U.S. Patent Extraterritoriality within the International Context

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I. INTRODUCTION

Erasing borders is a significant act. There are international, legal, economic, and philosophic implications. The concept of sovereignty, which is widely thought to have originated with the 1648 Treaty of Westphalia, is a cornerstone of the legal order of individual nations. In that era, the former fragmented, decentralized modes of imposing authority on the governed became defined along geographic boundaries. Political power was no longer "understood as the personal possession of rulers," but was instead replaced by our current understanding of modern nation-states, which have "an order which is separate from ruler and ruled (or citizen), separate from other polities like it, and operating in a distinct territory."

Sovereignty allows each nation to create its own laws.⁴ One logical corollary of this principle is that each is sovereign and so "the laws of others have no claim on it."⁵ Under traditional Westphalian principles, domestic law lacks enforcement power outside its territorial boundaries.⁶ Today, our conceptions of sovereignty have both internal and external dimensions—in other words, this concept includes aspects that encompass domestic governance as well as relations with those outside its borders.⁷ Regarding extraterritoriality, the U.S. Supreme Court has affirmed that "[i]t is a basic premise of

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^{1.} Christopher W. Morris, *The Modern State*, *in* HANDBOOK OF POLITICAL THEORY 195 (Gerald F. Gaus & Chandrun Kukathas eds., 2004).

^{2.} Id. at 197.

^{3.} *Id*.

^{4.} Id. at 198.

^{5.} *Id*.

^{6.} Richard Falk, *Revisiting Westphalia*, *Discovering Post-Westphalia*, 6 J. ETHICS 311, 317 (2002).

^{7.} See Christina Eckes, The Reflexive Relationship between Internal and External Sovereignty, 18 IRISH J. EURO. L. 33, 33 (2015) ("Internal' refers to the position within the sovereign entity and hence under domestic law. 'External' refers to the relationship of the sovereign entity with the outside world, [i.e.] in international relations and under international law.").

our legal system that, in general, United States law governs domestically but does not rule the world." The appropriate reach of U.S. domestic law has been founded on several important concerns, including respect for foreign sovereignty, international custom, and the recognition that foreign citizens, who have no rights in shaping our nation's laws, should not be governed by it. 9

Globalization has prompted the evolution of our definition of sovereignty. In the patent context, sovereignty issues have arisen amidst a recent focus on the extraterritorial reach of patent remedies. Some of these issues are examined in a recent series of decisions from the U.S. Court of Appeals for the Federal Circuit. These decisions evidence the tensions that emerge when present-day transnational conduct is evaluated within the Westphalian framework developed in the 1600s. In essence, resolving them requires grappling with the problems that arise "where the reality of human interaction, with its plural sources of norms, seems to be chafing against the strictures traditional conceptions of sovereignty impose."

Strict adherence to perfect Westphalian borders is not the current normative world order. Boundaries have become more porous, sometimes through agreement. Treaties, protocols, and other forms of cooperation subject domestic law to external obligations. For example, nations have cooperated to mitigate the impact of climate change, which is an inherently global phenomenon. Corporations engage in worldwide commerce, wield influence over

^{8.} RJR Nabisco, Inc. v. European Cmty., 136 S. Ct. 2090, 2100 (2016) (internal quotations omitted) (quoting Microsoft Corp. v. AT&T Corp., 550 U.S. 437, 454 (2007)).

^{9.} See generally Harold G. Maier, Extraterritorial Jurisdiction at a Crossroads: An Intersection Between Public and Private International Law, 76 AM. J. INT'L L. 280 (1982) ("the sovereign state is legally limited in its freedom by collective community will").

^{10.} See, e.g., David J. Bederman, *Diversity and Permeability in Transnational Governance*, 57 EMORY L.J. 201, 202 (2007) (discussing the influence globalization has on transnational governance).

^{11.} See Sapna Kumar, Patent Damages Without Borders, 36 REV. LITIG. (forthcoming 2016); Bernard Chao, Patent Imperialism, 109 Nw. U. L. REV. ONLINE 77, 84 (2014) (arguing against a growing trend allowing patentees to recover for damages suffered anywhere in the world); Timothy R. Holbrook, Extraterritoriality in U.S. Patent Law, 49 WM. & MARY L. REV. 2119, 2120 (2008) (rejecting the two approaches courts have adopted to deal with extraterritorial reach of U.S. patents in favor of requiring "courts to explicitly consider foreign law in assessing whether to enforce a patent extraterritorially").

^{12.} See discussion infra Part II.

^{13.} Paul Schiff Berman, From International Law to Globalization, 43 COLUM. J. OF TRANSNAT'L L. 485, 528 (2005).

foreign governments, and engage in activities that influence foreign economies. ¹⁴ Foreign intervention is justified to address human rights violations and, in some cases, security. Rationales have been asserted to extend U.S. law beyond its shores. For example, the Supreme Court authorized extraterritorial jurisdiction for federal courts to hear petitions for habeas corpus brought by prisoners in Guantanamo Bay, in part because the U.S. exercised "complete jurisdiction and control" over the territory and acted as the petitioners' custodians. ¹⁵ All of these examples represent shifts in the law's treatment of territorial reach.

In parallel with these changes, U.S. patent law has not viewed territorial sovereignty as inviolate. The U.S. has yielded internal sovereignty through accession to international agreements, including the Agreement on Trade-Related Aspects of Intellectual Property Rights ("TRIPS Agreement"). The executive branch negotiates trade agreements that impact the patent laws of foreign signatories. The U.S. Patent & Trademark Office has engaged in international coordination efforts through work on the IP5 and the development of the Patent Prosecution Highway. In addition to other common law doctrines, Congress has enacted a statutory subsection that permits recovery of damages for extraterritorial conduct when particular conditions are met.¹⁶

Recently, a number of litigants have challenged the territoriality principles of U.S. patent law by seeking damages for extraterritorial conduct. Although this line of cases turns on the interpretation of a domestic statute, 35 U.S.C. § 284, the issues raised cannot be fully resolved without understanding the global

^{14.} Such influence can include foreign direct investment and the privatization of formerly governmental functions. *See generally* Reuven S. Avi-Yonah, *National Regulation of Multinational Enterprises: An Essay on Comity, Extraterritoriality, and Harmonization*, 42 COLUM. J. TRANSNAT'L L. 5 (2003) (discussing the influence of multinational enterprises); *see also* Bederman, *supra* note 10, at 208–209 ("Major [transnational corporations] are also the leading agents of foreign direct investment").

^{15.} Rasul v. Bush, 542 U.S. 466, 480 (2004).

^{16. 35} U.S.C. § 271(f) (2012). There are some exceptions to this rule. *See, e.g.,* 35 U.S.C. § 271(f); Timothy R. Holbrook, *The Potential Extraterritorial Consequences of Akamai,* 26 EMORY INT'L L. REV. 499, 504 (2012) (describing exceptions).

^{17.} E.g., Power Integrations, Inc. v. Fairchild Semiconductor Int'l, Inc., 711 F.3d 1348, 1372 (Fed. Cir. 2013); WesternGeco LLC v. ION Geophysical Corp., 791 F.3d 1340 (Fed. Cir. 2015), vacated, 136 S.Ct. 2486 (2016), extraterritorial analysis reinstated in 837 F.3d 1358 (Fed. Cir. 2016); Carnegie Mellon Univ. v. Marvell Tech. Grp., 807 F.3d 1283 (Fed. Cir. 2015); Halo Elecs., Inc. v. Pulse Elecs., Inc., 831 F.3d 1369 (Fed. Cir. 2016).

implications. There are several difficulties that arise when damages for infringement of a U.S. patent are authorized for overseas conduct. Such results are contrary to over a century of law that establishes that practicing U.S. patents abroad is legal. Extraterritorial damages are contrary to the structure and purpose of the TRIPS Agreement and may introduce economic distortions. These difficulties undermine "the legitimacy of unilateralism by a handful of nations seeking to impose their legal and regulatory will over the entire globe." ¹⁸

Further, the executive and legislative branches traditionally set and implement foreign policy. In contrast, patents are privately held rights. Authorizing individual patent holders, who cannot be presumed to act in the public interest, to impose costs for foreign conduct through the courts may lead to adverse unintended consequences. This is particularly problematic if patentees assert a large number of patents around a particular important technology. Perhaps most importantly, imposing remedies on foreign conduct impacts a foreign nation's ability to cultivate and apply its own patentability standards flexibly to suit its local conditions. Allowing other nations to evolve their own patent standards, as the United States has itself done over the years, is the optimal path toward maximizing the aggregate global level of invention.

Any solution to the extraterritoriality issue must be sensitive to these implications. Whether resolution of the question seeks to overturn the presumption against extraterritoriality or resorts to a balancing test, the reasons that support extending the reach of U.S. patent law must be compelling. As a practical matter, damages impact innovators. Extraterritorial damages will impact foreign innovators. This is true for both infringing acts that occur wholly outside the United States and those that constitute acts argued to be "the direct, foreseeable result" of domestic infringement. These impacts will have follow-on effects on the contexts in which these innovators operate, including economic impacts on the foreign nation in which such innovators reside.

^{18.} Bederman, supra note 10, at 224.

^{19.} Power Integrations, Inc. v. Fairchild Semiconductor Int'l, Inc., 711 F.3d 1348, 1371 (Fed. Cir. 2013).

II. COMITY AND THE PRESUMPTION AGAINST EXTRATERRITORIALITY

At least since 1812, the U.S. has followed the principle that its laws do not apply to activity that occurs outside its territory. Although the world has become far more interdependent and interconnected since that time, the recent trend in U.S. Supreme Court decisions confirms this long-held principle. These decisions are driven by the concern that applying domestic law outside the nation's borders imposes "the sovereign will of the United States onto conduct occurring within the territorial jurisdiction of another sovereign." The rule is based, in part, on comity, which the Court defines as "the respect sovereign nations afford each other by limiting the reach of their laws."

Comity occupies an uncomfortably undefined place in American law. The doctrine has been described as a form of limited immunity or, alternatively, an international custom recognized in domestic law.²⁴ Another source theorizes that comity represents "an internationally oriented body of domestic law that is distinct from international law and yet critical to legal relations with other

20. See, e.g., The Schooner Exch. v. McFaddon, 11 U.S. 116, 147 (1812) (Marshall, C.J.) ("[T]he Exchange, being a public armed ship, in the service of a foreign sovereign . . . should be exempt from the jurisdiction of the country.").

32

^{21.} See RJR Nabisco v. European Cmtys., 136 S. Ct. 2090, 2100 (2016) (reapplying the "presumption against extraterritoriality"); Kiobel v. Royal Dutch Petroleum Co., 133 S. Ct. 1659, 1665 (2013) (applying the principles that underlie the presumption against extraterritoriality to constrain court jurisdiction under the Alien Tort Statute, 28 U.S.C. § 1350); Morrison v. Nat'l Austl. Bank Ltd., 561 U.S. 247, 261 (2010) (stating "we apply the presumption in all cases, preserving a stable background against which Congress can legislate with predictable effects").

^{22.} *Kiobel*, 133 S. Ct. at 1667; *see also* F. Hoffmann-La Roche Ltd. v. Empagran S.A., 542 U.S. 155, 167 (2004) (observing that "several foreign nations" have advised the Court that "to apply [U.S.] remedies would unjustifiably permit their citizens to bypass their own less generous remedial schemes, thereby upsetting a balance of competing considerations that their own domestic antitrust laws embody").

^{23.} Hartford Fire Ins. Co. v. California, 509 U.S. 764, 817 (1993); see also Am. Banana Co. v. United Fruit Co., 213 U.S. 347, 356 (1909) ("But the general and almost universal rule is that the character of an act as lawful or unlawful must be determined wholly by the law of the country where the act is done" and that any other result would be "contrary to the comity of nations").

^{24.} See, e.g., Arthur Larson, *International Custom and Practice*, in SOVEREIGNTY WITHIN THE LAW 332, 347 (1965) (discussing how "there is a principle of international law higher than the state's own sovereignty which compels it in certain circumstances . . . to respect certain rights of other sovereign states.").

countries."²⁵ One view argues that comity can be conceived of as deference to the executive branch, which has foreign relations expertise and the flexibility to implement international policy. ²⁶ Comity has been referred to as a "choice-of-law principle, a synonym for private international law, a rule of public international law, a moral obligation, expediency, courtesy, reciprocity, utility, or diplomacy."²⁷

Where a federal statute is at issue, comity operationalizes into a presumption that legislatures act in accordance with the principle of non-interference with another sovereign territory. Although the presumption can be overcome, courts generally rely on the foundational assumption that "comity is exercised by legislatures when they enact laws, and courts assume it has been exercised when they come to interpreting the scope of laws their legislatures have enacted." This presumption against extraterritoriality is said to be particularly compelling for damages, because "providing a private civil remedy for foreign conduct creates a potential for international friction beyond that presented by merely applying U.S. substantive law to that foreign conduct." Notably, the Court has emphasized that plaintiffs should not be permitted to bypass the deliberate policy choices embedded in law enacted by other sovereign nations. 30

Consistent with these general principles, U.S. patent law has long been considered territorial. This principle has been recognized at least since 1856, when the Supreme Court decided *Brown v. Duchesne*. Holding that a claim of infringement could not be asserted against a patented invention used on a French ship

^{25.} William S. Dodge, *International Comity in American Law*, 115 COLUM. L. REV. 2071, 2077 (2015).

^{26.} Eric A. Posner & Cass R. Sunstein, *Chevronizing Foreign Relations Law*, 116 YALE L. J. 1170, 1202 (2007).

^{27.} Joel L. Paul, *The Transformation of International Comity*, 71 LAW & CONTEMP. PROBLEMS 19, 19–20 (2008) (footnotes omitted).

^{28.} Hartford Fire Ins., 509 U.S. at 817.

^{29.} RJR Nabisco, Inc. v. European Cmty., 136 S. Ct. 2090, 2106 (2016) (discussing RICO civil remedies).

^{30.} *Id.*; see also William S. Dodge, *International Comity in American Law*, 115 COLUM. L. REV. 2071, 2078 (2015) (discussing comity as a principle of restraint).

^{31.} *E.g.*, Deepsouth Packing Co. v. Laitram Corp., 406 U.S. 518, 531 (1972) ("[The U.S.] patent system makes no claim to extraterritorial effect"); Dowagiac Mfg. Co. v. Minn. Moline Plow Co., 235 U.S. 641, 650 (1915) (affirming denial of damages for infringing acts occurring in Canada, holding that "[t]he right conferred by a patent under our law is confined to the United States and its territories, and infringement of this right cannot be predicated on acts wholly done in a foreign country." (citations omitted)).

^{32. 60} U.S. 183, 195 (1856).

sailing the high seas, the *Brown* Court observed that a device lawfully made in France could not trigger liability under U.S. patent law as that "would confer a power to exact damages where no real damage had been sustained, and would moreover seriously embarrass the commerce of the country with foreign nations." This quote illustrates the Court's view that conduct beyond U.S. shores is not infringement of a U.S. patent, and that a contrary rule interferes with the foreign relations authority of other branches of government. Recognizing that those branches are empowered to prescribe the terms of the United States' international relations, the *Brown* opinion instructed that a private cause of action for patent infringement should not be construed to interfere with the exercise of those functions. The *Brown* Court explained that it was:

impossible to suppose that Congress in passing these laws could have intended to confer on the patentee a right of private property, which would in effect enable him to exercise political power, and which the Government would be obliged to regain by purchase, or by the power of its eminent domain, before it could fully and freely exercise the great power of regulating commerce, in which the whole nation has an interest.³⁵

In 2007, the contemporary Supreme Court reaffirmed the *Brown* Court's principles in *Microsoft Corp. v. AT&T Corp.*³⁶ As this Court explained, courts should "assume that legislators take account of the legitimate sovereign interests of other nations when they write American laws" because "foreign law 'may embody different policy judgments about the relative rights of inventors, competitors, and the public in patented inventions." ³⁷

35. Id. at 198.

^{33.} Id. at 197.

^{34.} *Id*.

^{36. 550} U.S. 437, 444 (2007) ("Absent 'a clear congressional indication of intent'... courts ha[ve] no warrant to stop the manufacture and sale of the parts of patented inventions for assembly and use abroad.").

^{37.} *Id.* at 455 (citations omitted). There are limited exceptions. First, Congress has enacted 35 U.S.C. § 271(f), which authorizes infringement for the supply of a component outside the U.S. that either actively induces, or contributes to, infringement if the final combination would have constituted infringement if the conduct had occurred within the U.S. 35 U.S.C. § 271(f) (West 2012). The second exception is for system claims where the "control... and beneficial use" of the claim is within the U.S., although there is some conduct that occurs in another

The more recent Federal Circuit cases consider patentee requests for damages for extraterritorial conduct.³⁸ For example, in *Power Integrations, Inc. v. Fairchild Semiconductor Int'l, Inc.*, the patentee argued that it was foreseeable that the defendant's domestic infringement caused the loss of foreign sales.³⁹ Following the Supreme Court's *Microsoft* case, this decision recognized the rule that "a defendant's foreign exploitation of a patented invention . . . is not infringement at all" and therefore extraterritorial practice of U.S. patented claims "under almost all circumstances, cuts off the chain of causation initiated by an act of domestic infringement."

In WesternGeco L.L.C. v. ION Geophysical Corp., the Federal Circuit affirmed a finding of infringement regarding a system used to search for oil and gas beneath the ocean floor. 41 Because the invention was used abroad, the infringement finding was based on 35 U.S.C. § 271(f), which authorizes recovery for extraterritorial infringement. 42 The patentee was awarded a reasonable royalty for the infringement, which was not contested on appeal.⁴³ However, the court rejected the patentee's contention that additional recovery should be awarded for its failure to win ten contracts to be performed on the high seas.⁴⁴ Just as the *Brown v*. Duchesne Court had found, the WesternGeco court recognized that U.S. patent laws do not operate beyond the nation's borders. 45 The WesternGeco court reasoned that foreign sales did not, by themselves, constitute infringement of a U.S. patent, and therefore no damages could be due for such activity. 46 Further, this court determined that an operative infringing act under § 271(f) was the export of the component, and not the foreign use or sale of the final assembled system.⁴⁷ This construction, the court held, was contrary to the purpose of § 271(f), which had been designed to place domestic entities that export components for assembly abroad in the

country. NTP Inc. v. Research in Motion, Ltd., $418\ F.3d\ 1282,\ 1317$ (Fed. Cir. 2005).

^{38.} See cases cited supra at footnote 17.

^{39. 711} F.3d at 1371-72.

^{40.} Id. at 1372.

^{41. 791} F.3d 1340, 1342–43 (Fed. Cir. 2015).

^{42.} Id. at 1349.

^{43.} *Id*.

^{44.} Id. at 1350.

^{45.} Id.

^{46.} Id. at 1351.

^{47.} Id.

same position as domestic manufacturers of finished products. ⁴⁸ Further, the court reasoned, the patentee had been compensated in the form of a reasonable royalty. ⁴⁹

Although decided on domestic grounds, the Federal Circuit's refusal to expand the reach of U.S. patent law can be justified when viewed in its international context. As the next sections consider, the TRIPS Agreement was conceived to overcome the territoriality of domestic patent systems. At the same time, the TRIPS Agreement was intended to allow other nations flexibility in implementing the specifics of their patent systems to fit their local cultures, economies, and legal systems. By authorizing other sovereigns to enact individualized patentability standards, the TRIPS Agreement permits all members to formulate their own answers to the policy questions that arise in patent cases.

III. THE INTERNATIONAL INTELLECTUAL PROPERTY FRAMEWORK

The TRIPS Agreement requires members to adopt minimum standards for patent protection and enforcement, and to provide remedies for violations. Today, patents are available in almost every country. One primary justification for the TRIPS Agreement is that intellectual property law is territorial. Indeed, if damages were available extraterritorially, there would have been little need for the TRIPS Agreement. Now that the Agreement is in place, there is little need for the implementation of extraterritorial damages.

To some degree, the TRIPS Agreement accommodates legal individualization through an open-ended structure that leaves particular terms undefined, as well as sections that authorize implementation flexibility. ⁵³ This breathing space is critical.

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^{48.} *Id*.

^{49.} Id.

^{50.} Agreement on Trade-Related Aspects of Intellectual Property Rights arts. 27–34, 44–46, Apr. 15, 1994, 1869 U.N.T.S. 299 [hereinafter TRIPS Agreement].

^{51.} See Peter Drahos, The Global Governance of Knowledge: Patent Offices and Their Clients 2 (2010) ("There are probably less than five countries where one cannot obtain a patent."). Notably, nearly all nations had already enacted domestic patent laws when the TRIPS Agreement was finalized in 1995. See, e.g., Phil Thorpe, Study on the Implementation of the TRIPS Agreement by Developing Countries, Comm'n on Intell. Prop. Rts. (2009), http://www.iprcommission.org/papers/pdfs/study_papers/sp7_thorpe_study.pdf (observing that "very few developing countries are still denying patent protection for pharmaceutical products.").

^{52.} See cases cited supra note 31.

^{53.} TRIPS Agreement, *supra* note 50, at arts. 7–8.

Nations specifically bargained for them. ⁵⁴ Many nations have customized their patentability standards to encompass—or to exclude—certain types of claims to facilitate technological progress tuned to their individual circumstances. This allows members to incentivize invention based on local conditions. To interfere with this ability may stunt the level of invention worldwide.

From a governmental perspective, intellectual property can operate as a strategic tool to foster national development. There is extensive literature establishing that nations are not similarly situated with respect to their ability to generate technological advances. For example, the U.S. venture capital system does not exist everywhere. 55 The U.S. government's research and development funding, the private technological transfer mechanisms, the operation of research universities, and the existence of a start-up culture create a background of expectation for U.S. inventors and innovators that would be inappropriate where an analogous background is lacking.⁵⁶ Other nations have distinct national priorities, including uncertain supplies, different medical priorities, and dissimilar infrastructure needs. Additional factors at play include distinct industry-specific structures, educational systems, regional innovation clusters, and income disparities. 57 Further, consumer-spending capabilities differ. Developing countries tend to have a higher proportion of patents granted to foreign entities compared to those granted to nationals.⁵⁸ These circumstances can suppress domestic invention and innovation, particularly if foreign patents are

^{54.} Peter K. Yu, *The Objectives and Principles of the TRIPS Agreement*, 46 Hous. L. Rev. 979, 1022 (2009).

^{55.} See generally Samuel Kortum & Josh Lerner, Assessing the Contribution of Venture Capital to Innovation, 31 RAND J. ECON. 674 (2000); see also Stuart J.H. Graham et al., High Technology Entrepreneurs and the Patent System: Results of the 2008 Berkeley Patent Survey, 24 BERKELEY TECH. L.J. 1255, 1276 (2009) (surveying startup firms).

^{56.} E.g., Org. for Econ. Co-operation and Dev. [OECD], *International Comparisons*, 1 MAIN SCI. & TECH. INDICATORS 19 (2016), http://www.keepeek.com/Digital-Asset-Management/oecd/science-and-technology/international-comparisons_msti-v2016-1-5-en#.V6ag1xQpwVs (cataloguing differences in scientific funding and organizational structures of different countries).

^{57.} See generally Ingrid Verheul, Sander Wennekers, David Audretsch & Roy Thurik, An Eclectic Theory of Entrepreneurship: Policies, Institutions and Culture, in 27 Entrepreneurship: Determinants and Pol'y in a Eur.-U.S. Comparison 18 (David Audretsch et al. eds., 2002).

^{58.} Getachew Mengistie, WORLD INTELL. PROP. ORG. [WIPO], *The Impact of the International Patent System on Developing Countries*, at 6, WIPO Doc. A/39/13 Add.1 (Aug. 15, 2003), http://www.wipo.int/edocs/mdocs/govbody/en/a_39/a_39_13_add_1.pdf.

numerous, or are clustered in a portfolio surrounding important technologies. Analogously, the imposition of damages from asserted violations of another nation's patents within a developing country's borders threatens to do the same. This problem is compounded by the fact that many developing countries do not have well-developed antitrust laws.⁵⁹

In other words, the assumptions about invention, innovation, and national priorities that underlie the U.S. patent regime do not hold for other nations, which are capable of identifying their own. The following quote from the Brazilian delegation to the World Trade Organization illustrates this perspective:

The naïve assumption that providing IP title holders with stronger rights will, by itself, foster innovation or attract investments is no longer acceptable. The open and global economy has rejected this assumption and severely hit the very essence of the patent system, whereby a country would confer an artificial and temporary "monopoly" for the inventor in exchange of having the invention revealed allegedly benefiting the society. No such thing is currently taking place, with a few countries excepted. 60

A governmental shift of patentability standards to comport with present circumstances is not a new phenomenon. Over the course of its history, the U.S. has changed its patentability standards dramatically. Soon after the Great Depression, the U.S. Supreme Court raised the obviousness standard to an impossibly demanding level to minimize the operation of monopolies while the national economy was in a weakened state. The aversion to patents did not

59. Bernard Hoekman & Peter Holmes, *Competition Policy, Developing Countries and the WTO*, 22 WORLD ECON. 875, 882 (1999) ("Many [developing countries] do not have competition laws; those that do, often have limited implementation ability.").

60. Permanent Mission of Brazil to the World Trade Organization and Other Economic Organizations in Geneva, WORLD INTELL. PROP. ORG. [WIPO], *Proposal from Brazil*, WIPO Doc. SCP/14/7 (Jan. 20, 2010), http://www.wipo.int/edocs/mdocs/patent_policy/en/scp_14/scp_14_7.pdf.

61. See Cuno Engineering Corp. v. Automatic Devices Corp., 314 U.S. 84, 91 (1941) (adopting the "flash of creative genius" test to the nonobviousness requirement); see also Arthur M. Smith, Recent Developments in Patent Law, 44 MICH. L. REV. 899, 902 (1946) (observing that the Great Depression and need for raw materials to manufacture inputs to serve the United States' efforts during World War II placed pressure on the government to reform the patent system to guard against the accumulation of monopolies).

38

last long. In 1952, the U.S. amended the patent law to return the standard back to the former level. ⁶² Yet during the 1990s, the inventive step standard shifted yet again when the Federal Circuit applied the standard in a lenient manner that permitted patents claiming very modest advances to issue. ⁶³ Another shift occurred in 2007 when the U.S. Supreme Court corrected this course in *KSR International v. Teleflex Inc.* ⁶⁴ In this case, the Court implemented an "expansive and flexible approach" to the inventive step. ⁶⁵ Overall, this recent approach shifted toward requiring higher levels of technological creativity to obtain a patent. ⁶⁶ Most recently, the Supreme Court has trimmed patent protection further by modifying the patentable subject matter doctrine.

Other nations have made choices that, although arriving at different places than U.S. law, are valid efforts to optimize their patent system to fit local conditions. India's treatment of pharmaceuticals is illustrative. During its colonial years India had attempted to facilitate the chemical and medical industry, but the patent system imposed by Great Britain prevented the experimentation and development necessary to foster this nascent field. In contrast, post-colonial India recognized that this prior patent law had disadvantaged its own manufacturing ability, economy, and public health. To reverse this circumstance, India

^{62.} See 35 U.S.C. § 103 (2012) (codifying the nonobviousness requirement); see also Graham v. John Deere Co. of Kansas City, 383 U.S. 1, 4 (1966) (describing the codification of the nonobviousness requirement in 35 U.S.C. § 103 as returning the standard to that described in *Hotchkiss v. Greenwood*, 11 How. 248 (1851)).

^{63.} FED. TRADE COMM'N, TO PROMOTE INNOVATION: THE PROPER BALANCE OF COMPETITION AND PATENT LAW POLICY 12–13 (2003), https://www.ftc.gov/sites/default/files/documents/reports/promote-innovation-proper-balance-competition-and-patent-law-and-policy/innovationrpt.pdf.

^{64. 550} U.S. 398 (2007).

^{65.} *Id.* at 415.

^{66.} Id. at 421.

^{67.} See Bilski v. Kappos, 561 U.S. 593, 606 (2010) (narrowing protection for business method patents); see also Mayo Collaborative Servs. v. Prometheus Labs., Inc., 132 S. Ct. 1289, 1303 (2012) (narrowing protection for medical procedures by expanding the "laws of nature" exception to patentable subject matter); see also Alice Corp. v. CLS Bank Int'l, 134 S. Ct. 2347, 2354 (2014) (narrowing protection for patent claims by expanding the "abstract ideas" exception to patentable subject matter).

^{68.} Janice M. Mueller, *The Tiger Awakens: The Tumultuous Transformation of India's Patent System and the Rise of Indian Pharmaceutical Innovation*, 68 U. PITT. L. REV. 491, 508 (2007) ("Multinationals reportedly used the 1911 Act to prevent Indian drug firms from manufacturing drugs invented abroad.").

^{69.} Id.

amended its law in 1970 to prohibit protection for food and drug product claims. 70 At the same time, protection for process claims was limited to seven years.⁷¹ These changes led to unprecedented growth in India's pharmaceutical industry. 72 By the early 1990s, Indian firms satisfied up to 80% of the nation's domestic drug needs and roughly 20% of global demand.⁷³ When the TRIPS Agreement was enacted in 1995. India was forced to amend its patent laws to offer protection for pharmaceutical product claims and extend method claim protection to twenty years. Yet the nation's obviousness requirement retained some echoes of its past. Specifically, India's inventive step requirement is designed to bar claims that are mere attempts to evergreen existing protection on pharmaceutical substances unless better patient outcomes are demonstrated.⁷⁴ This rule is more demanding than the inventive step requirement of the most highly developed nations, and it maximizes India's ability to engage in pharmaceutical manufacturing and distribute low-cost drugs. India's variant of the inventive step requirement echoes its history, current national priorities, and economy.

South Africa, like India and many other countries, inherited its patent system from the British during the colonial era. Due to the press of other national priorities, the nation's patent system is only now transitioning from a registration system toward a search and examination system. The nation is now poised to examine

70. Patents Act, 1970, No. 39, Acts of Parliament, sec. 5, 1970 (India).

72. See Dr. Y.K. Hamied, Presentation on the Occasion of Dr. A.V. Rama Rao's 70th Birthday: Indian Pharma Industry: Decades of Struggle and Achievements (April 2, 2005),

http://www.arvindguptatoys.com/arvindgupta/avra-hamied.pdf (discus globalization and the impact on growth of India's pharmaceutical industry).

^{71.} *Id.* at sec. 53(a).

⁽April 2, 2005), a-hamied.pdf (discussing

^{73.} Jean O. Lanjouw, The Introduction of Pharmaceutical Product Patents in India: "Heartless Exploitation of the Poor and Suffering" 4 (Yale U. Econ. Growth Ctr., Discussion Paper No. 775, 1997); Cheri Grace, The Effect of Changing Intellectual Property on Pharmaceutical Industry Prospects in India and China Considerations for Access to Medicines 13 (2004), http://www.who.int/hiv/amds/Grace2China.pdf?ua=1.

^{74.} Amy Kapczynski, *Engineered in India—Patent Law 2.0*, 369 NEW ENG. J. MED. 497, 497 (2013), http://www.nejm.org/doi/full/10.1056/nejmp1304400#t=article (observing that India has enacted a statute that has been strictly interpreted to mean that "new forms of known drugs cannot be patented in India unless the new form yields therapeutic benefits.").

^{75.} DRAHOS, *supra* note 51, at 112–13.

^{76.} Chan Park, Achal Prabhala & Jonathan Berger, United Nations Development Programme [UNDP], USING LAW TO ACCELERATE TREATMENT

substantive changes to its current regime, which still largely echoes the British system from which it was derived. It has created, but not adopted, a draft intellectual property policy that seeks to integrate policy into its substantive standards. Recently, the nation's Minister of Trade and Industry has recognized the complexity of the questions presented in refining the system toward its priorities. Just as the United States has done, South Africa is approaching patent reform deliberatively and with an eye toward maximizing its domestic development. As a sovereign nation, and within the confines of the TRIPS Agreement, the nation should be permitted to proceed along that path without the potential disruption deriving from the imposition of damages for infringement of a U.S. patent for conduct within South Africa's borders.

Specifically, with regard to patent remedies, various countries are striving to implement their own answers to difficult damages questions. They may reach divergent conclusions for the appropriate level of compensation. There may be different policy implementations for claims subject to obligations that require the patentee to charge a "fair, reasonable and nondiscriminatory" (FRAND) licensing rate. Others are grappling with damage award calculation methods, relief for moral prejudice, apportionment,

Access in South Africa: An Analysis of Patent, Competition and Medicines Law $53-54\ (2013)$.

77. Draft National Policy on Intellectual Property (IP) of South Africa: A Policy Framework, 579 Nat'l Gazette No. 36816, 11–14 (Sept. 4, 2013) (S. Afr.) (promulgated by Department of Trade and Industry), http://ip-unit.org/wpcontent/uploads/2013/09/DRAFT-IP-POLICY.pdf; see also Dr. Rob Davies, Minister, Trade & Industry of South Africa, Keynote Address at the World Intellectual Property Organization, International Conference on Intellectual Property and Development, 12 (Apr. 7. 2016) http://www.wipo.int/edocs/mdocs/mdocs/en/wipo_ipda_ge_16/wipo_ipda_ge_16_t 3.pdf ("[W]hether or not IPRs in fact generate net benefits or costs to any particular country will depend on its productive profile, its R&D infrastructure, and the extent to which policy space is preserved to adapt the IPRs regime to local conditions and needs.").

78. Davies, *supra* note 77, at 9 ("As the policy debate unfolds, there nevertheless seems to be a wide acceptance that research on the topic must be extended and deepened if we are to have a better grasp of the complex relationship between IPR reform and FDI flows, technology transfer and industrialization.").

79. See, e.g., Case C-170/13, Huawei Technologies Co. Ltd v. ZTE Corp., 2015

http://curia.europa.eu/juris/celex.jsf?celex=62013CJ0170&lang1=en&type=TXT& ancre= (Jul. 16, 2015) (requiring that the patent owner agrees to grant fair licenses if a patent right is found to exist).

innocent infringement, willfulness, injunctive relief, and the availability of compulsory licenses. 80

Varying approaches are valid, in line with the intent of the TRIPS Agreement, and reflect the individual policy choices that are critical to each nation's use of intellectual property as a strategic tool to foster national development. Interfering with these sovereign choices should not be undertaken lightly. As a practical matter, allowing U.S. jury decisions to override other nations' considered judgments undermines the structure and theory of TRIPS flexibilities. To the extent that infringement overseas cannot be resolved through the present system despite the ubiquity of patent laws worldwide, this issue should be resolved on an international level with input from affected nations.

IV. THE POTENTIAL CONSEQUENCES OF EXTRATERRITORIAL REMEDIES

When the TRIPS Agreement was drafted, the availability of worldwide protection was viewed as a critical tool to correct trade distortions. Specifically, it was thought that such distortions were created when developed nations invested in developing knowledge-intensive goods, attempted to sell them worldwide, and then was met with copyists in other nations without effective patent remedies. This circumstance was said to lead to underinvestment in research. Additionally, it was theorized that developed nations might be unwilling to export products to, or locate manufacturing facilities in, nations where copyists would eviscerate their intended profit. Thus, worldwide protection was believed to facilitate free trade.

The TRIPS Agreement was intended to alleviate this circumstance by requiring all GATT trading partners to adopt, implement, and enforce intellectual property rights. ⁸¹ Under this plan, the Agreement was intended to maximize incentives for the best technological research, which has the potential to lead to innovation growth worldwide, particularly where spillovers resulted. ⁸² With the potential for a global market, entities would be

^{80.} See generally Thomas F. Cotter, Comparative Patent Remedies: A Legal and Economic Analysis (2013); Larry Coury, C'est What? Saisie! A Comparison of Patent Infringement Remedies Among the G7 Economic Nations, 13 Fordham Intell. Prop. Media & Ent. L.J. 1101 (2003) (analyzing the different approaches to patent damages adopted by seven countries).

^{81.} TRIPS Agreement, *supra* note 50, at 320.

^{82.} See generally M. Scott Taylor, Trips, Trade, and Growth, 35 INT'L ECON. REV. 361 (1994).

motivated to use "the world's best practice technologies." ⁸³ Additionally, it was predicted to have an overall positive effect on free trade, because the intellectual property protection facilitated the free exportation of goods to all members. ⁸⁴ That is, with the appropriate laws and procedural protections in place, local infringement actions could be brought against foreign copyists.

Additionally, the TRIPS Agreement was intended to encourage foreign direct investment in developing countries.⁸⁵ The reason, at least in theory, is that the widespread availability of intellectual property protection was thought to encourage multinational corporations to locate manufacturing in any nation that is optimal, based on the most qualified employee base, reduced transportation costs, the proximate availability of raw materials, or other efficiencies.⁸⁶ If all member nations respected the intellectual property rights of multinational corporations, then a lack of protection would not be a barrier to placing manufacturing in a location that was otherwise favorable.⁸⁷

If extraterritorial damages are awarded, courts must be mindful that trade distortions will be created. For example, if the U.S. awards extraterritorial damages, it can be expected that other nations will reciprocate and impose their patent laws on U.S.-based activity. This may impact the cost of doing business domestically. In the aggregate, the extraterritorial reach of U.S. damages law, coupled with the anticipated reciprocal imposition of other nations' damages laws, threatens to introduce trade distortions that, although different from those that the TRIPS Agreement was intended to erase, are equally undesirable. These include raising the cost of innovation.

The following three scenarios, roughly based on the facts of *Power Integrations, Inc. v. Fairchild Semiconductor Int'l, Inc.*, illustrate some potential impacts. 88 In that case, the defendant made, sold, or imported semiconductors that incorporated the patentee's

84. Id. at 367.

^{83.} Id. at 373.

^{85.} Keith E. Maskus, *The Role Of Intellectual Property Rights In Encouraging Foreign Direct Investment And Technology Transfer*, 9 DUKE J. COMP. & INT'L L. 109, 111 (1998) (defining foreign direct investment as "FDI, the establishment or acquisition of production subsidiaries abroad by multinational enterprises").

^{86.} Id. at 110-11.

^{87.} Singapore, which currently favors patent standards that are harmonized with the most developed nations, stands as an example of a nation that has received considerable foreign direct investment since the early 1990s due to a number of policy changes that include strengthening its patent protection.

^{88. 711} F.3d 1348, 1372 (Fed. Cir. 2013).

claimed technology. ⁸⁹ According to the patentee, these actions resulted in lost sales to end-users overseas. ⁹⁰ Under *Rite Hite Corp. v. Kelly*, such damages would constitute a recoverable form of damages if those lost sales had occurred within the U.S. ⁹¹ However, the *Power Integrations* court held that lost foreign sales were not recoverable: "[i]t is axiomatic that U.S. patent law does not operate extraterritorially to prohibit infringement abroad." ⁹² The following hypothetical variations consider the impact of a contrary result—in other words, if the *Power Integrations* court had instead held that foreign lost sales to end-users were recoverable under the U.S. law. These hypotheticals assume that the patentee owns patents to the same subject matter in both the U.S. and the foreign jurisdiction, and enforces both patents in their respective jurisdictions.

- First: Under the facts stated, the patentee might receive compensation for the lost sales under both U.S. law and foreign law for precisely the same activity. This result will occur if one of the courts deems a violation of a U.S. and a foreign patent are two separate torts, such that each warrants separate compensation. 94 This raises the infringer's innovation costs and amounts to double recovery. There may be follow-on issues that impact the foreign economy (including, for example, employment). In addition, the risk potential may chill the availability of foreign direct investment, a result contrary to the TRIPS Agreement's intent.
- Second: Use the same facts stated above, except assume that
 the predicate domestic infringing act is an infringing sale to a
 distributor, and the foreign activity is a foreign use of the
 same product by end users overseas. This might occur if a
 domestic defendant concluded contracts within the U.S. to a
 foreign entity that manufactures these devices offshore. In
 that instance, the domestic defendant will pay damages for
 the domestic sales, and the foreign manufacturer will be
 assessed damages for the overseas manufacture. In essence,

90. *Id*.

^{89.} Id.

^{91. 56} F.3d 1538, 1544 (Fed.Cir.1995) (en banc).

^{92.} Power Integrations, 711 F.3d at 1371.

^{93.} This hypothetical assumes that exhaustion rules do not eliminate recovery in either jurisdiction.

^{94.} Griffin v. Keystone Mushroom Farm Inc., 453 F. Supp. 1283, 1285—86 (E.D. Pa. 1978) (adopting this position for patents issued in both the U.S. and Italy).

this drives up the cost of forming contracts within the U.S., and might impact decisions to locate contract discussions here. If, instead, the predicate act was making products in the U.S. that are distributed overseas, double recovery might be had for both the manufacture and subsequent sale of products. This circumstance could impact decisions to locate manufacturing in the U.S.

• Third: Use the original facts, except assume that the U.S. grants patents for the invention but the foreign country has determined that the subject matter of the application is unpatentable. By awarding patent damages for activity that is not a violation of the foreign nation's law, the U.S. court has interfered with the decision-making sovereignty of the other nation. Further, this raises the cost of innovation within the foreign nation, which had determined that this technology should be in the public domain. As with the first scenario, this raises the foreign innovator's costs, and may impact the foreign economy and its ability to attract foreign direct investment.

As a practical matter, the patent system is intended to act as an incentive system. To the extent that the system operates as intended, awarding damages in a patent infringement affects the operation of those incentives, as well as the costs of innovation nationwide. Furthermore, changing the law of patent damages in this manner interferes with the decision-making authority of nations outside U.S. borders.

V. CONCLUSION

The question of extraterritorial damages arises within an international context. Although premised on the construction of a domestic statute, questions of foreign sovereignty and comity must be considered. The current trend, in both the U.S. Supreme Court and Federal Circuit, gives respect for the law-making authority of other nations by cutting against such awards. This paper establishes that there are sound reasons for doing so. The history of the U.S. Patent Act, the TRIPS Agreement, and the prospective consequences of damages for foreign-based conduct counsel against extraterritorial awards.

^{95.} See 35 U.S.C. § 271 (West 2012) (defining infringing acts).