragrances in France, by addressing this issue of perception.<sup>138</sup> In 2006 Patrice Farque was prosecuted for selling counterfeit

<sup>&</sup>lt;sup>133</sup> *Id*.

 $<sup>^{134}</sup>$  Id.

<sup>&</sup>lt;sup>135</sup> *Id*.

<sup>&</sup>lt;sup>136</sup> See Bellure v. L'Oréal, Cour d'appel [CA] [regional court of appeal] Paris, 4e ch. A, Jan. 25, 2006, D. 2006, at 580, J. Daleau.

<sup>&</sup>lt;sup>137</sup> See Charles Cronin, Genius in a Bottle: Perfume, Copyright, and Human Perception, 56 J. COPYRIGHT SOC'Y U.S.A. 427 (2009) (discussing relative acuity of human senses and its relevance to intellectual property protection).

<sup>&</sup>lt;sup>138</sup> The Cour de cassation is France's highest appellate court that is separated into six subjectmatter divisions, e.g., labor, criminal, civil, etc.
fragrances at a flea market outside Paris.<sup>139</sup> When the case foundered for lack of evidence Lancôme et al. claimed that by selling imitations of its fragrances Patrice Farque had infringed Lancôme's copyright in these products.<sup>140</sup>

When Lancôme's case ultimately advanced to the Cour de cassation (commercial section) in 2013, the court determined unequivocally that fragrance is not copyrightable expression.<sup>141</sup> The court separated the act of creating a fragrance from that of perceiving it, finding that while the development of a perfume may involve creative intellection beyond technical know-how, this original thought cannot be broadly *communicated* because it cannot be sufficiently *perceived*.<sup>142</sup>

With its 2013 decision in *Lancôme v. Farque* the Cour de cassation dashed expectations that French copyright law might offer the fragrance industry a new means by which to protect its perfume formulas. Courts in the United States have not yet fielded the question of whether fragrances may enjoy copyright protection. In fact, the existing classifications under which works may be registered in the United States would not accommodate an application for a work of fragrance.<sup>143</sup> Accordingly, except in the Netherlands, copyrights, like patents, offer little potential solace to an industry unsettled by the vulnerability of its most valuable intellectual property.

#### III

## FRAGRANCE AND TRADEMARK PROTECTION

## A. The Expanding Scope of Trademark Protection

Like the sphere of copyrightable expression in the United States, the range of commercial indicators protectable as trademarks increased dramatically in the

<sup>143</sup> The U.S. Copyright Office accepts registrations for works of: literature, visual arts, performing arts, sound recordings, and single serials. See eCO Frequently Asked Questions, U.S. COPYRIGHT OFFICE, http://copyright.gov/eco/faq.html (last visited Jan. 14, 2016).

<sup>&</sup>lt;sup>139</sup> Société Lancôme v. Patrice Farque, Cass. com., Dec. 10, 2013 [pourvoi n° 11-19872] available at http://www.cecoa.eu/images/cecoa/artdroit201312001.pdf.

<sup>&</sup>lt;sup>140</sup> See id. <sup>141</sup> Id.

<sup>&</sup>lt;sup>142</sup> Jean-Michel Bruguière has argued that the court's rationalizing its decision on the imperceptibility of the intellectual investment in the creation of a fragrance is flawed: "[t]he olfactory notes of Chanel No. 5 or Eau Sauvage are as reliably and accurately identifiable as musical notes - the harmony of the Beach Boy's "Good Vibrations" or the melody of the Rolling Stones' "Satisfaction". Jean-Michel Bruguière, Chroniques: Droit d'Auteur et Droits Voisins [News Column: Copyright and Neighboring Rights], 50 PROPRIÉTÉS INTELLECTUELLES 51, 52 (2014). He also suggests that some contemporary works of [classical] music are no more intelligible to the public than are fragrances. See id.

latter half of the twentieth century. By the end of the century, trademark protection extended to sounds,<sup>144</sup> and even single colors.<sup>145</sup> Moreover, legally protectable visual trademarks were no longer limited to those comprising words and/or designs, but had been extended also to the "trade dress" of products and services.<sup>146</sup>

Although U.S. law now protects colors, scents, and sounds, international conventions and other national trademark regimes are typically less accommodating than the United States of these non-traditional marks. For example, the World Trade Organization's multilateral Agreement on Trade-Related Aspects of Intellectual Property establishes only that *combinations* of colors may be eligible for trademark protection, and that registration may be conditioned on the mark having already acquired distinctiveness in the market through use.<sup>147</sup> There is considerable variation among national trademark regimes on trademark protection for color marks, and even relatively liberal regimes, like that of Germany, may protect only those single-color marks that have acquired secondary meaning.<sup>148</sup>

There is a similar lack of consistency among national trademark regimes with respect to sound marks, stemming in part from the fact that some nations, like Mexico and Brazil, permit registration only of marks that are visually perceptible.<sup>149</sup> While sound marks are not visually perceptible, they can be verbally documented quite accurately. Many sounds, like the iconic NBC chimes comprising the intervals of a rising sixth followed by a falling third, can be represented visually through music notation. Similarly, scent marks can be

<sup>&</sup>lt;sup>144</sup> See generally Trademark "Sound Mark" Examples, U.S, PATENT & TRADEMARK OFFICE, http://www.uspto.gov/trademark/soundmarks/trademark-sound-mark-examples (last visited Jan. 14, 2016).

<sup>&</sup>lt;sup>145</sup> See, e.g., Qualitex Co. v. Jacobson Products Co., 514 U.S. 159 (1995).

<sup>&</sup>lt;sup>146</sup> See discussion *infra* Part III.C. "The 'trade dress' of a product is essentially its total image and overall appearance. It 'involves the total image of a product and may include features such as size, shape, color or color combinations, texture, graphics, or even particular sales techniques." Two Pesos, Inc. v. Taco Cabana, Inc., 505 U.S. 763, 765 n.1 (1992) (citing Blue Bell Bio Medical v. Cin Bad, Inc., 864 F.2d 1253 (5th Cir. 1989), and John H. Harland Co. v. Clarke Checks, Inc., 711 F.2d 966 (11th Cir. 1983)).

<sup>&</sup>lt;sup>147</sup> See Daniel Zendel & Dennis Prahl, *Making Sense of Trademarks: An International Survey of Non-Visual Marks*, TRADEMARK WORLD, Issue 89 (1996), http://ladas.com/making-sense-trademarks-colors-sounds-scents/.

<sup>&</sup>lt;sup>148</sup> See id. (noting that while the German Marks Act of 1995 accommodates color marks, the German Patent Office internal guidelines require these marks to be combined with other distinctive features to be registrable).

<sup>&</sup>lt;sup>149</sup> See id. (noting the "visual perceptibility" requirement of both the Mexican Industrial Property Law and Brazilian Industrial Property Code).

accurately visually represented using the standard chemical symbols and verbal instructions of formulas, but are less tractable to verbal description than sound marks.

Courts have been reluctant to recognize colors, scents, and flavors as trademarks because doing so could allow the initial user to unfairly monopolize the viable marks for particular categories of goods and services.<sup>150</sup> A fundamental purpose of trademark protection is to protect consumers from deceptively labeled goods.<sup>151</sup> However, courts have held that this objective should not limit competition in a market by rewarding early entrants with potentially perpetual exclusive use of a limited number of marks.<sup>152</sup>

In particular, scent, flavor, and single-color marks are more readily depleted than design and word marks. This is not because there are fewer potential marks in these classes, but rather because consumers are less able to distinguish among them than among design, word, and sound marks.<sup>153</sup> For example, there are innumerable shades of red, but it is difficult to distinguish readily between Stanford's "cardinal" and Harvard's "crimson" without additional verbal or visual information. On the contrary, it is impossible to confuse the different verbal mottos also branding these universities.<sup>154</sup> Consumers would not be served by a prohibition on other

<sup>151</sup> See William Landes & Richard Posner, *Trademark Law: An Economic Perspective*, 30 J. L. & ECON. 265, 269 (1987) (discussing this benefit as reducing "consumer search costs").

<sup>&</sup>lt;sup>150</sup> In 1949, for instance, in *Campbell Soup Co. v. Armour & Co.*, the Third Circuit rejected plaintiff's claim to the exclusive right to use the color combination of red and white on food products: "If they may thus monopolize red in all of its shades the next manufacturer may monopolize orange in all its shades and the next yellow in the same way. Obviously, the list of colors will soon run out." Campbell Soup Co. v. Armour & Co., 175 F.2d 795, 798 (3d Cir. 1949). Over forty years later, in *NutraSweet Co. v. Stadt Corp.*, the Seventh Circuit rejected the plaintiff's claim to the exclusive right to use pastel blue on its sugar substitutes packaging: "if each of the competitors presently in the tabletop sweetener market were permitted to appropriate a particular color for its product, new entrants would be deterred from entering the market." NutraSweet Co. v. Stadt Corp., 917 F.2d 1024, 1028 (7th Cir. 1990). Ultimately, in *Qualitex*, the Supreme Court "concluded that the color depletion issue would rarely arise and could be resolved, if necessary, by applying the functionality doctrine to prevent anticompetitive results." 1-2 GILSON ON TRADEMARKS § 2.11.

<sup>&</sup>lt;sup>152</sup> See NutraSweet, 917 F.2d at 1028.

<sup>&</sup>lt;sup>153</sup> See Cronin, Genius in a Bottle, supra note 137.

<sup>&</sup>lt;sup>154</sup> "Die Luft der Freiheit weht" and "Veritas" respectively. The greater the number of different colors in a mark the greater the likelihood of its distinctiveness. Nevertheless, the particular perception of color marks depends to a greater extent than that of word marks on geographical location. San Franciscans will associate a combination of the colors blue and gold with the University of California at Berkeley while residents in St. Paul will think of their city's Bethel University. Residents of both cities will associate the combination of red, white, and blue

universities using the color red as part of their "brand" simply because Harvard was the first to do so. It is desirable, however, to curtail another university's branding itself with the color red, the motto "Veritas", and – obviously – the name Harvard, because it curbs potential confusion on the part of consumers, as well as unwarranted derogation that the original Harvard might suffer.<sup>155</sup>

Like single colors, scents and flavors are problematic trademarks because the typical consumer cannot distinguish variations in scents and flavors as easily as those of designs and words.<sup>156</sup> While there is an infinite variety of scents and flavors, we tend to classify them, as we do shades of color, using relatively limited taxonomies: "royal blue", "blood red", etc. For instance, we use "floral" to describe the scents of hundreds of different flowers, and "spicy" to refer to the taste of hundreds of different piquant flavors.

The greater the number of words or designs that are combined in a mark, the more complex and inherently distinctive it is likely to be.<sup>157</sup> This is not true for scents and flavors. Combinations of different scents and of different flavors may yield more complex chemical compounds, but we tend to perceive these not as distinctive new scents and flavors but rather as muzzy blends of the relatively few existing generic categories: "this wine has a citrusy flavor;" "this moisturizer has a vegetal scent."<sup>158</sup> There are, of course, thousands of varieties of vegetal scents and

<sup>157</sup> Visually or verbally complex marks, however, may be weaker than simple marks because they demand more intellectual effort on the part of consumers to decipher and recall their association with a particular product or service.

<sup>158</sup> Most notorious is the wine industry's attempts to suppress the fact of weak human perception of tastes and smells, with the humbuggery it uses to market its products. *See* David

with the United States; those of Paris and Lyon, on the other hand, will think of France (though they will reorder the colors to that of their *tricolore:* blue, white, and red).

<sup>&</sup>lt;sup>155</sup> See 1-2 GILSON ON TRADEMARKS § 2.11 (discussing case law establishing that school colors, when used with "other indicia" of the school, can acquire secondary meaning to qualify for trademark protection).

<sup>&</sup>lt;sup>156</sup> See Douglas Churovich, Intellectual Property: Policy Considerations from a Practitioner's Perspective: Scents, Sense or Cents? Something Stinks in the Lanham Act: Scientific Obstacles to Scent Marks, 20 ST. LOUIS U. PUB. L. REV. 293, 293–94 (2001) (claiming that "the landmark In re Clarke decision was ill-advised since it was founded upon a poor, if not non-existent, understanding of osphresiology and the misguided application of legal principles that fail to apply to scents"); Bettina Elias, Do Scents Signify Source? An Argument Against Trademark Protection for Fragrances, 82 TRADEMARK REP. 475 (1992) (claiming that "fragrances only rarely, if ever, function as trademarks in the marketplace and, in those few cases in which fragrances do arguably indicate a product's source, their trademark protection remains doctrinally problematic and potentially impossible to implement and enforce in a consistent fashion.").

citrusy flavors but humans cannot readily distinguish among them using a broadly shared taxonomy. Accordingly, because this perceptual inadequacy presents a risk for trademark depletion, most trademark regimes do not accommodate scent marks.<sup>159</sup>

International conventions touching on intellectual property, like the TRIPS Agreement and the European Union Trademark Directive, do not expressly permit or prohibit trademark protection for scent marks. However, international courts and national laws have made it difficult or impossible to register them.<sup>160</sup> On the national level the trademark statutes of France and Germany implicitly preempt scent mark registrations by limiting protection to marks that can be visually represented.<sup>161</sup>

In 2002 the European Court of Justice (ECJ) considered the question of what constitutes graphical representation of a scent mark.<sup>162</sup> The dispute involved an appeal from the ruling of a German court that upheld the national trademark office's refusal to register a scent.<sup>163</sup> The applicant, Ralf Sieckmann, had submitted a fragrance claiming it as a mark denoting a range of professional services.<sup>164</sup> As graphical representations of the mark Sieckmann provided a sample of the fragrance in a liquid, the chemical composition of the fragrance (C6H5-CH = CHCOOCH3), and a description of it as "balsamically fruity with a slight hint of cinnamon."<sup>165</sup>

Derbyshire, *Wine-Tasting: It's Junk Science*, GUARDIAN (June 22, 2013, 7:01 PM), http://www.theguardian.com/lifeandstyle/2013/jun/23/wine-tasting-junk-science-analysis.

<sup>&</sup>lt;sup>159</sup> On this question "[t]he door is firmly closed in ... countries such as Brazil Japan, China and Taiwan, where scent marks are neither registrable and the courts do not appear to have considered the protection of unregistered scent marks under other legal theories." *See* Zendel & Prahl, *supra* note 147.

<sup>&</sup>lt;sup>160</sup> See First Council Directive to Approximate the Laws of the Member States Relating to Trade Marks, art. 2, O.J. L 40/1, at 2 (1989) (broadly defining trademarks as comprising "any sign capable of being represented graphically ... provided that such signs are capable of distinguishing the goods or services of one undertaking from those of another undertaking"); Agreement on Trade Related Aspects of Intellectual Property Rights, Apr. 15, 1994, Marrakesh Agreement Establishing the World Trade Organization, Annex 1C, Legal Instruments-Results of the Uruguay Round, 1869 U.N.T.S. 299, 33 I.L.M. 1197 (1994) (offering a similarly broad definition of trademarks, and the right of convention members to "require, as a condition of registration that signs be visually perceptible").

<sup>&</sup>lt;sup>161</sup> See Zendel & Prahl, supra note 147.

<sup>&</sup>lt;sup>162</sup> Case C-273/00, Ralf Siekmann v. German Pat. & Tmk. Office , 2002 E.C. R. I- 11754.

<sup>&</sup>lt;sup>163</sup> *Id.* at ¶/14-15.

<sup>&</sup>lt;sup>164</sup> *Id.* at  $\P$  10-11.

<sup>&</sup>lt;sup>165</sup> *Id.* at ¶/11-13.

The ECJ determined that none of these submissions, alone or combined, were an effective graphical representation of the scent as a trademark.<sup>166</sup> Although the submissions were visual, they did not enable consumers "... to guarantee the identity of the origin of the marked product or service...by enabling him, without any possibility of confusion, to distinguish that product or service from others..." <sup>167</sup> In other words, these representations are ineffective graphical representations because the appearance of an amber liquid, and the words "balsamically fruity" are so commonplace that when consumers encounter them they will conjure any number of scents (and tastes). Moreover, only a narrow sector of consumers who are trained as chemists might recognize "C6H5-CH = CHCOOCH3" as the fragrant compound Methyl Cinnamate.

Consumers' limited capacity to perceive Sieckmann's mark through these visual representations would obscure the boundaries of protection trademark registration might provide. This would defeat the purpose of graphical representation, which is required "...specifically to avoid any element of subjectivity in the process of identifying and perceiving the sign," and would provide overly broad protection that is potentially detrimental both to consumers and competitors of the trademark owner. <sup>168</sup> Moreover, even if consumers recognized the chemical formula for Methyl Cinnamate, as readily as we recognize H2O as that for water, the fragrance mark itself is inherently unstable "...because of different factors which influence the manner in which it can actually be perceived, such as concentration, quantity, temperature or the substance bearing the odor."<sup>169</sup>

Unlike the European Union, the United States does not require that trademarks be represented graphically to be registered. In fact, the United States Patent and Trademark Office (USPTO) has accommodated registration for such marks by establishing a classification for them: Mark Drawing Code 6, "for situations for which no drawing is possible, such as sound."<sup>170</sup>

Nevertheless, while there are many United States trademark registrations for sounds there are remarkably few for scents.<sup>171</sup> The first scent mark registration was issued in 1991, after the Trademark Trial and Appeal Board overturned the USPTO's initial denial of a trademark registration for a floral scent used to brand

<sup>&</sup>lt;sup>166</sup> *Id.* at ¶/39, 45-48.

<sup>&</sup>lt;sup>167</sup> *Id.* at  $\P{35}$ .

<sup>&</sup>lt;sup>168</sup> *Id.* at  $\sqrt[n]{54}$ .

 $<sup>^{169}</sup>$  *Id.* at  $\sqrt[9]{63}$ .

<sup>&</sup>lt;sup>170</sup> See TMEP § 807.09 (8th ed. Oct. 2014).

<sup>&</sup>lt;sup>171</sup> See Trademark "Sound Mark" Examples, supra note 144.

sewing thread.<sup>172</sup> Since then, only fifteen additional fragrance marks have been registered, and only four are still "living".<sup>173</sup> These include the scents of vanilla and citrus for cosmetics and fuel oil respectively, and that of coconut to mark the retail space of a beach apparel seller.<sup>174</sup>

Most of the now expired fragrance marks were registered by Smead, Inc., a Minnesota office supplies manufacturer, to protect their branding of their paper products with fragrances like peppermint and peach.<sup>175</sup> The fact that Smead allowed their scent trademark registrations to lapse suggests that the company determined that consumers did not effectively associate the scents with their particular source. Smead might have more successfully developed consumer association between the scent of the paper products and their manufacturer if it had deployed a single fragrance across its entire line of products. While Smead could not monopolize the *idea* of scenting paper, which stationers have been doing for centuries, it might have monopolized the use of a *particular* fragrance for paper products. Smead's use of *various* fragrances to mark interchangeable products, likely led consumers to associate the fragrance more with the particular variants – scent of peaches for the peach colored file folders, etc. – than with the manufacturer.

## B. Growing Significance of Multisensory Trade Dress

Retail sales of consumer goods have always been driven in part by visual cues in the presentation of the merchandise, which comprise not only the distinctive packaging that we identify with specific products, but also the overall visual ambiance in which the products are displayed and sold. While one shops for apparel at Saks, the flattering lighting and carpeted dressing rooms promote

<sup>&</sup>lt;sup>172</sup> See In re Celia Clarke, 17 U.S.P.Q.2d 1238 (T.T.A.B. 1990) (finding that "the scent of a product may be registrable if it is used in a non-functional manner").

<sup>&</sup>lt;sup>173</sup> Sixteen records were obtained July 21, 2015 using the USPTO's Trademark Electronic Search System searching the terms "for situations for which no drawing is possible, such as sound," in the Mark Drawing Code field, and the term "fragrance" in the Description of Mark field. *Trademark Electronic Search System (TESS)*, U.S. PATENT & TRADEMARK OFFICE, http://tmsearch.uspto.gov (last visited Jan. 15, 2016).

<sup>&</sup>lt;sup>174</sup> CITRUS FRAGRANCE, Registration No. 3,726,789 (issued 2009 for biofuel); the mark consists of a coconut scent or fragrance, Registration No. 4,113,191 (issued 2012 for retail sales); the mark consists of a high impact fragrance primarily consisting of musk, vanilla, rose, and lavender, Registration No. 4,057,947 (issued 2011 for cosmetics).

<sup>&</sup>lt;sup>175</sup> The specific paper products they sought to protect were hanging file folders. *See, e.g.*, APPLE CIDER SCENT, Registration No. 3,140,701 (cancelled in 2013).

lingering, and palliate sticker shock.<sup>176</sup> In contrast, the buzzing fluorescence and concrete floors of Costco generate brisk efficiency for the grim acquisition of huge quantities of "house brand" paper products and similar utilitarian goods sold at "volume discount" prices.<sup>177</sup>

In general, the more a product's economic value stems from its purported refinement and exclusivity (e.g., perfume, jewelry, haute couture) the more its retail sales are tied to visual presentation and other factors extrinsic to the product itself. The cost of presentation and other less immediately apparent external factors, like polite salesclerks, clean washrooms, or a forgiving returns policy, are built into the retail prices of these goods. Accordingly, while Target sells for \$80 a two-and-a-half ounce bottle of the *eau de* toilette of Patou's *Joy*, Nordstrom charges \$130 for the same item.<sup>178</sup>

Retailers also use sound to boost sales, which is not a recent phenomenon. Even before the advent of technologies for recording and broadcasting musical works, department stores engaged musicians whose live performances promoted not only sales of sheet music, but also the sale of other merchandise, once the music had lured customers into the store.<sup>179</sup> Some retailers, restaurants, and hotels still enhance their public spaces with live music performances.<sup>180</sup> However, with

<sup>&</sup>lt;sup>176</sup> See generally, MARTIN LINDSTROM, BUYOLOGY: TRUTH AND LIES ABOUT WHY WE BUY (2008) (discussing tactics by which retailers and consumer products companies sell products through the use of various sensory stimuli).

<sup>&</sup>lt;sup>177</sup> See generally id.

<sup>&</sup>lt;sup>178</sup> These prices were found on websites of these retailers on July 28, 2015. Target does not sell *Joy* in its physical stores, so its presentation costs for this product are minimal. TARGET, http://www.target.com/ (last visited July 28, 2015); NORDSTROM, http://www.nordstrom.com/ (last visited July 28, 2015). Target's decision not to sell *Joy* in stores may have been motivated by fears that the small but relatively expensive item would be attractive to shoplifters. It may also have contracted with Patou not to do so based on Patou's concern about the pollution of its brand through association with Target. The existing arrangement benefits both companies because underlying it is a conspiratorial understanding between them and consumers who would be embarrassed by purchasing a high-end product at a brick-and-mortar Target bargain-counter. *Eau de toilette* is the most diluted version of a fine fragrance, and the only version of *Joy* sold by Target. Nordstrom also sells *Eau de parfum* that is less diluted, and more expensive, than the *Eau de toilette*. Nordstrom does not sell the *parfum*, a half ounce of which is sold only at top-tier shops like Neiman Marcus for about \$350. TARGET, http://www.target.com/ (last visited July 28, 2015); NORDSTROM, http://www.nordstrom.com (last visited July 28, 2015); Nieman Marcus, http://www.niemanmarcus.com/ (last visited July 28, 2015).

<sup>&</sup>lt;sup>179</sup> See David Suisman, Selling Sounds: The Commercial Revolution in American Music 66 (2012).

<sup>&</sup>lt;sup>180</sup> These venues include not only restaurants featuring the dreaded "strolling musicians" but also Nordstrom department stores where former U.S. Secretary of State Condoleezza Rice once

the development of recording and broadcasting technologies, this goal is now met mainly through recorded performances of musical works.<sup>181</sup>

"Background music" is now so prevalent in commercial spaces in the United States that it is disconcerting to enter a shop or restaurant blessedly free of it.<sup>182</sup> Like the visual décor of commercial spaces, these aural ambiances are now artfully developed and deployed to promote sales of goods and services to specific populations of consumers.<sup>183</sup> This deployment is now so pervasive in retail spaces that the withholding of music and all visual adornment in "big box" stores like Costco, appears to be a deliberate reassurance to customers seeking to purchase goods at "no-frills" prices.

Because the sound of recorded music is now so commonplace in retail locations, customers do not *listen* to it as they might have a century ago. Customers still hear the music, however, and the character of the music becomes a familiar and predictable attribute of a particular commercial milieu.<sup>184</sup> In other words, regardless what music being played, it is being deployed as "muzak", i.e. an aural enhancement of an environment in which retailers anticipate that we will focus on something else, namely purchasing their goods or services.<sup>185</sup>

This ambient music affects the experience and behavior of customers in these retail spaces.<sup>186</sup> Retailers play music to entice customers to linger over merchandise by providing familiar and affirmative "sound tracks".<sup>187</sup> They tailor

<sup>181</sup> See SUISMAN, supra note 179.

<sup>183</sup> See generally George Prochnik, IN PURSUIT OF SILENCE: LISTENING FOR MEANING IN A WORLD OF NOISE (2010) (discussing soundscapes developed on behalf of Abercrombie & Fitch).

<sup>184</sup> See LINDSTROM, BRAND SENSE, supra note 23, at 72 (observing that "while hearing involves receiving auditory information through the ears, listening relies on the capacity to filter, selectively focus, remember, and respond to sound").

<sup>185</sup> Broadcasting music recordings has also been used effectively to alienate undesirables from commercial spaces. See Twilight of the Yobs: How Classical Music Helps Keep Order, ECONOMIST (Jan. 6, 2005), http://www.economist.com/node/3536150.

<sup>186</sup> See LINDSTROM, BRAND SENSE, supra note 23, at 74 (noting that in Disney World "carefully choreographed sound is piped through the entire park. Even the bird sounds are controlled. It's a whole environment designed to capture the hearts of children and waken the child within each adult.").

<sup>187</sup> A Gap store in San Francisco enables customers to use smart phones to select the muzak they hear while shopping. See Gap Pilots In-Store DJ System, Lets Customers Pick and Play

anticipated making a living as a musician. See ELISABETH BUMILLER, CONDOLEEZZA RICE: AN AMERICAN LIFE 56 (2007).

<sup>&</sup>lt;sup>182</sup> "[M]usic, any music at all, is so welcome to the weak of mind and so readily supplied by their commercial manipulators that almost all the music you hear, at least all you hear inadvertently, is BAD." PAUL FUSSELL, BAD: OR, THE DUMBING OF AMERICA 126 (1991).

the music to appeal to consumers based on factors like age, race, gender, and economic class.<sup>188</sup> While a misogynist rap number broadcast in a Nike store might subliminally flatter the egos of young male customers, it would likely alienate shoppers at Tiffany's browsing engagement rings and bone china.<sup>189</sup> Accordingly, shopping malls and department stores broadcast varied "soundscapes" in which the disparate "sound tracks" comprising them are regularly updated to conform to the evolving musical tastes of their targeted consumers.<sup>190</sup>

Like music, scents have long been used in the marketing of goods and services. The aroma of baking cookies, with its homey associations, has often been used to market houses; the alarming odor of burnt wood has been used to sell fire insurance policies to protect such property.<sup>191</sup> Moreover, developers of scent delivery systems have capitalized upon existing technologies like ink-jet printing and smartphones to create new means of communicating scents, particularly in connection with advertising and entertainment.<sup>192</sup>

Music, VENTUREBEAT (Nov. 21, 2011, 9:13 AM), http://venturebeat.com/2011/11/21/roqbotgap/. It seems unlikely, however, that retailers would ever provide customers the wondrous capacity simply to turn off a soundtrack.

<sup>188</sup> See generally PROCHNIK, supra note 183.

<sup>189</sup> Marketing researchers have established that classical music played in a commercial setting increases the "quality sensation". See Annabel Elliott, The Buy-ology of a Shopping Spree: How Stores like Apple and Victoria's Secret Use Scent, Sound and Color to Make You Spend More Money, DAILY MAIL (Dec. 5, 2014), http://www.dailymail.co.uk/femail/article-2861386/The-Buy-ology-shopping-spree-stores-like-Apple-Victoria-s-Secret-use-scent-soundcolor-make-spend-money.html. Accordingly, one is more likely to hear classical music in a highend restaurant or art gallery catering to discerning customers than in a fast-food joint or sneaker shop targeting teenagers. See id.

<sup>191</sup> In the 1930s, a Connecticut home insurance firm impregnated their advertising brochures with the scent of charred wood. See Marston Bogert, Your Nose Knows, 39 SCI. MONTHLY 345 (1934). Such uses of scents capitalize on their potential to conjure powerful memories instantaneously, a phenomenon known as the "Proustian effect". See Sarah Dowdey, Does What You Smell Determine What You Buy?, HOW STUFF WORKS, http://money.howstuffworks.com/ scent-marketing.htm (last visited Jan. 14, 2016). "When you first perceive a scent, you connect it to an event, person or thing. When you smell the scent again, it often triggers memory in the form of a conditioned response . . . smell can also activate the subconscious and influence your mood. Instead of reminding you of specific details from [a] vacation, [an] ocean scent might make you feel content or happy." Id.

<sup>192</sup> See Roxie Hammill & Mike Hendricks, Scent Received, With a Tap of a Smartphone, N.Y. TIMES (July 8, 2015), http://www.nytimes.com/2015/07/09/technology/personaltech/scentreceived-with-a-tap-of-a-smartphone.html (discussing "Scentee", "oPhone Duo" and other mechanisms developed to generate specific scents in response to digitally communicated instructions).

Marketers, however, increasingly use fragrances not to conjure a narrowly defined good or service, but to mark an overall environment in which retail customers purchase the goods or services of a particular seller.<sup>193</sup> This practice is not limited to sellers of luxury goods and services: today "… marketing using scent is catching on among retailers and in car showrooms, sports stadiums, airports, banks and apartment buildings that seek to distinguish themselves with customers via the deeply influential sense of smell."<sup>194</sup>

For example, the air in the lobbies of all Omni hotels is infused with the scent of lemongrass.<sup>195</sup> Omni anticipates that its repeat customers will learn to associate this scent with comfortable accommodations, and specifically those offered by Omni. Hyatt's objectives in their use of fragrance are more nuanced than Omni's. Hyatt scents the air of the public spaces of each of its sumptuous "Park Hyatt" properties with a different and unique bespoke fragrance, which is also used to scent the lotions, soaps, and candles liberally sprinkled throughout the particular hotel's public and private spaces.<sup>196</sup> Hyatt hopes that because customers will encounter a particular bespoke fragrance *only* at the hotel in which it is deployed; they will associate it not with "Hyatt" – which has properties ranging from relatively austere to luxuriant - but with a particular top-tier Hyatt hotel that is purposefully distinct from all other Hyatt properties.<sup>197</sup>

<sup>&</sup>lt;sup>193</sup> "The real action, however, lies in projecting olfactory character into indoor commercial spaces. This application has been fully embraced in one large business sector: the gaming industry. Las Vegas is the trend's epicenter; half the major properties on the Strip have scent systems. The MGM Grand has deployed as many as nine scents simultaneously around its property and the Venetian features a corporate logoscent called 'Seduction'." LINDSTROM, BRAND SENSE, *supra* note 23, at 171.

<sup>&</sup>lt;sup>194</sup> Alexia Elejalde-Ruiz, *For Branding, Many Places Adopt Signature Scents,* L.A. TIMES (April 14, 2014, 7:05 PM), at http://www.latimes.com/business/la-fi-scent-branding-20140419-story.html - page=1. Even Goodwill Industries now infuse the air of their retail shops with a bespoke fragrance. *See id.* Goodwill's motivations for doing so, however, differ from those of a retailer like Bloomingdales. Bloomingdales scents its air to *promote* an atmosphere of luxury and exclusivity; Goodwill uses fragrance to *counter* an atmosphere of frugality, if not penury, associated with the sale of used apparel of questionable cleanliness.

<sup>&</sup>lt;sup>195</sup> See L. Aruna Dhir, Scent of a Hotel, 4 HOTELIERS (Dec. 3, 2013), http://www.4hoteliers.com/features/article/8037.

<sup>&</sup>lt;sup>196</sup> See Caroline Cerny, A New Scent at Park Hyatt Zurich, HYATT (May 1, 2008), http://newsroom.hyatt.com/2008-05-01-A-New-Scent-At-Park-Hyatt-Zurich (discussing how parfumeur Blaise Mautin creates different scents for Hyatt depending upon the location of the hotel; Zurich's commercial vibe is captured in an astringent scent).

<sup>&</sup>lt;sup>197</sup> "Global Hyatt offers... more than 750 hotels in more than 45 countries." *Id.* 

Retailers scent their salesrooms hoping to imprint customers' memories with a positive association between a fragrance and the experience of shopping at their stores. Retailers may do so also to promote sales of the fragrance itself, like Abercrombie & Fitch's "Fierce." The distinctive environment of this retailer is a carefully manufactured mix: visual elements like dim lighting and exiguously dressed young clerks; a loud soundtrack of popular music that teenagers find appealing; and an atmosphere constantly infused with the scent of "Fierce," the retailer's "signature" scent.<sup>198</sup> As Abercrombie's website proclaims, "Fierce", sold as a cologne, body wash, and candles, is "[k]nown as the world's hottest fragrance...a symbol of masculinity and great American achievement."<sup>199</sup> In other words, the retailer's hypertrophic sensory ambiance is intended to evoke that of attractive nuisances like Los Angeles's Sunset Strip music "clubs" that entice the same customers that Abercrombie targets: just-legal teenagers untethered from their parents, but in possession of their credit cards.<sup>200</sup>

# C. U.S. Trademark Protection for Trade Dress

Trade dress is the "total image and overall appearance" of a product, or the totality of elements that "may include features such as size, shape, color or color combinations, texture, graphics."<sup>201</sup> A product's trade dress may be a concatenation of elements that are not separately protectable as trademarks, but the amalgamation of these elements is protectable because of its capacity to identify the source of a product or service.<sup>202</sup> In this respect, the whole is greater than the sum of its parts.

<sup>&</sup>lt;sup>198</sup> In one branding study, a teenager expressed confidence that the Abercrombie jeans she had been handed were authentic, and not a knockoff pair bought from a sidewalk vendor, because they were imbued with Abercrombie's signature scent. See LINDSTROM, BRAND SENSE, supra note 23, at 2.

<sup>&</sup>lt;sup>199</sup> Fierce Cologne, ABERCROMBIE & FITCH, http://www.abercrombie.com/shop/us/menscologne/fierce-cologne-5217072 01 (last visited Jan. 14, 2016). "Fierce" was created by Christophe Laudamiel, a gay parfumeur from France. See Serguey Borisov, Intervew with Christophe Laudamiel, FRAGRANTICA (Apr. 13, 2014, 7:03 AM), http://www.fragrantica.com/ news/Interview-with-Christophe-Laudamiel-5381.html.

<sup>&</sup>lt;sup>200</sup> Abercrombie & Fitch is a "retailer of men's and women's casual clothing, such as t-shirts, outerwear, sweatshirts, woven shirts, sweaters, jeans, khakis, shorts, baseball caps, belts, socks, and other accessories . . . designed primarily to appeal to young men and women of college age." Abercrombie & Fitch Stores, Inc. v. Am. Eagle Outfitters, Inc., 280 F.3d 619, 624 (6th Cir. 2002). See generally PROCHNIK, supra note 183, at 89 – 106 (2010) (documenting the marketing tactics of Abercrombie and similar retailers to attract young customers by creating alluringly risqué environments) <sup>201</sup> TMEP, § 1202.02 (8th ed. Oct. 2014).

<sup>&</sup>lt;sup>202</sup> See Two Pesos, Inc. v. Taco Cabana, Inc., 505 U.S. 763 (1992) (finding that the overall décor of the respondent's restaurant was inherently distinctive, and therefore protectable trade

The trade dress of a product or service might also be the combination of separately protectable marks. If, for instance, a computer manufacturer tagged its products with an image of a lemon, colored them a bright yellow, and imbued their laptops and peripherals with a lemon scent, all three tags contribute to the products' trade dress despite the fact that each of them might be separately protected as a trademark when applied to computing machinery.

Trade dress can now be registered as trademarks on the Principal Register in the United States.<sup>203</sup> Nevertheless, the trade dresses for most products and services have not been registered.<sup>204</sup> This may be because a trade dress, like a trade secret, is typically developed incrementally over time, and its value often becomes apparent to the owner only when another tries to capitalize upon it.<sup>205</sup> Also, trade dress tends to be more protean than word and design marks. Whereas the hairstyle and apparel of Betty Crocker or the Morton Salt Girl needs to be updated only every few decades, the soundscape of a department store must be adjusted to evolving markets far more frequently to retain its potency.<sup>206</sup>

Moreover, trade dress often combines non-traditional marks like sounds, colors, and scents that retailers use to create a deeper emotional response in consumers than that engendered by purely visual marks.<sup>207</sup> In recent decades, as these non-traditional marks and trade dress have become more prevalent, U.S.

Register). <sup>204</sup> See 1-2 GILSON ON TRADEMARKS § 2A.01 (noting that "although there is no empirical evidence, it appears that most trade dress is not registered and may instead be judicially protected under Section 43(a) of the Lanham Act").

<sup>205</sup> This was true, for example, of the trade dress at issue in *Qualitex Co. v. Jacobson Prods. Co.*, 514 U.S. 159 (1995). Qualitex had been using the contested trade dress for about thirty years and only attempted to register it as a trademark when a competitor began using a similar trade dress.

<sup>206</sup> GENERAL MILLS, HISTORY OF INNOVATION: THE HISTORY OF BETTY CROCKER, www.generalmills.com/~/media/Files/history/hist\_betty.pdf; *History of the Morton Salt Girl*, MORTON SALT, http://www.mortonsalt.com/our-history/history-of-the-morton-salt-girl (last visited Jan. 14, 2016).

<sup>207</sup> See 1-2 GILSON ON TRADEMARKS § 2.11 (citing Martin Lindstrom's *Brand Sense: Build Powerful Brands Through Touch, Taste, Smell, Sight, and Sound*, in which the author argues that given the overload of information in today's marketplace, retailers must develop multisensory brands to reach consumers). LINDSTROM, BRAND SENSE, *supra* note 23.

dress, even though respondent had not demonstrated that this décor had acquired secondary meaning).

<sup>&</sup>lt;sup>203</sup> Marks that are not inherently distinctive, but otherwise meet registration requirements, may be registered on the Secondary Register. *See* Glynn S. Lunney, *The Trade Dress Emperor's New Clothes: Why Trade Dress Does Not Belong on the Principal Register*, 51 HASTINGS L.J. 1131 (2000) (discussing significance of registration on the Principal rather than Supplemental Register).

2015]

courts have recognized their capacity, like that of traditional word and design marks, to enable consumers to distinguish among sources of goods and services. Two Supreme Court cases, in particular, have established a vastly larger sphere of protectable trademarks than that of half a century ago.<sup>208</sup>

In *Two Pesos, Inc. v. Taco Cabana, Inc.*, the Supreme Court determined that trade dress was entitled to the same protection as that afforded to word and design trademarks.<sup>209</sup> The parties were small Mexican fast food chains that deployed a similar décor in all of their restaurants. Taco Cabana was established seven years earlier than Two Pesos, and claimed that Two Pesos infringed its trade dress by using interior decoration confusingly similar to theirs.<sup>210</sup> The plaintiff's description of their trade dress was more discursive than those typically used for word or design marks, comprising not only specific ornamental objects like "artifacts, paintings, and murals," but also color schemes and architectural features like "a stepped exterior," and "bright awnings and umbrellas."<sup>211</sup>

A district court jury found Two Pesos liable for trademark infringement, having determined that that Taco Cabana's décor was protectable trade dress because it was inherently distinctive, despite the fact that the plaintiff had not demonstrated that its trade dress had acquired secondary meaning.<sup>212</sup> The Fifth Circuit upheld the lower court's judgment and Two Pesos appealed. The Supreme Court granted a writ of certiorari because of a circuit split; the Second Circuit precedent conflicted with that of the Fifth, holding that, unlike a registered trademark, unregistered trade dress like the plaintiff's could obtain protection under the Lanham Act only if it were inherently distinctive *and* had acquired secondary meaning through use in commerce.<sup>213</sup>

<sup>&</sup>lt;sup>208</sup> See generally Two Pesos, Inc. v. Taco Cabana, Inc., 505 U.S. 763 (1992); Qualitex Co. v. Jacobson Prods. Co., 514 U.S. 159 (1995).

<sup>&</sup>lt;sup>209</sup> See Two Pesos, 505 U.S. at 767.

<sup>&</sup>lt;sup>210</sup> See id. at 766.

<sup>&</sup>lt;sup>211</sup> See id. at 764.

<sup>&</sup>lt;sup>212</sup> See id. at 766. The plaintiff's exhibits of images of the competing restaurants suggest that the district court jury was likely swayed in their verdict of infringement by the fact that the defendant not only copied the plaintiff's colors, and architectural features, but also the size and arrangement of these features, down to the flower pots along an exterior wall. Photos of both restaurants are provided in the slides of Michael Atkins' presentation *Trade Dress Protection in the United States*, given at the University of Washington School of Law. Michael Atkins, *Trade Dress Protection in the United States*, SLIDESHARE, http://www.slideshare.net/mikeatkins/ alicante-presentation-7504041 (last visited Jan. 14, 2016).

<sup>&</sup>lt;sup>213</sup> See Two Pesos, 505 U.S. at 767.

In *Two Pesos*, the Supreme Court rejected the Second Circuit's narrower approach, and upheld the Fifth Circuit's broader understanding of protection available to trade dress under the Lanham Act. Because trade dress serves exactly the same function as trademarks, the Court reasoned, there is no reason why trade dress should be subject to more stringent standards than traditional registered marks like words and designs, to obtain protection under the federal statute.<sup>214</sup>

Three years later, in *Qualitex Co. v. Jacobson Prods. Co.*, the Supreme Court further accommodated trade dress as protectable information, determining that a single color could constitute a valid trademark.<sup>215</sup> The single color at issue was a bilious green/gold hue that Qualitex used on the dry cleaning pads they manufactured.<sup>216</sup>

When Jacobson appealed the district court's ruling that it was liable for infringing Qualitex's single-color trademark, the Ninth Circuit court overturned this decision, finding that color alone could not qualify for trademark protection.<sup>217</sup> Qualitex, in turn, appealed to the Supreme Court, which granted a writ of certiorari to resolve contradictory precedent from various federal circuit courts on the validity of single-color trademarks.<sup>218</sup>

The Supreme Court overruled the Ninth Circuit and upheld the validity of Qualitex's single-color trademark registration.<sup>219</sup> Like the multifaceted décor indicating Taco Cabana's restaurant services, the particular shade of green with which Qualitex "dressed" its products distinguished them from those of others, and served no other practical purpose.<sup>220</sup> Moreover, Qualitex had used the color in this capacity for over thirty years, during which it acquired distinctiveness as consumers came to associate it with this company's product.<sup>221</sup>

Qualitex's trade dress gradually matured into a protectable trademark as it developed secondary meaning through ongoing use in the marketplace.<sup>222</sup> In other words, it is only through ongoing exposure to a single color used to dress a product

<sup>&</sup>lt;sup>214</sup> *See id.* at 766.

<sup>&</sup>lt;sup>215</sup> Qualitex Co. v. Jacobson Prods. Co., 514 U.S. 159 (1995).

<sup>&</sup>lt;sup>216</sup> See id. The pads, sold to dry cleaning establishments, look like ironing board covers. See SunGlow Press Pads, QUALITEX, http://www.qualitexco.com/http/pads.html (last visited Jan. 15, 2016).

<sup>&</sup>lt;sup>217</sup> See Qualitex Co. v. Jacobson Prods. Co., 13 F.3d 1297 (9th Cir. 1994).

<sup>&</sup>lt;sup>218</sup> See Qualitex, 514 U.S. at 161.

<sup>&</sup>lt;sup>219</sup> See *id*. at 174.

<sup>&</sup>lt;sup>220</sup> See id. at 164.

<sup>&</sup>lt;sup>221</sup> See Qualitex Co. v. Jacobson Prods. Co., 13 F.3d 1297, 1299 (9th Cir. 1994).

<sup>&</sup>lt;sup>222</sup> See id.

that consumers will begin to link that particular color with that product's manufacturer. This gradually built association renders the color protectable despite the fact that consumers may have encountered or associated it with unrelated products. Taco Cabana's décor, on the other hand, was found to be inherently distinctive and therefore did not require a similar incubatory period in which to establish its eligibility for trademark protection.<sup>223</sup> Such complex trade dress tends to be unique, and consumers are likely to immediately associate it with the source of the product or service it is "dressing".<sup>224</sup>

#### D. Fragrance as Trade Dress

Trademark, and specifically trade dress, might ultimately provide the only legally protectable intellectual property to fragrances and their manufacturers. The earlier discussion of patents and copyrights concluded that neither form of legal protection held much potential for safeguarding the fragrance industry's intellectual property.<sup>225</sup> The term for a patent is only twenty years – shorter than the market lifespan of a successful perfume.<sup>226</sup> Moreover, fragrances must be "useful" to be patented – not a designation that fragrance manufacturers would want applied to most of their products, particularly fine fragrances.<sup>227</sup> As French courts ultimately determined, copyright is not a viable form of protection for fragrances, despite the creative thought their creation may involve, because this intellection cannot be communicated or perceived in an effective and consistent manner.<sup>228</sup> Given these shortcomings of other forms of legal protection for intellectual property, trademark and trade dress emerge as the most viable options for protection. However, a number of idiosyncrasies particular to fragrance trade dress may condition its trademark protection.

Recorded music is one of the most commonly used elements to create a distinctive trade dress, but recorded music is more tightly constrained by intellectual property law than is fragrance. Retailers typically do not own the copyrights of musical works that they broadcast in their stores, and therefore must

<sup>&</sup>lt;sup>223</sup> See Two Pesos, Inc. v. Taco Cabana, Inc., 505 U.S. 763, 775 (1992).

<sup>&</sup>lt;sup>224</sup> See, e.g., AmBrit, Inc. v. Kraft, Inc., 812 F.2d 1531, 1536 (11th Cir. 1986) (basing its finding that plaintiffs owned protectable trade dress in their packaging of Klondike ice cream bars on the fact that the images were not "a basic shape or common design [but] . . . [r]ather . . . a complex composite of size, color, texture and graphics . . . [creating] a distinctive visual impression").

<sup>&</sup>lt;sup>225</sup> See discussion supra Part I.

<sup>&</sup>lt;sup>226</sup> See discussion supra Part I.

<sup>&</sup>lt;sup>227</sup> See discussion supra Part I.

<sup>&</sup>lt;sup>228</sup> See supra note 139 and accompanying text.

pay royalties to their owners.<sup>229</sup> However, the legitimate use of another's intellectual property might become part of the user's legally protectable multisensory trade dress.<sup>230</sup> For instance, if one retailer were to consistently broadcast Bee Gees songs in its shops, it might be able to prevent other retailers from using these songs by claiming that consistent use and consumer association had transformed the music into a protectable component of its trade dress. Such use of another's copyrighted material does not provide a retailer any legal interest in the music or the recordings themselves.

If a retailer owns the underlying musical work being performed in connection with their goods, it might also seek trademark protection for the music itself. While sound marks typically comprise merely a few non-musical sounds or notes – like NBC's – a larger musical work, like a jingle, can also function as a trademark.<sup>231</sup> The efficacy of such marks, however, may ultimately depend upon consumers' ongoing familiarity with the words of the jingle that identify the retailer or brand. Accordingly, while NBC's sound mark continues to be effective, that of Mr. Softee, Inc. for instance, has become genericized.<sup>232</sup> Today the tinkling sound of the Mr. Softee jingle, invariably heard without its long-forgotten words, conjures the sale of aerated ice cream from itinerant trucks by any number of purveyors.<sup>233</sup> In fact, any singsong tune, rendered in a chimey timbre, and sounding

<sup>&</sup>lt;sup>229</sup> See Copyright Act of 1976, 17 U.S.C. §106 (2012). "Mom & Pop" restaurants and retail establishments are exempt from this requirement. See id. at § 110. These royalties are managed by performing rights organizations, the largest of which is ASCAP. See AM. SOC'Y OF COMPOSERS, AUTHORS & PUBLISHERS, http://www.ascap.com (last visited Jan. 14, 2016).

<sup>&</sup>lt;sup>230</sup> See Kimberlianne Podlas, I Do Not Endorse This Message! Does a Political Campaign's Unauthorized Use of a Song Infringe on the Rights of the Musical Performer?, 24 FORDHAM INTELL. PROP. MEDIA & ENT. L.J. 1 (2013) (arguing that performers of copyrighted musical works should not be able to prevent uses of their performances that are legitimate under copyright law, based on trademark claims). <sup>231</sup> See id.

<sup>&</sup>lt;sup>232</sup> Mr. Softee, Inc. could still assert copyright to control performances of their registered song, written by jingle composer Les Waas in 1958. See Daniel Neely, Ding, Ding!: The Commodity Aesthetic of Ice Cream Truck Music, in MOBILE MUSIC STUDIES, VOL. II 155 (2014). In fact, Les Waas's melody is highly derivative of the English Folk tune, "How many miles to Babylon?". See Eloise Hubbard Linscot, FOLK SONGS OF OLD NEW ENGLAND 18 (1939) (providing words and music notation of the song).

<sup>&</sup>lt;sup>233</sup> The same fate did not befall Coca Cola Company's jingle "I'd Like to Buy the World a Coke" despite the fact that Coca Cola later authorized the use of its melody in the pop song "I'd Like to Teach the World to Sing," recorded by The Hillside Singers. See The "Hilltop" Ad: The Story of a Commercial, LIBR. OF CONGRESS, http://lcweb2.loc.gov/ammem/ccmphtml/ colaadv.html (last visited Jan. 15, 2016). This is because whenever Coca-Cola advertised its

from a truck on a city street during the summer will elicit memories of ice cream and popsicles.<sup>234</sup>

Because fragrance enjoys relatively limited intellectual property law protection, retailers are less legally constrained in their deployment of fragrance in their public sales spaces.<sup>235</sup> Fragrances are not copyrightable works, so the copyright performance and display rights applicable to musical and artistic works do not regulate their release into communal spaces, even commercial spaces.<sup>236</sup> Many small retailers and service providers like spas routinely scent their atmospheres, delivering established brands of fragrances through various delivery methods, such as aerosols, scented candles, and potpourris. For example, there is nothing objectionable to Diptyque or Shoyeido about a clothing boutique owner lighting a Diptyque candle in his shop, or a spa manager burning a stick of Shoyeido incense on the premises, because doing so promotes sales of these products among customers who inquire about what they smell. Fragrance brands would likely object, however, if a large retailer used their air conditioning system to disseminate one of their fragrances consistently, and without authorization.

With scant intellectual property protection fragrance producers possess little control over use of their products, but trademark protection may offer an untapped compensatory benefit. Once Chanel sells a bottle of its well-known *No. 5* the company has virtually no legal means of controlling how the buyer uses it. However, trademark may allow it to regain some authority over sales and use of this product. For instance, if Omni Hotels began to scent all of their properties with

products using the jingle, the words identifying Coca-Cola were always heard along with the melody.

<sup>&</sup>lt;sup>234</sup> See Neely, supra note 232, at 146 (noting that the sound of ice cream truck music is not Pavlovian – i.e. stimulating a reflexive response to want ice cream – but rather plays on an "anamnesis" conditioned on the ability to recognize a specific product through sound).

<sup>&</sup>lt;sup>235</sup> Health regulations rather than intellectual property rights are more likely to affect a retailer's use of fragrances in commercial and public spaces. *See* Stuart Elliott, *Joint Promotion Adds Stickers to Sweet Smell of Marketing*, N.Y. TIMES (Apr. 2, 2007), http://www.nytimes.com/2007/04/02/business/media/02adcol.html (discussing the San Francisco's Municipal Transportation Authority's order to the California Milk Processor Board to remove chocolate-scented advertisements posted near public bus stops); RACHEL HERZ, THE SCENT OF DESIRE: DISCOVERING OUR ENIGMATIC SENSE OF SMELL 14 (2007) (noting that Halifax, Nova Scotia has enacted regulations making illegal the wearing of fragrances in public).

<sup>&</sup>lt;sup>236</sup> See Copyright Act of 1976, 17 U.S.C. §106 (2012). The possibility of copyright protection for fragrances raises the question how moral rights of attribution, reputation, etc. would be applicable to them under copyright regimes like that of France, that provide such protection. *See* Code de la Propriété Intellectuelle [Intellectual Property Code] L. 121-1- L. 121-4 (1992).

*No.* 5, rather than using their proprietary lemongrass fragrance, Chanel would likely assert a claim under the Lanham Act of unfair competition, and "passing off".<sup>237</sup> Even if Omni used no visual evidence of the brand, Chanel would argue that by "marking" their air with the well-known *No.* 5 Omni was attempting to lead consumers to believe that its mid-range hotels are legitimately associated with this purveyor of top-tier luxury products. This association would potentially sully Chanel's image.<sup>238</sup> Therefore, even though no other business uses *No.* 5 as trade dress, Chanel could prevent such use if it can demonstrate that consistently scenting the air of a commercial space would likely create confusion "as to the source, sponsorship, or association between goods or services."<sup>239</sup>

Fragrance's relatively brief period of perceptibility affects its trademark capacity. While consumers may "tune out" the sounds and images of a retailer's trade dress they cannot stop hearing and seeing them unless they block or replace the sounds and images.<sup>240</sup> In contrast, humans become habituated to scent relatively swiftly.<sup>241</sup> Once we have perceived an odor, our awareness of it rapidly wanes even though we continue to be exposed to the same concentration of it in the atmosphere.<sup>242</sup>

<sup>238</sup> See John Tagliabue, *Why European Computer Makers Flop*, N.Y. TIMES (Oct. 7, 1996), http://www.nytimes.com/1996/10/07/business/why-european-computer-makers-flop.html.

<sup>239</sup> Lanham Act § 43(a), 15 U.S.C. § 1125 (2012).

<sup>240</sup> Such efforts would involve wearing unwieldy headphones, blinders, or similar paraphernalia, the use of which may elicit ambivalence by spectators as to the mental stability of the wearer.

<sup>241</sup> See Jennifer Chen, Human Olfactory Perception: Mechanism, Characteristics, and Functions (May, 2013) (unpublished Ph.D. dissertation, Rice University) (on file with author); see also AVERY GILBERT, WHAT THE NOSE KNOWS: THE SCIENCE OF SCENT IN EVERYDAY LIFE 85 (2008) (positing that "[t]he longer you are exposed to an odor, the more you adapt to it. Step into a garlic factory and the reek will overwhelm you. A few minutes later its intensity fades, and after an hour you might not be able to smell garlic at all, no matter how hard you try. Work there a few months and this adjustment will happen almost as soon as you step in the door").

<sup>242</sup> See GILBERT, supra note 241, at 85. It is this habituation that prompts retailers of perfumes to keep at hand a saucer of coffee beans, the odor of which contrasts sharply with that of fine fragrances, thereby enabling customers to "reset" their olfaction, allowing them to perceive fragrances anew. Nevertheless, Gilbert notes that: "the bean meme is now a fixture in perfume retailing... The Jo Malone display in Saks had them [coffee beans] in an apothecary jar with a metal lid. It's all good fun and marketing, but there is not a jot of science behind it. (There

<sup>&</sup>lt;sup>237</sup> Lanham Act § 43(a), 15 U.S.C. § 1125 (2012) (prohibiting conduct "likely to cause confusion, or to cause mistake, or to deceive as to the affiliation, connection, or association of such person with another person, or as to the origin, sponsorship, or approval of his or her goods, services, or commercial activities by another person. . . . ").

LOST AND FOUND

Because of its brief period of perceptibility, fragrance is more likely to be protected as trade dress when used in a multisensory combination of various stimuli like colors, images, and sounds. When one first enters an interior space, a signature fragrance by itself may be the first confirmation that one is at a particular retailer, hotel, or spa. As that perception wanes, however, visual and aural stimuli will play a more prominent role in consumers' awareness of a particular vendor. In fact, the consistent combination of a particular fragrance with other visual and aural stimuli will likely *strengthen* through such amalgamation, the association of that fragrance with a specific retailer.

The greater the number of sensory elements comprising a trade dress, the more likely it is to be protectable as a distinctive indicator of a particular source of goods or services. Taco Cabana's trade dress was protectable only because it combined a number of architectural and decorative elements; the murals, umbrellas, and interior design only become distinctive when combined.<sup>243</sup> The greater the complexity of the trade dress, however, the narrower the scope of its protection. Accordingly, if Abercrombie were to claim a trade dress that comprises visual elements as well as sounds and scents, it would be difficult for this retailer to establish unfair competition based upon a competitor's use of a discrete element of Abercrombie's multisensory trade dress.

Fragrance's capacity for trademark protection may directly benefit retailers and fragrance brands, but not the industrial manufacturers of fragrance blends. A fragrance manufacturer cannot protect a fragrance as trade dress for its products or services because fragrances *are* its products and services. As such they cannot acquire the distinctiveness, or secondary meaning necessary to obtain trademark protection. Manufacturers sell even fine fragrances to retail products manufacturers like couture houses and cosmetic companies that package and label commissioned blends under their own brands.<sup>244</sup> These brands, like retailers and hotel chains that scent their atmospheres, do not publicize the name of the manufacturer that produced the scent. In short, major fragrance manufacturers are akin to

are twenty-seven aroma impact molecules in roasted Arabica coffee – how could smelling all these help clear the nose?)" Id. at 108.

<sup>&</sup>lt;sup>243</sup> See Two Pesos, Inc. v. Taco Cabana, Inc., 505 U.S. 763 (1992).

<sup>&</sup>lt;sup>244</sup> Dior's fragrances like *Miss Dior and Diorissimo*, for instance, were developed, and manufactured by Givaudan. *See supra* note 77 and accompanying text

ghostwriters who cede copyright in their writings in exchange for fees from the commissioning parties to whom the published works are attributed.<sup>245</sup>

Although they are not the primary beneficiaries of fragrance trade dress protection, fragrance manufacturers may indirectly capitalize on the growing accommodation under U.S. trademark law for the protection of non-traditional trade dress. Ghostwriters are aware of the economic value of the copyrights that they assign to the attributed author of their works, and this value is reflected in their fees. The fact that a commissioned fragrance may now be deployed and protected as trade dress adds economic value greater than that of fragrances distributed exclusively as retail products. Given that fragrances increasingly function as valuable and legally protectable branding agents, fragrance creators should factor this development into the fees they charge for the creation and production of products deployed in this innovative manner.

#### CONCLUSION

Over the past twenty-five years advances in analytic technologies, and increasingly stringent government disclosure regulations, have challenged fragrance manufacturers' efforts to maintain exclusive control over their most valuable assets: proprietary information relating to the creation and manufacture of fragrances.<sup>246</sup> As discussed earlier, once this information has been disseminated there is little recourse under copyright or trade secret law to check its distribution or implementation.<sup>247</sup> Patents also are of limited efficacy to fragrance manufacturers, effectively protecting only newly discovered "captive" molecules.<sup>248</sup>

Johann Böttiger's enterprise (Meissen Porcelain) lost its most valuable, and seemingly mission-critical, trade secret within decades of its establishment. Yet, hundreds of years after what would appear to have been a devastating loss,

<sup>&</sup>lt;sup>245</sup> See ROBERTA KWALL, THE SOUL OF CREATIVITY: FORGING A MORAL RIGHTS LAW FOR THE UNITED STATES 91 (2009) (suggesting an inherent "degradation" of both attributed author and ghostwriter when the ghostwriter creates most of a literary work but without attribution).

<sup>&</sup>lt;sup>246</sup> See, e.g., United Nations Economic Commission for Europe, Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters, June 25, 1998, 2161 U.H.T.S. 450 (granting the public right of access to any information held by European Union agencies relating to emissions into the environment); International Fragrance Association, North America, Federal Regulatory Chart, http://ifrana.org/advocacy/laws-and-regulations/federal/ (identifying seven federal agencies involved in regulating fragrance ingredients and manufacturing in the United States).

<sup>&</sup>lt;sup>247</sup> See discussion supra Parts I & II.

<sup>&</sup>lt;sup>248</sup> See discussion supra Part II.A.

Meissen Porcelain is flourishing not only because it diversified its merchandise, but more importantly because it capitalized upon the prestige associated with the quality of its porcelain, and also its market lead, made possible by the fact that it was the first European enterprise capable of producing it.

Like Meissen Porcelain, major fragrance houses have long histories, most having existed for well over a century.<sup>249</sup> Unlike Meissen, however, these fragrance companies have functioned as ghostwriters, creating and manufacturing products ultimately sold as emanations of their customers, including couture houses, retailers, and consumer products companies. To an increasing extent, these fragrances are not merely sold by retailers as consumer products but are also used, like broadcast recordings of musical works, as a component of a larger trade dress by which consumers identify a particular retailer or service provider.

The economic potential in fragrance trade dress can be analogized to that inherent in the public performance of copyrighted musical works. Copyright owners of musical works cannot control, or derive financial benefit from, private performances of their songs. When their copyrighted compositions are performed in public, however, they are legally entitled to receive royalties for these uses of their works.<sup>250</sup> Like copyright owners, fragrance manufacturers and retailers cannot control, or derive financial benefit from, private uses of their legitimately acquired products. Nonetheless, as these products are increasingly deployed in public – especially commercial – spaces, they acquire value beyond that ascribable to their hedonic attributes, by contributing to the branding of a commercial product or service. In other words, just as a copyrighted song realizes greater economic value through public performances, a fragrance acquires greater economic value when it becomes part of a legally protectable trade dress through its deployment in a commercial public space.

<sup>&</sup>lt;sup>249</sup> Givaudan, the largest fragrance manufacturer, dates its origins to 1786. *See A Rich Heritage of Growth*, GIVAUDAN, https://www.givaudan.com/our-company/rich-heritage (last visited Jan. 14, 2016). IFF was established in 1889. *See History Timeline*, INT'L FLAVORS & FRAGRANCES, INC., http://www.iff.com/Company/IFF-History (last visited Jan. 14, 2016). Firmenich was established in 1895. *See Company*, FIRMENICH, http://www.firmenich.com/ en\_INT/company.html (last visited Jan. 14, 2016). Symrise merged Haarmaan & Reimer (1874) and Dragoco (1919). *See History*, SYMRISE, https://www.symrise.com/company/organization/ history/ (last visited Jan. 14, 2016). Only Takasago was established in the twentieth century. *See History of Taskago*, TAKASAGO, http://www.takasago.com/en/aboutus/history/1920.html (last visited Jan. 14, 2016).

<sup>&</sup>lt;sup>250</sup> See generally, Podlas, supra note 230 and accompanying text.

The legal protections for fragrance remain limited. Like the Meissen Porcelain enterprise in the 1720s, individual fragrance manufacturers today can never recapture once-secret information that is now widely known, or readily and legitimately ascertained by others through reverse engineering. Accordingly, trade secret protection is an increasingly elusive quarry for this industry. Patent protection is similarly inefficacious, due to its limited duration and requirement of usefulness -- a characterization unpalatable to luxury purveyors. As works of fragrance are not copyrightable, their diffusion in public spaces cannot be regulated as performances of them. When such use results in the establishment of legally protectable trade dress, however, fragrance creators could acquire a portion of the economic value of this interest, in the creation of which they have played a significant role. By capitalizing on the value stemming from the increasing *use* of fragrances in establishing protected brands, fragrance houses might find through trademark law partial compensation for this loss of intellectual property.