

---

---

## International [Dis]harmony: Solving Legal Uncertainty in Extraterritorial Patent Infringement Suits

*Matthew T. Wilkerson\**

I. A GLOBALIZED ECONOMY REQUIRES GLOBALIZED PATENT STRUCTURES.....	376
II. HISTORICAL CONTEXT OF UNITED STATES INTERNATIONAL INFRINGEMENT LITIGATION.....	379
A. The Deepsouth Regime .....	379
B. The § 271 Regime from 1984 to 2018 .....	381
C. The Supreme Court Changes Course in <i>WesternGeco</i> .....	383
D. Justice Gorsuch’s Dissent in <i>WesternGeco</i> and Concerns Moving Forward .....	386
III. GERMAN AND BRITISH TREATMENT OF FOREIGN PATENT INFRINGING ACTIONS .....	386
A. The Three Categories of Extraterritorial Enforcement of Patent Rights Problems in the EPC.....	388
B. Germany’s Nearly Fifteen-Year-Old Policy on Extraterritorial Enforcement of Patent Rights .....	389
C. The Anomaly Called the United Kingdom.....	391
IV. THE COSTS OF INTERNATIONAL DISHARMONY IN A GLOBALIZED ECONOMY	392
A. The Power of the PCT .....	395
B. The Failure of the Dispute Resolution Protocol of Art. 59.....	395
C. Amending the PCT to Decrease Legal Uncertainty Providing International Harmonization and Legal Principles Aligned with Economic Realities.....	396
1. PROCEDURE FOR INTRODUCING A PCT AMENDMENT.....	397
2. TWO POTENTIAL AMENDMENTS TO THE PCT WILL CORRECT THE ISSUES RELATING TO EXTRATERRITORIAL PATENT INFRINGEMENT AND POSSIBLY OTHER DISPUTES INVOLVING A PRIVATE PARTY .....	398
A. A BLANKET BAR ON EXTRATERRITORIAL PATENT JUDGMENT ABSENT THE NATION OF RESIDENCE OF THE PARTY IN QUESTION’S CONSENT .....	399
B. LIMITATIONS ON EXTRATERRITORIAL INFRINGEMENT JUDGMENTS ..	400
VI. CONCLUSION .....	401

---

\* Special thanks to Professor Jason Rantanen for assisting and advising on this piece and W. Cory Spence for providing useful data collected by his firm, SpencePC. J.D. Candidate, The University of Iowa College of Law, 2020; M.S. in Law, Northwestern University Pritzker School of Law, 2016; B.S. in Biology, Bucknell University, 2014.

## I. A GLOBALIZED ECONOMY REQUIRES GLOBALIZED PATENT STRUCTURES

Since World War II, the global economy has seen an unprecedented rate of globalization.<sup>1</sup> Although the rate of globalization is slowing, the current growth is so pervasive that economic globalization will maintain at current levels into the foreseeable future.<sup>2</sup> Global Intellectual Property (“IP”) and patent markets reflect this trend.<sup>3</sup> Economic leaders have long attempted to reconcile the natural tension between the mobility of intellectual property assets and geopolitical boundaries with multilateral treaties dating back to the late 19th century.<sup>4</sup>

The current major patent treaty is the Patent Cooperation Treaty (“PCT”),<sup>5</sup> which has 153 signatory members.<sup>6</sup> The PCT creates obligations on its Member States for structuring their patent regimes, providing a mechanism to facilitate applications and grants of patent rights in multiple nations.<sup>7</sup> Certain issues continue to exist with the PCT as it stands.<sup>8</sup> A primary issue is the

---

<sup>1</sup> For purposes of this Article, globalization refers generally to the idea of economic globalization. As defined in a UN paper on the matter, economic globalization “refers to the increasing interdependence of world economies as a result of the growing scale of cross-border trade of commodities and services, flow of international capital and wide and rapid spread of technologies.” Gao Shangquan, *Economic Globalization: Trends, Risks and Risk Prevention* 1 (United Nations Dep’t of Econ. and Soc. Affairs Background Paper, 2000), [https://www.un.org/en/development/desa/policy/cdp/cdp\\_background\\_papers/bp2000\\_1.pdf](https://www.un.org/en/development/desa/policy/cdp/cdp_background_papers/bp2000_1.pdf).

<sup>2</sup> See generally, WORLD TRADE ORG., WORLD TRADE REPORT 2017: TRADE, TECHNOLOGY AND JOBS, (Sept. 27, 2017).

<sup>3</sup> This Note uses metrics in patent applications, grants, and litigation to evaluate the overall market growth. Applications and grants are used to provide data regarding the volume of assets sought and granted. Litigation rate is used, because the true value of an asset can only be assessed once litigated, thus high litigation rates indicate greater and more accurate valuations. See WORLD INTELLECTUAL PROPERTY ORGANIZATION, WORLD INTELLECTUAL PROPERTY INDICATORS 2018 18, 24, 31 (2018).

<sup>4</sup> See Paris Convention for the Protection of Industrial Property, Mar. 20, 1883, 21 U.S.T. 1583, 828 U.N.T.S. 305.

<sup>5</sup> The PCT serves many purposes, including providing a simpler pathway to patenting in multiple jurisdictions, providing ease of access for patent agencies and the public, and providing ease of enforcement across jurisdictions. The PCT and WIPO were not created to replace national and regional offices, but rather are intended to be complementary. See *Protecting your Inventions Abroad: Frequently Asked Questions About the Patent Cooperation Treaty (PCT)*, WIPO (Oct. 2017), <https://www.wipo.int/pct/en/faqs/faqs.html>.

<sup>6</sup> Patent Cooperation Treaty, June 19, 1970, 28 U.S.T. 7645, 1160 U.N.T.S. 231 (1970).

<sup>7</sup> *Id.*

<sup>8</sup> See generally Daniel Nepelski & Giuditta De Prato, *Does the Patent Cooperation Treaty Work? A Global Analysis of Patent Applications by Non-Residents* (European Comm’n, Joint Research Ctr., Institute for Prospective Tech. Studies Working Paper, 2013), <https://publications.jrc.ec.europa.eu/repository/bitstream/JRC79541/irc79541.pdf>.

jurisdictional reach of Member States' courts in cases of international infringement.<sup>9</sup>

Three patent leading states—the United States, Germany, and the United Kingdom<sup>10</sup>—have taken distinct approaches regarding damages in international infringement cases. Typically, the United States will only hold a party liable for infringement if the infringing act occurs in the United States per 35 U.S.C. § 271.<sup>11</sup> Section 271(a) states, “Except as otherwise provided in this title, whoever without authority makes, uses, offers to sell, or sells any patented invention, within the United States or imports into the United States any patented invention during the term of the patent therefor, infringes the patent.”<sup>12</sup> However, the statute and the U.S. courts have identified instances in which the patent may not be literally infringed in the United States, yet the law will still consider the actions infringing.<sup>13</sup>

Conversely, in Germany, direct and indirect patent infringement are dealt with separately; a finding of direct infringement is not required to establish indirect infringement. Alternatively, in the United States, each claim of indirect infringement must be linked to a finding of direct infringement.<sup>14</sup> This distinction has allowed the German courts to find infringement in cases of cross-border infringement—cases where all of the infringing activities have occurred in more than one state, so long as a crucial step has occurred in Germany.<sup>15</sup> Germany has also obtained help in achieving this policy from an

---

<sup>9</sup> See generally BRIAN T. YEH, CONG. RESEARCH SERV., LSB10173, PATENT OWNERS MAY RECOVER FOREIGN-BASED DAMAGES IN CERTAIN INFRINGEMENT CASES 1 (2018); Dennis Crouch, *Law of the Flag and Patent Infringement on the High Seas*, PATENTLYO (May 17, 2018), <https://patentlyo.com/patent/2018/05/flag-patent-infringement.html>; see also *WesternGeco LLC v. ION Geophysical Corp.*, 138 S.Ct. 2129 (2018); *Microsoft Corp. v. AT&T Corp.*, 550 U.S. 437 (2007).

<sup>10</sup> The IP5 is a group of the five largest patent offices and is critical in setting the tone for international patent policies and measures to increase the efficiency of patent examination and granting. The patent offices included are the United States Patent and Trademark Office (USPTO), European Patent Office (EPO), Japan Patent Office (JPO), Korean Intellectual Property Office (KIPO), and the National Intellectual Property Administration of the People's Republic of China (CNIPA). IP5, <https://www.fiveipoffices.org/index.html> (last visited Mar. 17, 2020). It is important to note that the IP5 includes the European Patent Office as one of the five, but not Germany and the United Kingdom individually. As leaders of the EPO, both nations have been, and continue to be, leaders in the international patent community and vital to IP5 and the international patent community.

<sup>11</sup> 35 U.S.C. § 271 (2012).

<sup>12</sup> *Id.* at (a).

<sup>13</sup> See generally *WesternGeco*, 138 S.Ct. at 2129; 35 U.S.C. § 271, (f)(1)–(2).

<sup>14</sup> See PATENTGESETZ [PatG] [CODE of PATENT LAW], § 9–10, Dec. 16, 1980, BANZ at 1, §9 and § 10 (Ger.) [hereinafter, PatG § 9 and PatG § 10, respectively]; see also *DSU Medical Corp. v. JMS Co., Ltd.*, 471 F.3d 1293 (2006).

<sup>15</sup> Heinz Goddar, *Cross-Border Contributory Patent Infringement in Germany*, 7 WASH. J. L. TECH. & ARTS 135, 138–39 (2011).

EU regulation, which allows for jurisdictional flexibility among EU Member States.<sup>16</sup>

Finally, the United Kingdom typically does not find liability in international and cross-border infringement due to their statutory language.<sup>17</sup> This, however, does not prevent courts in the United Kingdom from finding indirect infringement in cross-border schemes.<sup>18</sup> The British courts have achieved this through [U.K.] Patents Act § 60(2), which they have determined requires finding (1) who uses the infringing item and (2) where is it used.<sup>19</sup> Disharmony is not efficient, but the clarity with which the United States, Germany, and the United Kingdom treated extraterritorial patent infringement historically limited legal uncertainty, which mitigates risk and keeps transactional costs minimal. This legal uncertainty is no longer limited.

However, two recent events have muddied the waters of interstate infringement and require a re-examination of the PCT to assist in governing the issue: Brexit and the U.S. Supreme Court's decision in *WesternGeco LLC v. ION Geophysical Corp.*<sup>20</sup> Although Brexit is a fascinating event, this Note focuses on the *WesternGeco* case and what it means for extraterritorial patent infringement and enforcement moving forward. Part II of this Note first addresses how the U.S. has historically treated international infringement and then analyzes the U.S. Supreme Court ruling in *WesternGeco*. Part III then addresses how Germany and the United Kingdom treat international infringement. Lastly, Part IV suggests solutions that provide greater international harmony and increase legal certainty.

---

<sup>16</sup> Council Regulation 1215/2012, 2012 O.J. (L 351) 1.

<sup>17</sup> Patents Act 1977, § 60(1) (UK).

<sup>18</sup> See *Menashe Bus. Mercantile Ltd. v. William Hill Org. Ltd.* [2002] EWCA (Civ) 1702, [2003] 1 All ER 279.

<sup>19</sup> Patents Act 1977, § 60(2) (UK); see also *RIM v. Motorola* [2010] EWHC 118 (Pat).

<sup>20</sup> See Paul D. Ackerman & Gary Abelev, *United States: Westerngeco v. ION—Did The Supreme Court Define A New World Order In Patent Damages?*, MONDAQ (Sept. 3, 2018), <http://www.mondaq.com/unitedstates/x/732536/Patent/Westerngeco+v+IONDid+The+Supreme+Court+Define+A+New+World+Order+In+Patent+Damages>; Laura Lydigsen, *Supreme Court Allows Foreign Lost Profits Recovery in WesternGeco LLC v. ION Geophysical Corp.*, BRINKS, GILSON & LIONE (June 25, 2018), <https://www.brinksgilson.com/supreme-court-allows-foreign-lost-profits-recovery-in-westerngeco-llc-v-ion-geophysical-corp>; Linda A. Wadler & Alissa K. Lipton, *The Supreme Court Permits Recovery of Lost Profits for Foreign Uses in WesternGeco LLC v. Ion Geophysical Corp.*, FINNEGAN & HENDERSON (June 25, 2018), <https://www.finnegan.com/en/insights/the-supreme-court-permits-recovery-of-lost-profits-for-foreign-uses-in-westerngeco-llc-v-ion-geophysical-corp.html>; see also Carolyn E. Pepper & Demelza Hassani, *Brexit and the Pharmaceuticals Sector: The Key Issues*, REED SMITH (Sept. 3, 2018), <https://www.lifescienceslegalupdate.com/2018/09/articles/international-life-sciences/eme-life-sciences/brexit-and-the-pharmaceuticals-sector-the-key-issues/>; Joff Wild, *There is one Brexit IP Issue that Could Explode Politically - and it has Nothing To Do with Patents*, IAM (May 20, 2018), <https://www.iam-media.com/copyright/there-one-brexit-ip-issue-could-explode-politically-and-it-has-nothing-do-patents> (focusing on food and drink labeling, but discussing issues regarding the unitary patent and unitary patent court (UPC)).

---

---

## II. HISTORICAL CONTEXT OF UNITED STATES INTERNATIONAL INFRINGEMENT LITIGATION

Extraterritorial patent infringement law and enforcement has come a long way in a rather short time in the United States. This section addresses that brief history beginning with *Deepsouth*, a seminal case defining the bounds of 35 U.S.C. § 271(a). This Note then discusses the resulting statutory amendments, the body of case law following those amendments, and concludes with a discussion of the *WesternGeco* case, which has created a significant shift in U.S. extraterritorial patent infringement jurisprudence.

### A. *The Deepsouth Regime*

In 1972, the U.S. Supreme Court decided *Deepsouth Packing Co. v. Laitram Corp.*, and held that the Patent Act of 1952 only provided a patent holder with the exclusive right to their invention within the territorial confines of the United States.<sup>21</sup> In *Deepsouth*, a patent holder brought suit against an alleged infringer for using U.S.-based manufacturing facilities to construct every component of the patent's machine without combining them, who then exported the components overseas where they were assembled.<sup>22</sup> The Supreme Court relied on precedent and three judicial principles to reach its conclusion: (1) the legislative history of the patent statute, (2) the United States' "antipathy to monopoly," and (3) the presumption against extraterritoriality.<sup>23</sup>

The decision in *Deepsouth* was unsatisfying to various actors in the patent space and spurred Congress to act.<sup>24</sup> Prior to *Deepsouth*, and for twelve years following the decision, the U.S. Patent Act did not contain § 271(f).<sup>25</sup> In 1984, Congress passed amendments to the Patent Act, in particular to § 271.<sup>26</sup>

(f)(1) Whoever without authority supplies or causes to be supplied in or from the United States all or a substantial

---

<sup>21</sup> *Deepsouth Packing Co. v. Laitram Corp.*, 406 U.S. 518, 519 (1972).

<sup>22</sup> *Id.* at 518–522.

<sup>23</sup> *Id.* at 530, 532; see also *Sears, Roebuck & Co. v. Stiffel Co.*, 376 U.S. 225 (1964); *Kendall v. Winsor*, 62 U.S. 322 (1858); *Brown v. Duchesne*, 60 U.S. 183 (1856). The three historic cases provide an example of the Court's attitudes towards the three named principles through the years upon which the *Deepsouth* Court relied.

<sup>24</sup> See Robert A. McFarlane & Timothy V. Fisher, *Software Patents Under 35 U.S.C. § 271(f): Should Congress Amend § 271 to Harmonize Protection Between Tangible and Intangible Inventions?*, 2 HASTINGS SCI. & TECH. L.J. 183, 185–89 (2010); see also Patent Law Amendments of 1984, H.R. 6286, 98th Cong. (1984). See generally Charles M. Kerr, *Operable Versus Substantial Assembly of Patented Combinations: A Critique of Deepsouth v. Laitram*, 26 STAN. L. REV. 893 (1974).

<sup>25</sup> Patent Law Amendments of 1984, H.R. 6286, 98th Cong. (1984).

<sup>26</sup> *Id.*

---

---

portion of the components of a patented invention, where such components are uncombined in whole or in part, in such manner as to actively induce the combination of such components outside of the United States in a manner that would infringe the patent if such combination occurred within the United States, shall be liable as an infringer.

(2) Whoever without authority supplies or causes to be supplied in or from the United States any component of a patented invention that is especially made or especially adapted for use in the invention and not a staple article or commodity of commerce suitable for use in the invention and not a staple article or commodity of commerce suitable for substantial noninfringing use, where such component is uncombined in whole or in part, knowing that such component is so made or adapted and intending that such component will be combined outside of the United States in a manner that would infringe the patent if such combination occurred within the United States, shall be liable as an infringer.<sup>27</sup>

Section 271(f) made the act of supplying the components of a patented invention that actively induces the combination of the components outside of the United States, if such action inside the United States would constitute infringement, to be considered an infringement of the patent.<sup>28</sup>

With continued globalization in the patent economy, Congress passed § 271(g) in 1988, providing a cause of action in cases of importation of products manufactured by a patented process.<sup>29</sup>

(g) Whoever without authority imports into the United States or offers to sell, sells, or uses within the United States a product which is made by a process patented in the United States shall be liable as an infringer, if the importation, offer to sell, sale, or use of the product occurs during the term of such process patent. In an action for infringement of a process patent, no remedy may be granted for infringement on account of the noncommercial use or retail sale of a product unless there is no adequate remedy under this title for infringement on account of the importation or other use, offer to sell, or sale of that product. A product which is made by a patented process

---

<sup>27</sup> 35 U.S.C. § 271(f) (2012).

<sup>28</sup> *Id.*

<sup>29</sup> Process Patent Amendments Act of 1987, S. 1200, 100th Cong. (1987).

---

---

will, for purposes of this title, not be considered to be so made after—

(1) it is materially changed by subsequent processes; or

(2) it becomes a trivial and nonessential component of another product.<sup>30</sup>

Section 271(g) creates infringement liability for anyone that imports into the United States a product that was made by a process that is protected by a valid U.S. method patent.<sup>31</sup> The application of the amended § 271 sub-sections did not become prevalent until the advent of software and internet patents, which have inventions that are considerably easier to transport across national boundaries.<sup>32</sup>

#### *B. The § 271 Regime from 1984 to 2018*

The U.S. Court of Appeals for the Federal Circuit—which has subject matter jurisdiction over patent cases, removes circuit splits. The lack of splits often provides the governing interpretation of U.S. patent law for long periods of time when the Supreme Court may not consider a particular issue. The Federal Circuit has addressed extraterritorial patent enforcement under § 271. However, the Supreme Court has never applied a § 271 interpretation that overcame the Supreme Court-established presumption against extraterritoriality until *WesternGeco*.<sup>33</sup> The first case the Supreme Court heard on a similar issue to *WesternGeco* was *Microsoft v. AT&T Corp.*<sup>34</sup> In *Microsoft*, AT&T held a patent on a device that digitally encoded and compressed recorded speech.<sup>35</sup> Microsoft's operating system ("OS") was capable of infringing the patent, because the OS enabled a computer to process speech,

---

<sup>30</sup> 35 U.S.C. § 271(g).

<sup>31</sup> *Id.*

<sup>32</sup> See generally *Eolas Technologies Inc. v. Microsoft Corp.*, 399 F.3d 1325 (Fed. Cir. 2005) (finding that software sent abroad by manufacturer for copying from disks to hard drives by foreign personal computer manufacturer constituted "component" of infringing products); *AT&T Corp. v. Microsoft Corp.*, 414 F.3d 1366 (Fed. Cir. 2005) (addressing the issue of whether a manufacturer's exportation of software for replication constituted supplying a component); *Bayer AG v. Housey Pharm., Inc.*, 340 F.3d 1367 (Fed. Cir. 2003) (holding that importation of product made by patented process applies only to physical products, not information).

<sup>33</sup> See *Microsoft Corp. v. AT&T Corp.*, 550 U.S. 437, 454–55 (2007); Yeh, *supra* note 9.

<sup>34</sup> *Microsoft Corp.*, 550 U.S. at 437.

<sup>35</sup> *Id.* at 441–42.

which follows the same process as that claimed in AT&T's patent.<sup>36</sup> Microsoft would send a master disk with this software abroad for installation on computers manufactured overseas.<sup>37</sup> The master disk copy is not used in manufacturing, but rather copies made abroad are installed onto the computers.<sup>38</sup> AT&T alleges that Microsoft's exportation of the master disk constitutes infringement under 35 U.S.C. § 271(f).<sup>39</sup>

In *Microsoft*, Justice Ginsburg delivered the opinion of the Supreme Court and relied upon the contradiction between the language of § 271(f)–(g)<sup>40</sup> and § 154.<sup>41</sup> Section 154 defines what each patent grants to the holder, which limits the grant to the geographic boundaries of the United States.<sup>42</sup> In § 271, which defines what constitutes infringement, § 271(f) and (g) provide a mechanism for broadening that geographic boundary, which creates a natural tension within the Patent Act.<sup>43</sup> After addressing this tension, the Court held that the presumption against extraterritoriality is strong, strengthened in fact by the other sections of the Patent Act, such as § 154, and was not overcome by the infringing activity conducted overseas in this case.<sup>44</sup>

Justice Ginsburg primarily relied upon § 154(a)(1) for her analysis.<sup>45</sup> This section of the statute refers to the "Contents," or the scope of each patent holders' rights. The language of this section is quite unequivocal, stating:

Every patent shall contain a short title of the invention and a grant to the patentee, his heirs or assigns, of the right to exclude others from making, using, offering for sale, or selling the invention throughout the United States or importing the invention into the United States, and, if the invention is a process, of the right to exclude others from using, offering for sale or selling throughout the United States, or importing into the United States, products made by that process . . . .<sup>46</sup>

---

<sup>36</sup> *Id.*

<sup>37</sup> *Id.* at 442.

<sup>38</sup> *Microsoft Corp.*, 550 U.S. at 442.

<sup>39</sup> *Id.*

<sup>40</sup> 35 U.S.C. § 271(f)–(g) (2012).

<sup>41</sup> 35 U.S.C. § 154 (2012).

<sup>42</sup> *Microsoft Corp.*, 550 U.S. at 442.

<sup>43</sup> 35 U.S.C. § 271(f)–(g) (2012).

<sup>44</sup> *Microsoft Corp.*, 550 U.S. at 455.

<sup>45</sup> *Id.*

<sup>46</sup> 35 U.S.C. § 154(a)(1) (2012).



Justice Ginsburg was unable to reconcile the language above with that of § 271(f) or (g). In light of the difference and the presumption against the extraterritoriality, the narrow decision acknowledged that liability may exist under § 271(f) or (g), but the facts of this case do not meet the requisite scenario to overcome the presumption against extraterritoriality. The question of what conduct falls within the scope of § 271(f) or (g) and overcomes the presumption against extraterritoriality in patent infringement cases was not answered until *WesternGeco*.

### C. The Supreme Court Changes Course in *WesternGeco*

The patent dispute in the *WesternGeco* case was about marine seismic streamer technology.<sup>47</sup> The patents that WesternGeco claims are infringed by ION Geophysical, their competitor, are all regarding streamer positioning and control devices.<sup>48</sup> The streamers are pulled behind ships and use acoustic signals and sensors to create 3-D maps of the oceanic subsurface to aid natural resource exploration.<sup>49</sup> The ability to control the streamers' position optimizes the images created, prevents the streamers from becoming entangled, and allows for the vessel and streamers to safely navigate rocks and oilrigs.<sup>50</sup>

WesternGeco brought their claim in the Southern District of Texas.<sup>51</sup> There, a jury found for WesternGeco and awarded \$12.5 million in reasonable royalties and \$93.4 million in lost profits.<sup>52</sup> The Federal Circuit set the verdict aside at the request of ION Geophysical.<sup>53</sup> The Federal Circuit reasoned that § 271(a) prohibits the recovery of foreign lost profits, and thus § 271(f) also prohibits such a recovery.<sup>54</sup> The Federal Circuit's reasoning was something of a middle ground between *Microsoft* and the legislative intent of § 271.<sup>55</sup> The Federal Circuit's analysis of § 271(a) and § 271(f) was resoundingly similar to that of the *Microsoft* Court's analysis and comparison of § 154 and § 271(f)–(g). Yet, the Federal Circuit determined that the difference in language between the sections only limited the type of recovery WesternGeco could receive, not

---

<sup>47</sup> *WesternGeco LLC v. ION Geophysical Corp.*, 735 F.Supp.2d 623, 626 (S.D. Tex. 2010).

<sup>48</sup> *Id.* at 627. See also U.S. Patent No. 7,293,520; U.S. Patent No. 7,162,967; U.S. Patent No. 7,080,607; U.S. Patent No. 6,691,038.

<sup>49</sup> *WesternGeco LLC*, 735 F.Supp.2d at 623, 626.

<sup>50</sup> *Id.* at 626–27.

<sup>51</sup> *WesternGeco LLC v. ION Geophysical Corp.*, 953 F.Supp. 2d 731, 740 (S.D. Tex. 2013).

<sup>52</sup> *Id.* at 755.

<sup>53</sup> *WesternGeco LLC v. ION Geophysical Corp.*, 791 F.3d 1340, 1350–51 (Fed. Cir. 2015).

<sup>54</sup> *Id.*

<sup>55</sup> See generally *Microsoft Corp. v. AT&T Corp.*, 550 U.S. 437 (2007); Patent Law Amendments of 1984, H.R. 6286, 98th Cong. (1984).

that there was a total bar on recovery.<sup>56</sup> This is consistent with the ruling in *Microsoft*, where the Supreme Court acknowledged that the presumption against extraterritoriality may be overcome.<sup>57</sup> The Federal Circuit distinguished *WesternGeco* from *Microsoft* because the component(s) being exported are those components that are actually infringing, unlike in *Microsoft*, where the component was not the actual item that infringed the patent, but the copies made from the component infringed if located within the United States.<sup>58</sup>

Following the decision in the Federal Circuit, *WesternGeco* petitioned for certiorari.<sup>59</sup> The Supreme Court addressed the specific question of whether a party that proves infringement under § 271(f) can recover lost foreign profits under § 284.<sup>60</sup> Firstly, the Court acknowledges that § 271 provides the grounds for which infringement is established and § 284 provides that a patent owner who proves infringement under § 271 is entitled to relief.<sup>61</sup>

The Supreme Court does not overturn *Microsoft*, but is able to distinguish the cases by applying a newer test. The Court in *WesternGeco* analyzed whether *WesternGeco* overcame the presumption against extraterritoriality by following *RJR Nabisco, Inc. v. European Community*, which details a two-step analysis.<sup>62</sup> Applying the two-step framework from *Nabisco*<sup>63</sup> for the question of extraterritoriality here, the Supreme Court reversed the decision of the Federal Circuit, holding that a patent owner that proves infringement under § 271(f)(2) is entitled to foreign lost profits under § 284.<sup>64</sup>

The first step of *Nabisco* asks “whether the presumption against extraterritoriality has been rebutted.”<sup>65</sup> The rebuttal can only exist if the statute in question clearly indicates there is an extraterritorial application.<sup>66</sup>

---

<sup>56</sup> See *WesternGeco LLC*, 791 F.3d 1340.

<sup>57</sup> *Microsoft Corp.*, 550 U.S. at 441–42.

<sup>58</sup> *WesternGeco LLC*, 791 F.3d at 1351–52.

<sup>59</sup> *WesternGeco LLC v. ION Geophysical Corp.*, 138 S.Ct. 2129, 2135 (2018).

<sup>60</sup> *Id.* at 2134.

<sup>61</sup> *Id.* at 2135 (quoting 35 U.S.C. § 284 (2012)) (“Patent owners who prove infringement under § 271 are entitled to relief under § 284, which authorizes ‘damages adequate to compensate for the infringement, but in no event less than a reasonable royalty for the use made of the invention by the infringer.’”); see 35 U.S.C. § 271(f) (2012); 35 U.S.C. § 284 (2012).

<sup>62</sup> *RJR Nabisco, Inc. v. European Cmty.*, 136 S. Ct. 2090, 2101 (2016). In *Nabisco*, the Supreme Court identified a two-step framework for determining when a statute may or may not have overcome the presumption against extraterritoriality.

<sup>63</sup> *Id.*

<sup>64</sup> *WesternGeco LLC*, 138 S.Ct. at 2139.

<sup>65</sup> *RJR Nabisco, Inc.*, 136 S.Ct. at 2101.

<sup>66</sup> *WesternGeco LLC*, 138 S.Ct. at 2136 (citing *Morrison v. Nat’l Austl. Bank Ltd.*, 561 U.S. 247, 255 (2010)).

---

---

If the first step fails rebuttal, then the second step asks “whether the case involves a domestic application of the statute.”<sup>67</sup> For the second step, the Courts must identify “the statute’s ‘focus’” to establish the relevancy of the conduct to the focus occurring in the United States’ territory.<sup>68</sup> Here, the Supreme Court resolved the case at step two.<sup>69</sup> The Court acknowledged that it is atypical to skip the first step in this analysis, but that it has discretion in the application of the framework.<sup>70</sup> The Court reasoned that the focus of § 284, in light of § 271(f), is on the act of exporting components of a patented machine or process from the United States.<sup>71</sup>

Therefore, as aforementioned, the Supreme Court held that if a patent owner can prove infringement under § 271(f) they are entitled to a recovery under § 284, including lost foreign profits.<sup>72</sup> Justice Thomas rather simply stated:

Section 271(f)(2) focuses on domestic conduct. It provides that a company “shall be liable as an infringer” if it “supplies” certain components of a patented invention “in or from the United States” with the intent that they “will be combined outside of the United States in a manner that would infringe the patent if such combination occurred within the United States.” The conduct that § 271(f)(2) regulates—i.e., its focus—is the domestic act of “suppl[ying] in or from the United States.” As this Court has acknowledged, § 271(f) vindicates domestic interests: It “was a direct response to a gap in our patent law,” and “reach[es] components that are manufactured in the United States but assembled overseas.” As the Federal Circuit explained, § 271(f)(2) protects against “domestic entities who export components . . . from the United States.”<sup>73</sup>

---

<sup>67</sup> *Id.* (quoting *RJR Nabisco, Inc.*, 136 S. Ct. at 2101).

<sup>68</sup> *Id.* at 2137.

<sup>69</sup> *Id.* at 2136–37.

<sup>70</sup> *Id.* (citing *Pearson v. Callahan*, 555 U.S. 223, 236–43 (2009)).

<sup>71</sup> *WesternGeco LLC*, 138 S.Ct. at 2138.

<sup>72</sup> *Id.* at 2138–39.

<sup>73</sup> *Id.* at 2137–38 (internal citations omitted).

He continued to emphasize, “[t]he conduct in this case that is relevant to that focus clearly occurred in the United States, as it was ION’s domestic act of supplying the components that infringed WesternGeco’s patents.”<sup>74</sup>

*D. Justice Gorsuch’s Dissent in WesternGeco and Concerns Moving Forward*

Justice Gorsuch drafted a short dissent that highlights various concerns regarding the policy the majority interpreted and implemented.<sup>75</sup> Justice Gorsuch’s primary concern is the reciprocity U.S. patent holders and companies may receive by foreign courts.<sup>76</sup> The theory underlying his argument is that the Supreme Court has now signaled that it will exert influence and decisions over foreign activities in the patent space, which, he reasons, notifies other nations that they may do the same to our companies and patent holders.<sup>77</sup> Ultimately, Justice Gorsuch sees a dim world in which foreign courts exert influence upon foreign economies, which, most troubling for him, includes the United States’ economy.<sup>78</sup> Although some patent practitioners believe Justice Gorsuch’s hypothetical is hyperbolic,<sup>79</sup> there is a sense that his concerns have some validity.<sup>80</sup>

### III. GERMAN AND BRITISH TREATMENT OF FOREIGN PATENT INFRINGING ACTIONS

As mentioned in Part I, there are important distinctions between the British and German patent systems regarding cross-border infringement.<sup>81</sup>

---

<sup>74</sup> *Id.* at 2138.

<sup>75</sup> *Id.* at 2142–43 (Gorsuch, J., dissenting).

<sup>76</sup> *WesternGeco LLC*, 138 S.Ct. at 2143.

<sup>77</sup> *Id.*

<sup>78</sup> *Id.*

<sup>79</sup> Thomas F. Cotter, *WesternGeco v. ION: Analysis*, COMP. PATENT REMEDIES (June 22, 2018), <http://comparativepatentremedies.blogspot.com/2018/06/westerngeco-v-ion-analysis.html> (discussing “Justice Gorsuch’s parade of horrors”).

<sup>80</sup> *Id.*; Jeffrey J. Catalano & Tae Y. Kim, *Supreme Court Opens the Door for the Recovery of Foreign Lost Profits for Patent Infringement Under 35 U.S.C. § 271(f)(2)*, FREEBORN & PETERS LLP CLIENT ALERT (2018), [https://www.freeborn.com/sites/default/files/white\\_papers/freeborn\\_client\\_alert-supreme\\_court\\_foreign\\_patent\\_infringement\\_decision.pdf](https://www.freeborn.com/sites/default/files/white_papers/freeborn_client_alert-supreme_court_foreign_patent_infringement_decision.pdf); Lora A. Brzezynski et al., *Foreign Lost Profits Are Not Lost After All*, FAEGRE DRINKER (June 26, 2018), <https://www.faegredrinker.com/en/insights/publications/2018/6/foreign-lost-profits-are-not-lost-after-all> (“[I]t appears that the Court has opened the door for expanded lost profit liability. Global companies should be aware of this additional potential exposure and recovery potential.”).

<sup>81</sup> *See supra*, notes 14–19.

However, it is also important to recognize that there are similarities and overlaps between the United Kingdom and Germany because they are both Member States of the European Patent Convention (“EPC”).<sup>82</sup>

It is also important to acknowledge and note the unitary patent and Unified Patent Court (“UPC”) in Europe.<sup>83</sup> The unitary patent and UPC are anticipated to start by the end of 2020.<sup>84</sup> The unitary patent will be issued by the EPO and will provide uniform patent protection in up to twenty-six EU Member States.<sup>85</sup> This is different from the current EPO patent, which must be examined and maintained in each country a rights holder wishes to receive protection.<sup>86</sup> Although the existing European patent creates some increase in efficiencies, it does not rise close to the uniformity and simplicity of the unitary patent.<sup>87</sup> The UPC can only be established following the entrance of the thirteenth Member State, three of which must be France, Germany, and the United Kingdom.<sup>88</sup> Despite concern regarding Brexit, the United Kingdom’s ratification came in April of 2018.<sup>89</sup> The UPC is a step towards international harmony, because it provides a unitary forum for enforcement of patent rights across twenty-six EU Member States, however, it falls short due to the exclusion of the four other members of the IP5.<sup>90</sup>

Due to the unknown impact the UPC will have, and the continued legal uncertainty of cross-border infringement in the global context, this note does not further discuss the UPC. Moving forward, this section discusses some of the issues surrounding the EPC, further explaining the handling of cross-

---

<sup>82</sup> *Member states of the European Patent Organisation*, EUR. PAT. OFF., (last visited Mar. 26, 2020).

<sup>83</sup> *Unitary Patent & Unified Patent Court*, EUR. PAT. OFF., <https://www.epo.org/law-practice/unitary.html> (last visited Mar. 26, 2020). The unitary patent and UPC are an attempt by European nations to provide a mechanism for a unified patent across all participating states. This unified patent would be granted for all participating states and would be enforceable in all participating states via the UPC.

<sup>84</sup> *When will the Unitary Patent System Start?*, EUR. PAT. OFF., <https://www.epo.org/law-practice/unitary/unitary-patent/start.html> (last visited Mar. 26, 2020). The exact start date has been an open question ever since Member States began signing the Agreement and has consistently been pushed back.

<sup>85</sup> *Unitary Patent*, EUR. PAT. OFF., <https://www.epo.org/law-practice/unitary/unitary-patent.html> (last visited Mar. 26, 2020).

<sup>86</sup> *Id.*

<sup>87</sup> *Id.*

<sup>88</sup> *Start Date*, EUR. PAT. OFF., <https://www.epo.org/law-practice/unitary/unitary-patent.html> (last visited May 1, 2020).

<sup>89</sup> *UK Ratifies the Unified Patent Court Agreement*, INTELL. PROP. OFF. [U.K.] (Apr. 26, 2018), <https://www.gov.uk/government/news/uk-ratifies-the-unified-patent-court-agreement>.

<sup>90</sup> IP5, <https://www.fiveipoffices.org/index.html> (last visited Mar. 26, 2020).

---

---

border infringement in Germany, and explores cross-border infringement in the United Kingdom.

*A. The Three Categories of Extraterritorial Enforcement of Patent Rights  
Problems in the EPC*

Germany, a member state of the EPC, has taken a harder stance on protecting patents infringed by foreign activities.<sup>91</sup> Professor of Intellectual Property Law, Marketa Trimble, points out that the German position has been strengthened by participation in the EPC and the creation of the European Patent Office (“EPO”), which occurred as part of the EPC.<sup>92</sup>

Professor Trimble identified the three major categories of problems with extraterritorial enforcement of patent rights in EPC states: (1) enforcement of unitary European rights, (2) enforcement of parallel rights in multiple nation states, and (3) enforcement of rights from one national law with extraterritorial effects on activities in other countries.<sup>93</sup> While Professor Trimble’s three categories are useful, and she correctly asserts that there is overlap in the categories,<sup>94</sup> this Note focuses on the third category.

Professor Trimble articulates numerous issues that exist with extraterritorial enforcement of an individual national right, which can be summarized into two main categories: (1) high transactional costs and (2) uncertainty regarding enforcement.<sup>95</sup> The high cost of enforcement of a patent in multiple states is so high that in certain jurisdictions the patent becomes unenforceable.<sup>96</sup> This leads to most right holders obtaining rights in only one or a few countries.<sup>97</sup> The Brussels I Regulation<sup>98</sup> was intended to simplify the recognition and enforcement of judgments among the EU Member States, however, IP decisions suffer from delays and territorial challenges, particularly concerning internet conduct.<sup>99</sup>

As Professor Trimble succinctly explained, the EPC was designed to alleviate numerous cross-border issues, but there is little evidence that this

---

<sup>91</sup> See, e.g., MARKETA TRIMBLE, GLOBAL PATENTS: LIMITS OF TRANSNATIONAL ENFORCEMENT 116–118, 120 (2012).

<sup>92</sup> *Id.*

<sup>93</sup> Marketa Trimble, *Extraterritorial Intellectual Property Enforcement in the European Union*, 18 SW. J. INT’L L. 233, 233 (2011).

<sup>94</sup> *Id.*

<sup>95</sup> *Id.* at 238–40.

<sup>96</sup> *Id.* at 238.

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

<sup>98</sup> Council Regulation 44/2001, 2000 O.J. (L 12) 16 (EC).

<sup>99</sup> Trimble, *supra* note 93, at 239–40.

---

---

has occurred.<sup>100</sup> She does acknowledge that the EU and EPC are taking steps to improve the situation, but also acknowledges that as long as the focus is only on Europe, cross-border issues will continue to arise with non-European countries.<sup>101</sup>

*B. Germany's Nearly Fifteen-Year-Old Policy on Extraterritorial Enforcement of Patent Rights*

As mentioned above,<sup>102</sup> Germany separately recognizes direct and indirect patent infringement in PatG § 9 and PatG § 10.<sup>103</sup> In PatG § 9, the main provision is that, “any third party shall be prohibited from . . . producing, offering, putting on the market or using a product which is the subject-matter of the patent, or from either importing or possessing such a product for the purposes referred to.”<sup>104</sup> PatG § 10 provides the language establishing indirect infringement stating in pertinent part, “any third party shall be prohibited . . . to exploit the patented invention with means relating to an essential element of the invention . . . if the third party knows or if it is obvious from the circumstances that those means are suitable and intended for using that invention.”<sup>105</sup> However, in both instances, Germany has enforced cross-border infringement, granted under slightly different circumstances.<sup>106</sup> Since the early 2000s, German courts have held that if a process or machine patent is at least partially infringed within the territorial limits of Germany and then exported for the completion of the infringement, the court will treat the issue as if the entire infringement occurred in Germany and assess direct infringement.<sup>107</sup> The German courts rely on PatG § 9 in this context to broaden the language of the prohibition from offering for sale a patented item—to include offers from outside Germany to within Germany, and offers from inside

---

<sup>100</sup> *Id.* at 241–242.

<sup>101</sup> *Id.*

<sup>102</sup> *See supra* note 14.

<sup>103</sup> PatG § 9 and PatG § 10, *supra* note 14. *See also* Goddar, *supra* note 15, at 137–38.

<sup>104</sup> PatG § 9, *supra* note 14. This section of the German patent statute is resoundingly similar to the language of the U.S. Patent Statute at § 271(a), a prohibition from making, selling, using, offering for sale, or importing a patented invention.

<sup>105</sup> PatG § 10, *supra* note 14. This section is similar to the indirect infringement sections of the U.S. Patent Act. 35 U.S.C. § 271(b)–(c).

<sup>106</sup> *See generally* Goddar, *supra* note 15.

<sup>107</sup> *See generally Rohrschweissverfahren*, Oberlandesgericht Düsseldorf [OLGD] [Higher Regional Court Dusseldorf] June 24, 2004, I-2 U 18/03 (Ger.), *aff'd Rohrschweissverfahren*, Bundesgerichtshof [BGH] [Federal Court of Justice] Feb. 24, 2007, X ZR 113/04 (Ger.); *Prepaid-Karten II*, Oberlandesgericht Düsseldorf [OLGD] [Higher Regional Court Dusseldorf] Dec. 10, 2009, I-2 U 51/08 (Ger.).

Germany to purchasers outside of Germany.<sup>108</sup> The Germans have also relied upon the EU jurisdiction and enforcement regulations, which require recognition and enforcement of other EU Member States' decisions across the EU.<sup>109</sup> To fully understand the scope at which PatG § 9 may be applied, it is useful to note that German courts have held, as early as 2002, that an internet advertisement written in German for a good that infringes a German patent is an offer to sell and thus constitutes infringement, even when no other infringing activity occurs within Germany.<sup>110</sup> Professor Trimble identifies the above two scenarios as the areas where German law regarding cross-border patent infringement goes beyond that of U.S. law.<sup>111</sup>

In the independently operating PatG § 10, the German law defines contributory infringement.<sup>112</sup> This section prohibits third parties from offering or supplying any means related to an essential element of a patented invention to anyone not entitled to use the invention.<sup>113</sup> The essential element(s) in question are either elements within the claim(s) of the patent, or elements that work functionally with the claim elements.<sup>114</sup> PatG § 10 also has an intent requirement for the third party, which can be satisfied if a party can show that the third party knew or it was obvious from the circumstances that the elements are suitable for using the patented invention.<sup>115</sup>

The extremely broad scope of protections offered in Germany may lead some to the simple conclusion that patent holders should always attempt to obtain protection in Germany. However, in the IAM Yearbook 2019, SpencePC attorneys neatly identified some of the differences in cost, time to trial, and recoverability between United States and German patent litigation. This simple solution to the problem of preventing cross-border infringement will frequently be wiped away by the relatively small awards available in Germany.

Table 1: Patent Litigation in the United States and Germany<sup>116</sup>

---

<sup>108</sup> Goddar, *supra* note 15, at 138.

<sup>109</sup> 2012 O.J. (L 351) 1; Council Regulation 44/2001, 2000 O.J. (L 12) 16 (EC).

<sup>110</sup> See *Sohlen für Sportschuhe*, Landgericht Düsseldorf [LGD] [District Court Dusseldorf] Feb. 5, 2002, 4a O 78/08 (Ger.); *Einrichtung zur zentralen Notlichtversorgung*, Landgericht Düsseldorf [LGD] [District Court Dusseldorf] Mar. 26, 2009, 4a O 78/08 (Ger.).

<sup>111</sup> TRIMBLE, *supra* note 91, at 122.

<sup>112</sup> PatG § 10, *supra* note 14.

<sup>113</sup> *Id.*

<sup>114</sup> Goddar, *supra* note 15, at 139.

<sup>115</sup> *Id.* at 140.

<sup>116</sup> *Id.* at 144.



	United States	Germany
Litigation costs	\$3 million to \$4 million	\$100,000 to \$500,000
Time to trial	Twenty-four to thirty-six months	Nine months
Damages	\$8.9 million median; largest award: \$2.5 billion	Largest award: \$2.7 million
Injunctions	Rarely granted absent direct competition	Automatic on finding of infringement
Discovery	Extensive document and deposition discovery	Minimal discovery
Contingency fees	Allowed	Not allowed

As the table illustrates, numerous differences remain between the German and U.S. patent regimes and a well-devised strategy should still be employed when leveraging a patent portfolio or filing suit for infringement when multiple jurisdictions might be available. A patent holder alleging extraterritorial violation that would not be recoverable in the United States may be tempted to bring suit in Germany to capitalize on the German regime of extraterritorial damages. However, this may not always be the best solution because choosing Germany as the forum of suit will frequently provide less compensation for the patent holder.<sup>117</sup>

### *C. The Anomaly Called the United Kingdom*

Germany and the United States have both provided a relief mechanism to cure cross-border infringement in cases of direct infringement, although Germany remains a global leader in the scope of the remedies available. Another member of the IP5 and the EPC, the United Kingdom has taken a narrower approach to cross-border infringement.<sup>118</sup> Similar to the text of the

<sup>117</sup> *Id.*

<sup>118</sup> IP5, <https://www.fiveipoffices.org/index.html> (last visited Mar. 17, 2020); *Member States of the European Patent Organisation*, EPO, <https://www.epo.org/about-us/foundation/member-states.html> (last visited Mar. 17, 2020).

United States Patent Act of 1952,<sup>119</sup> the United Kingdom's patent act states that infringement must occur "in the United Kingdom."<sup>120</sup> Such a provision indicates the early 20th century pre-globalized nature of patents, and is similar to the United States' general policy regarding the territorial limitations on patent rights, with the exception of 35 U.S.C. § 271(f)-(g).<sup>121</sup>

Although the United Kingdom and Germany are both member states of the IP5, EPO, and PCT, their policies regarding extraterritorial enforcement have significantly diverged. As noted above, Germany will find infringement even when the invention is entirely practiced outside of Germany, but advertised in Germany, including online.<sup>122</sup> Alternatively, in the United Kingdom, cross-border infringement can only be established if the claims of the patent are drafted to localize the invention in the United Kingdom.<sup>123</sup> The U.K. regime is one that will not entirely bar a remedy in cross-border infringement, but closely resembles the U.S. regime pre-*WesternGeco*. Moving forward, it will be important to keep an eye on the United Kingdom regarding their divestment from the EU, and to what agreements they will remain a party.

#### IV. THE COSTS OF INTERNATIONAL DISHARMONY IN A GLOBALIZED ECONOMY

This section of the note will begin by reviewing the impact that international disharmony and legal uncertainty can have on an economy, as well as highlight the research indicating the power of harmonization. Next, I will further introduce the PCT and discuss its shortcomings, primarily in the case of jurisdiction, because that is the heart of cross-border patent infringement. It is alarming to discover that there is such great disharmony when it comes to extraterritorial infringement of patents, particularly among three<sup>124</sup> of the five members of IP5, a collection of the five largest intellectual property offices, which includes the EPO, the United States Patent and Trademark Office (USPTO), the Japan Patent Office (JPO), the Korean

---

<sup>119</sup> As noted above, the U.S. had no extraterritorial exceptions to patent infringement until 1984 and 1988 with the additions of 35 U.S.C. § 271(f) and (g). *Supra* at Section II A.

<sup>120</sup> Patents Act 1977 c. 37, § 60(1).

<sup>121</sup> *See generally* 35 U.S.C. (2012).

<sup>122</sup> Goddar, *supra* note 15, at 137–38.

<sup>123</sup> *See Menashe Bus. Mercantile Ltd. v. William Hill Org. Ltd.* [2002] EWCA Civ 1702 (appeal taken from Eng. & Wales); *See also RIM v. Motorola* [2010] EWHC 118 (Pat) (appeal taken from Eng. & Wales).

<sup>124</sup> Although the IP5 includes Germany and the U.K. as part of the single larger EPO, both nations are widely recognized as having been long developed with robust patent markets that have national offices among the busiest and most respected. *German patents and trade marks in demand abroad as seldom before*, GERMAN PATENT AND TRADE MARK OFFICE, [https://www.dpma.de/english/services/public\\_relations/press\\_releases/20190228.html](https://www.dpma.de/english/services/public_relations/press_releases/20190228.html) (last accessed Mar. 17, 2020); Ryan Lacey, *UK Patent Benefits: UKIPO Analyses UK Patent System*, D YOUNG & CO KNOWLEDGE Bank (Oct. 18, 2017), <https://www.dyoung.com/en/knowledgebank/articles/ukpatentbenefits>.

Intellectual Property Office (KIPO), and the State Intellectual Property Office (SIPO) of China.<sup>125</sup>

Professor of Economics Dr. Helmut Wagner does not hesitate to point out the negative impacts of legal disharmony in his paper regarding legal uncertainty and harmonization.<sup>126</sup> Dr. Wagner states, “[c]onsumers as well as producers tend to refrain from contracts in foreign legal systems if the costs of information . . . and/or the costs of enforcement . . . seem too high or unpredictable.”<sup>127</sup> Additionally, it is assumed that legal diversity causes transaction costs and lowers economic trade and welfare.<sup>128</sup>

Apparent from the aforementioned synopsis of the treatment of extraterritorial infringement by the United States, Germany, and the United Kingdom, this is an area with inherent disharmony due to its territorial nature. Initially, it might appear that *WesternGeco* increased harmony, but the reality is that the narrow holding decreases legal certainty because the bounds of cross-border enforcement in the United States are still widely unknown.<sup>129</sup>

The legal uncertainty recognized by Dr. Wagner can be largely attributed to an increase in the globalization of the world economy coupled with a lack of response from nation states to adjust their policies to accommodate increasing patent globalization.<sup>130</sup> Not only do we have research and scholarly works that point out the costs associated with legal uncertainty, but there have also been studies that show the efficacy of harmonization.<sup>131</sup> Economics Professors Elias Dinopoulos and Constantina Kottaridi analyzed hypothetical patent policies in a two-country model.<sup>132</sup> They exhibited that a reduction in uncertainty about patent rights based on harmonization leads to acceleration of long-run global rates of innovation and economic growth, but the global growth is not optimal.<sup>133</sup> Yet, they also showed that global long-run growth is maximized and the rate of technology transfer is increased, indicating a decrease in

---

<sup>125</sup> IP5, *supra* note 119.

<sup>126</sup> HELMUT WAGNER, LEGAL UNCERTAINTY—IS HARMONIZATION OF LAW THE RIGHT ANSWER? A SHORT OVERVIEW 1 (2009).

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

<sup>128</sup> *Id.*

<sup>129</sup> *See generally* Cotter, *supra* note 79.

<sup>130</sup> WAGNER, *supra* note 127, at 2.

<sup>131</sup> *See generally* Elias Dinopoulos & Constantina Kottaridi, *The Growth Effects of National Patent Policies*, 16(3) REV. INT’L ECON. 499 (2008). Costs associated with legal uncertainty vary greatly and can be in the form of the need to retain additional counsel to the loss in transactions in the marketplace. A common solution to legal uncertainty is international legal harmony. *See also* WAGNER, *supra* note 127.

<sup>132</sup> Dinopoulos & Kottaridi, *supra* note 132, at 500–01.

<sup>133</sup> *Id.* at 510–11.

transaction costs associated with export/import of the intellectual property.<sup>134</sup> When reviewing the outcomes of the Dinopoulos and Kottaridi study, it is important to remember what the different metrics represent. The global growth is defined as the capacity of the global economy to produce goods and services over time and is measured in either nominal or real terms.<sup>135</sup> Alternatively, global long-run growth considers “growth of productivity, demographic changes, and labor force participation.”<sup>136</sup>

Table 1 displays the impact of international disharmony on the litigation process in economic terms, but the patent prosecution arena is also harmed by transactional costs.<sup>137</sup> In the United States, filing a patent may cost as little as \$5,000 including attorney’s fees, however, depending on the technology, it can cost as much as \$16,000–20,000.<sup>138</sup> There is an additional minimum of \$12,600 to maintain the patent over the full term, excluding any issuing fees.<sup>139</sup>

As discussed, we currently operate in a global economy where patent protection is often required in numerous jurisdictions, so the costs are even greater. The typical process in the United Kingdom starts with an application costing £3,000–6,000.<sup>140</sup> Within twelve months, most U.K. inventors will then file a PCT application, which will cost £4,000–5,000.<sup>141</sup> Before the PCT grant has lapsed, the inventor must designate countries for the national phase. Dehns, a patent prosecution firm in the United Kingdom, estimates a cost of £5,500 to proceed with only EPO and U.S. applications, but up to £25,000 for all major markets, with even more money being required if specific smaller markets are required.<sup>142</sup> Again, these figures are purely for the application

---

<sup>134</sup> *Id.*

<sup>135</sup> See Jim Chappelow, *Economic Growth*, INVESTOPEDIA, <https://www.investopedia.com/terms/e/economicgrowth.asp> (last updated Apr. 16, 2019). Also see *Understanding economic growth*, KHAN ACAD., <https://www.khanacademy.org/economics-finance-domain/ap-macroeconomics/ap-long-run-consequences-of-stabilization-policies/economic-growth/v/understanding-economic-growth-ap-macroeconomics-khan-academy> (last visited Mar. 17, 2020) (Providing a brief instructive video on economic growth).

<sup>136</sup> *Long-Run Growth*, LUMEN LEARNING, <https://courses.lumenlearning.com/boundless-economics/chapter/long-run-growth/> (last visited Mar. 17, 2020).

<sup>137</sup> See *supra* Table 1.

<sup>138</sup> *USPTO Fee Schedule*, U.S. PATENT & TRADEMARK OFFICE, <https://www.uspto.gov/learning-and-resources/fees-and-payment/uspto-fee-schedule> (last updated Mar. 1, 2020). Amounts used were added by the author from the fee schedule with the typical costs of filing used for calculation. Totals presented are estimates. *Id.*

<sup>139</sup> *Id.* Using the fee amount for a regular entity, small entities and micro entities are assessed a smaller charge.

<sup>140</sup> *The Financial Realities of Patent Protection*, DEHNS, [https://www.dehns.com/cms/document/the\\_financial\\_realities\\_of\\_patent\\_protection.pdf](https://www.dehns.com/cms/document/the_financial_realities_of_patent_protection.pdf) (last updated Mar. 2017).

<sup>141</sup> *Id.*

<sup>142</sup> *Id.*

process and do not include the maintenance of the patent, which can get extremely expensive when operating in multiple nations.

#### A. *The Power of the PCT*

The Patent Cooperation Treaty (“PCT”) is a multilateral treaty governed by the World Intellectual Property Organization (“WIPO”) that was first signed in 1970.<sup>143</sup> The treaty has 153 Contracting States, and is intended to clarify and simplify the process of obtaining and maintaining patent protection in the globalized economy.<sup>144</sup> Additionally, the PCT lays out standardized patent protections that each Contracting State must afford its citizens and those of the other Contracting States.<sup>145</sup> Clearly, the PCT is a powerful legal instrument that has had success since its inception; however, it does have its shortfalls.

#### B. *The Failure of the Dispute Resolution Protocol of Art. 59*

The PCT has countless advantages and is a beacon of hope for how international patent harmony may develop. However, as is the case in all endeavors, there are some failures. For purposes of this Article, the PCT’s primary failure is the dispute resolution protocol.<sup>146</sup>

Subject to article 64(5), any dispute between two or more Contracting States concerning the interpretation or application of this Treaty or the Regulations, not settled by negotiation, may, by any one of the States concerned, be brought before the International Court of Justice by application in conformity with the Statute of the Court, unless the States concerned agree on some other method of settlement. The Contracting State bringing the dispute before the Court shall inform the International Bureau; the International Bureau shall bring the matter to the attention of the other Contracting States.<sup>147</sup>

---

<sup>143</sup> *PCT – The International Patent System*, WIPO, <http://www.wipo.int/pct/en/> (last visited Mar. 28, 2020) [hereinafter WIPO]; Patent Cooperation Treaty, June 19, 1970, 28 U.S.T. 7645, 1160 U.N.T.S. 231.

<sup>144</sup> WIPO, *supra* note 144.

<sup>145</sup> *Id.*

<sup>146</sup> Patent Cooperation Treaty art. 59, June 19, 1970, 28 U.S.T. 7645, 1160 U.N.T.S. 231 (1970).

<sup>147</sup> *Id.*

As Article 59 currently reads, an individual that believes they have been unfairly treated by a foreign court in a patent matter has no recourse unless another Contracting State has an interest and is willing to initiate a dispute regarding the grievance.<sup>148</sup>

Article 59 illustrates the largest failure of the PCT; there is no realistic mechanism to resolve disputes, which only increases legal disharmony. There is no realistic mechanism because nation states are rarely, if ever, impacted by individual patent decisions on a scale so vast that it is prudent for a Contracting State to initiate a cause before the International Court of Justice. This essentially creates a situation where a state is only held liable to the requirements of the PCT if their actions are so egregious that another state is harmed in a manner severe enough to warrant action.

*C. Amending the PCT to Decrease Legal Uncertainty Providing International Harmonization and Legal Principles Aligned with Economic Realities*

The quickest and most effective route to remedying the issue of disharmonic extraterritorial patent infringement regimes and the associated uncertainty across jurisdictions is an amendment to the PCT. The PCT has Contracting Members comprised of the largest economies and all five of the IP5.<sup>149</sup> Thus, the PCT would be the most effective avenue of lowering the degree of uncertainty in the global patent market, which will result in decreased transactional costs and more innovation and economic growth.

Critics may question whether such proposals will lower the costs and create a more robust patent economy. As Dr. Wagner and Professors Dinopoulos and Kottaridi pointed out, legal uncertainty has increased cost. It logically follows that a decrease in legal uncertainty would decrease the costs in the system.<sup>150</sup> Furthermore, Professors Dinopoulos and Kottaridi's research and data show the same result.<sup>151</sup> Their Proposition 3 summarizes the effects of patent protection in a global economy that has a common patent policy, stating:

Proposition 3. If the global economy is governed by a common patent-policy regime ( $T^- = T = T^*$  and  $\varepsilon^- = \varepsilon = \varepsilon^*$ ), then: (a) the global wage-income distribution is invariant to changes in the common patent policy; (b) stronger common patent enforcement  $\varepsilon^-$  increases long-run growth and the rate of international technology transfer; and (c) an increase in the

---

<sup>148</sup> *Id.*

<sup>149</sup> *The PCT now has 153 Contracting States*, WIPO, (last visited Mar. 28, 2020) [https://www.wipo.int/pct/en/pct\\_contracting\\_states.html](https://www.wipo.int/pct/en/pct_contracting_states.html).

<sup>150</sup> See generally WAGNER, *supra* note 127; Dinopoulos & Kottaridi, *supra* note 132.

<sup>151</sup> See generally Dinopoulos & Kottaridi, *supra* note 132.

---

---

duration of global patents  $T^-$  has an ambiguous effect on long-run growth and the rate of international technology transfer.<sup>152</sup>

The researchers are asserting that a global patent regime with differences in laws and regulations raises the transaction costs in both trade and technology transfer.<sup>153</sup> If there was increased harmonization across patent regimes, corporations and inventors have decreased uncertainty resulting in lower international transaction costs, which, ultimately, Proposition 3 indicates that a move towards harmonization accelerates the rate of global economic growth.<sup>154</sup>

Some might question the accuracy of the analysis done with the two-country model, but as the researchers briefly mention, there is already one area of patent law that is all but harmonized: patent duration.<sup>155</sup> With patent duration remaining constant, inventors and their attorneys do not need to add the cost of further analysis and strategy development for international protection. Next, this Note will explore how exactly harmonization could increase, whereas costs on the global patent market could decrease.

#### 1. Procedure for Introducing a PCT Amendment

An amendment to the PCT must be introduced in accordance with articles 60 and 61 of the PCT.<sup>156</sup> Article 60 states:

(1) This Treaty may be revised from time to time by a special conference of the Contracting States. (2) The convocation of any revision conference shall be decided by the Assembly. (3) Any intergovernmental organization appointed as International Searching or Preliminary Examining Authority shall be admitted as observer to any revision conference. (4) Articles 53(5), (9) and (11), 54, 55(4) to (8), 56, and 57, may be amended either by a revision conference or according to the provisions of Article 61.<sup>157</sup>

---

<sup>152</sup> *Id.* at 509.

<sup>153</sup> *Id.*

<sup>154</sup> *Id.*

<sup>155</sup> *Id.* at 510.

<sup>156</sup> Patent Cooperation Treaty, *supra* note 147, 1160 U.N.T.S at 262–63..

<sup>157</sup> *Id.* at 262. It is important to note that the term ‘Assembly’ refers to the Assembly of Union, which is the International Patent Cooperation Union. *Id.* at 233–35.

The amendment procedure is fairly straightforward. For the purposes of amending article 59, the same procedure laid out in article 60, as described above, could be followed.<sup>158</sup> Thus, a special conference would need to be called.<sup>159</sup> It may be difficult to do so, but pressure from the United States, United Kingdom, or Germany, as well as other leaders in WIPO such as an IP5 member, would be effective in initiating the action. The special conference request should be put before the Assembly, which meets at least annually, and will determine the necessity and/or merits of proposed amendments from a Contracting State.<sup>160</sup> If the Assembly deems the offered reasons for a special conference just, they will call one.<sup>161</sup> The parties to the conference determine whether an amendment to the PCT is required.<sup>162</sup>

As a matter of exercise, this Note will now walk through a hypothetical—and entirely possible—scenario of which this process may take place. A U.S. corporation *X* is heavily involved in marketing, manufacturing, and selling its goods in China, India, the United States, and the EU. Following the *WesternGeco* decision, the IP attorneys at *X* are concerned that they will now be the subject of unjust patent litigation in foreign courts, say Germany, with their strict advertisement rule regarding the offer for sale bar on patented inventions. *X* begins to lobby the ambassador to the U.N., the USPTO, and other U.S. government officials involved in IP. The government officials recognize *X*'s concerns, and the Assembly of the International Patent Cooperation Union call for a special conference regarding extraterritorial infringement enforcement and damages. The Assembly appoints an examining party from an intergovernmental organization for preliminary research into the issue, if it deems such research necessary. The organization presents that a real threat does exist that has negative consequences on the global patent market. The Assembly then votes to hold a special conference. The parties at the special conference will debate the amendments on the floor as well as hear from any intergovernmental body that has been tasked with researching the issue. The special conference then determines if the proposed amendments are necessary. If passed, they become part of the PCT, and all Contracting States are bound by the amendment.

## 2. Two Potential Amendments to the PCT will Correct the Issues Relating to Extraterritorial Patent Infringement and Possibly Other Disputes Involving a Private Party

---

<sup>158</sup> *Id.*

<sup>159</sup> *Id.*

<sup>160</sup> *Id.*; *Assemblies of the Member States of WIPO*, WIPO, [https://www.wipo.int/meetings/en/topic.jsp?group\\_id=3](https://www.wipo.int/meetings/en/topic.jsp?group_id=3) (last visited Mar. 28, 2020).

<sup>161</sup> Patent Cooperation Treaty, *supra* note 147, art. 60.

<sup>162</sup> *Id.*



---

---

There are two amendments to the PCT that this Note identifies that are plausible, effective, and efficient for moving forward. While there are likely various solutions to the problems at hand, as there always are, the two presented here are intended to provide the quickest solution with minimal change to each individual nation. This section outlines two PCT amendments, which would increase enforcement harmonization and include a bar on extraterritorial patent judgments by PCT Contracting States, with a small caveat, and a limitation on the damages that may be awarded in extraterritorial infringement cases.

*a. A BLANKET BAR ON EXTRATERRITORIAL PATENT JUDGMENT ABSENT THE NATION OF RESIDENCE OF THE PARTY IN QUESTION'S CONSENT*

A bar on extraterritorial patent infringement cases would remove the issue altogether. Without some form of exception, this amendment could result in weaker enforcement. However, a condition allowing states to enter into agreements allowing extraterritorial infringement judgments would encourage EU-like harmony and consolidation between other states, such as the United States. Additionally, it allows existing agreements to remain in place, such as the EU.<sup>163</sup>

Opponents of such an amendment would likely point to two potential issues. The first would be that a Contracting State is unlikely to consent to a foreign court obtaining jurisdiction over a resident or resident corporation, primarily a large and successful resident corporation. The second likely critique would be that Contracting States might use this regime as a way to exert influence and control over private parties. Such a result would be viewed unfavorably in a nation such as the United States, where libertarian tendencies are stronger and more frequent.

While both critiques are valid and may be issues or unintended consequences created by the proposed amendment, their cost would likely be less than their profit. As we saw from the Wagner paper and the Dinopoulos and Kottaridi research results, a decrease in legal uncertainty results in greater development and innovation while driving down transaction costs.<sup>164</sup>

---

<sup>163</sup> Council Regulation 1215/2012, 2012 O.J. (L 351) 1.

<sup>164</sup> See WAGNER, *supra* note 127. See also Dinopoulos & Kottaridi, *supra* note 132.

Another advantage is the maintenance of the EU<sup>165</sup> structures already in place, which provide for a simpler transition. Additionally, it will not disrupt U.S. law, or the recent decision in *WesternGeco*. That case ultimately had two U.S. companies as parties to the litigation. The proposed amendment here is regarding the jurisdiction of extraterritorial patent disputes; if both parties are residents of the same nation, that nation's laws will apply. As the Supreme Court, led by Justice Thomas, determined in *WesternGeco*, § 271(f) infringement allows for § 284 recovery.<sup>166</sup> This proposed amendment would also quell the concerns of Justice Gorsuch in his dissent.<sup>167</sup>

Additionally, Contracting States may be more likely to engage in treaties permitting particular instances of extraterritorial infringement, such as the conduct in *WesternGeco*. Agreements increasing cross-enforcement also assist in driving long-run global growth, more than simple harmonization alone.<sup>168</sup>

*b. LIMITATIONS ON EXTRATERRITORIAL INFRINGEMENT JUDGMENTS*

The second possible amendment would be a limitation on extraterritorial infringement judgments. Such a limitation could take any number of forms, and some examples are provided here: the first, and simplest, would be limits such as those that exist in 35 U.S.C. § 217(f)–(g).<sup>169</sup> By preventing parties from exploiting an invention that would have otherwise been infringed had defendants only not imported or exported the invention in pieces is a broadening of U.K. law and a narrowing of German law into a middle ground, which is current U.S. law. It provides for a middle ground that will see bad actors, such as ION, make the infringed party whole. Simultaneously, it limits the potential for the retributive behavior that Justice Gorsuch predicted will take place by various nations.<sup>170</sup>

The second potential limitation would be on the amount recoverable. By capping the monetary damages, a nation has lost their motivation for a retributive decision that Justice Gorsuch foresees. Furthermore, it should help to stabilize the global patent market by bringing some clarity to what options exist for an individual or corporation when their patent has been infringed. As we saw in Table 1, the costs and remedies between the United States and

---

<sup>165</sup> Council Regulation 1215/2012, 2012 O.J. (L 351) 1.

<sup>166</sup> See generally *WesternGeco LLC v. ION Geophysical Corp.*, 138 S. Ct. 2129 (2018).

<sup>167</sup> See *WesternGeco*, 138 S. Ct. at 2139–44 (Gorsuch, J., dissenting).

<sup>168</sup> See Dinopoulos & Kottaridi, *supra* note 132, at 510–11.

<sup>169</sup> PATENTS AND PROTECTION OF PATENT RIGHTS, 35 U.S.C. §§ 271(f)–(g) (2012).

<sup>170</sup> *Id.*; see *WesternGeco*, 138 S. Ct. at 2139–44 (Gorsuch, J., dissenting)

---

---

Germany are vastly different.<sup>171</sup> This is interesting considering the degree of innovation that occurs in both nations, and the sophistication of each system.

Lastly, a limitation that could be employed to placate the Germans more than others, would be an adoption of their system for international cases. Where any completion of infringement, so long as an essential element<sup>172</sup> occurred within a nation, say Germany, that nation can enforce the patent granted by it. There are likely questions here, such as, can multiple nations enforce a patent against one party for one act of infringement? The answer, if this were the only amendment, would appear to be yes. However, currently there is nothing barring an international infringer from being liable in multiple nations.

Ultimately, the most palatable amendment that is in the form of a limitation would be something similar to 35 U.S.C. § 271(f)–(g). It would be supported by the United States because it is already the law we have seen fit to pass, it would likely be supported by the Germans because it does not take away their current practices and only limits them, and it would likely be acceptable to the United Kingdom, which does not intend on departing the EPC and has allowed its citizens and residents to be subjected to foreign patent trials.

## VI. CONCLUSION

*WesternGeco* has brought the issue of extraterritoriality in patent infringement cases to the forefront for many people involved in intellectual property. There are those that are satisfied with the ruling and those that are not. However, this case illustrated and highlighted some of the issues in the global patent market that must be addressed, primarily the issue of legal uncertainty as a result of disharmony in extraterritorial enforcement. The costs will continue to climb for patent prosecutions and litigations as technology continues to invade every corner of the globe. It is high time that the law supported the actions of the global economy and enabled continued growth as opposed to stifling it.

The PCT should be amended to include an article regarding extraterritoriality similar to 35 U.S.C. § 271(f)–(g). Such an amendment will ultimately increase global patent law harmony and decrease legal uncertainty, which will result in a greater rate of development and innovation while decreasing transaction costs associated with international patents. The increase in innovation and the decrease in transaction costs will likely result in long-run global growth, an increase in wage parity, and increase in technology transfer.

---

<sup>171</sup> See *supra* Table 1.

<sup>172</sup> Patentgesetz [PatG] [Patent Act], Dec. 16, 1980, BGBl I at 3546, § 9 (Ger).