

# SYRACUSE SCIENCE AND TECHNOLOGY LAW REPORTER

## Preserving the Patent Process to Incentivize Innovation in Global Economy

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*Man is not the only animal who labors; but he is the only one who improves his workmanship. This improvement, he effects by Discoveries, and Inventions....*  
--Abraham Lincoln, April 6, 1858

### Introduction

The United States of America is experiencing one of the most transformational moments in our history. Although we are still the most dominant market economy in the world, we find other nations, with significantly larger populations, catching up to us. To stay competitive in the global marketplace will require incredible fortitude from every sector of the economy at all levels. Our goal must be to move this country forward and continue to be the land where freedom can bring opportunity, prosperity, and progress for all. There is probably no single solution as to how the United States of America (America) can rise to this challenge. It is likely, however, that one of the most important factors will be America's ability to innovate at a rapid pace.

Further complicating this challenge is the devastation Hurricane Katrina created. This disaster has exposed our fragility along with the problems in our society that, though not beyond

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contemplation, were not imminently being addressed. As recovery from the crisis ramps up, Congress is re-evaluating its order of business. Congress will be tempted to move quickly, without going through a deliberative process to evaluate unintended consequences of the actions it may take.

In 2005, Big Business, manufacturers, and their lawyers have been on an assault to drastically change the patent laws. One of the major amendments would be to make the patent laws more favorable to patent owners who develop their inventions into products or services for commercial sale at the expense of those who do not. The objective is to disadvantage non-manufacturing patent owners in favor of those who manufacture or provide services. Ultimately, this campaign to change the patent laws is meant to reduce the power of those coined as *patent trolls*. Such a term is “used to describe individuals or companies that buy up patents and assert them with no intent ever to create a product.”<sup>2</sup> Manufacturers complain that patent trolls exploit the patent system through acquiring patents exclusively for financial gain without the concomitant intent to develop new products to bring them to the market.<sup>3</sup> Many companies assert that they have “no use for nonmanufacturing [sic] companies that amass patents for the purpose of asserting them.”<sup>4</sup> The supposition is that patent trolls are an unruly tax on industry, having no intrinsic value.<sup>5</sup>

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<sup>2</sup> Victoria SlindFlor, *Simon Says Intel’s Chief Patent Counsel, David Simon, Has Some Tough Rules for Outside Counsel*, IP LAW & BUSINESS, Vol. 4, Issue 12, Dec. 10 2004. See Word Spy, *Patent Troll*, at <http://www.wordspy.com/words/patenttroll.asp> (last visited Mar. 22, 2006) (defining “patent troll” as, “[a] company that purchases a patent, often from a bankrupt firm, and then sues another company by claiming that one of its products infringes on the purchased patent); see also Brenda Sandburg, *Inventor’s Lawyer Makes a Pile of Patents*, The Recorder, July 30, 2001 (“A patent troll is somebody who tries to make a lot of money off a patent that they are not practicing and have no intention of practicing and in most cases never practiced.”).

<sup>3</sup> *Patent System Review – Part I, Committee on Senate Judiciary Subcommittee on Constitution, Civil Rights and Property Rights*, April 25, 2005, 2005 WL NR 6469328 (F.D.C.H.) (statement of Joel Poppen, Deputy General Counsel, Micron Technologies, Inc.) (referring to these activities as “inventing patents” instead of patenting inventions) [hereinafter Micron].

<sup>4</sup> SlindFlor, *supra* note 2.

To date, attacks on patent trolls persist without significant opposition.<sup>6</sup> Certainly, individuals exist who abuse the patent system. That, however, is not a reason to write laws solely favoring manufacturers at the expense of promoting innovation. Preferring one type of inventor over another may have the unintended consequence of cooling inventive activity. After all, “[o]ne man’s independent inventor is another’s predator.”<sup>7</sup>

Just as public interest groups have decried that the patent system does not exist in order to line the pockets of patent holders,<sup>8</sup> the system, in turn, is not meant to equip manufacturers with means to infringe non-manufacturers’ patents willy-nilly. Without an effective mechanism for innovators to exclude others from stealing intellectual property, “many of the [economic] returns to innovation will be lost and we can expect less innovation to occur.”<sup>9</sup> The United States should refrain from transforming its patent system from one that encourages innovation to one that epitomizes manufacturing as the reason for why the patent laws exist.

This Article posits that the patent laws should not be amended to solely benefit manufacturers at the expense of suppressing incentives for innovation. If amendments are necessary, they should not be so one-sided that only manufacturing is promoted. Other innovators and patent owners who do not manufacture also must be heard. Without listening to

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<sup>5</sup> *Id.* (arguing patent troll lawsuits ensue a tax on the industry without any concomitant benefits resulting therefrom).

<sup>6</sup> *But see* C. Boyden Gray, *Patents: Patent Reform Bill: A Troubling Proposal for the U.S. Patent Law System*, 70 BNA PAT. TRADEMARK AND COPYRIGHT J. 121 (2005) (articulating why suggested patent reforms are the wrong solution to real problems, thereby damaging innovation); *but see* Mark D. Janis, *Symposium: Patent System Reform*, 17 BERKELEY TECH. L.J. 899 (2002) (suggesting large scale modern patent law reform should proceed with caution).

<sup>7</sup> Danny Fortson, *The Big Squeeze*, 4 INTELL. PROP. L. & BUS. 11 (2004) (referring to Jerome Lemelson, a notorious independent inventor who generated more than \$1.4 billion in licensing revenue).

<sup>8</sup> *See* The Patent Act of 2005, H.R. 121, 109th Cong. (2005) (statement of Daniel B. Ravicher, Executive Director, Public Patent Foundation.)[hereinafter *PUBPAT*].

<sup>9</sup> HERBERT HOVENKAMP, *FEDERAL ANTITRUST POLICY THE LAW OF COMPETITION AND ITS PRACTICE* 241 (3d ed. 2005).

every voice, the patent system will be in the business of promoting manufacturing, instead of innovation, at a time when manufacturing is shifting off shore. Many have lost sight of the purpose of the patent system, which is “to promote the Progress of Science and the useful Arts.”<sup>10</sup> Although there may be public policy reasons for propping up the manufacturing sector in the United States, such action should not be undertaken through amending the patent laws, which should be more appropriately focused on supporting innovation.

Part I of this Article presents an overview of some of the suggested patent law reforms in 2005. Part II discusses that the primary purpose of the patent law system is to encourage innovation, not manufacturing. Part III posits that patents create a market for innovation that would not otherwise exist. Part IV discusses why injunctions are a vital remedy for patent infringement. Part V presents other options to improve patent quality. Part VI is the conclusion.

## **I. Overview of Suggested Patent Law Reforms in 2005**

One of the most significant proposed reforms would eliminate the presumption that a patentee, upon a finding of patent infringement, will likely suffer irreparable harm if an injunction is not granted.<sup>11</sup> One of the factors to be weighed in determining irreparable harm is

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<sup>10</sup> See U.S. CONST. art. I, § 8, cl. 8.

<sup>11</sup> 151 CONG. REC. E1160-01 (Jun. 8, 2005). The Honorable Howard L. Berman of California, states: Section 7 [of H.R. 2795] is designed to address the negative effect on innovation created by patent “trolls.” We have learned of countless situations in which patent holders, making no effort to commercialize their inventions, lurk in the shadows until another party has invested substantial resources in a business or product that may infringe on the unutilized invention. The patent troll then steps out of the shadows and demands that the alleged infringer often feels compelled to pay almost any price named by the patent troll because, under current law, a permanent injunction issues automatically upon a finding of infringement. Issuance of a permanent injunction would, in turn, cause the alleged infringer to lose the substantial investment made in the allegedly infringing business or product.

*While we may question their motives, we do not question the right of patent trolls to sue for patent infringement, obtain damages, and seek a permanent injunction. However, the issuance of a permanent injunction should not be granted automatically upon a finding of infringement. Rather, when deciding whether to issue a permanent injunction, courts should weigh all the equities, including for example, the “unclean hands” of the patent trolls, the failure to commercialize the patented invention, the social utility of the infringing utility, and the loss of invested resources by*

whether the patentee makes or uses the invention.<sup>12</sup> Such a change to current law will ultimately lead to money damages as the presumed remedy for patent infringement, diminishing the availability of injunctive relief.<sup>13</sup> Often the threat of money damages alone is not enough to convince an alleged infringer to cease its infringing activity and take a license to practice the invention. Reducing a patentee's likelihood of obtaining an injunction will not only harm all patentees, but will almost certainly curb innovation in general. Those who invent want to be compensated for their efforts. If the rights of inventors to enforce their patents are lessened, it follows that innovation incentives would be negatively affected.<sup>14</sup>

Another suggested reform is to make it easier for alleged infringers to invalidate patents by changing the quantum of proof from clear and convincing to preponderance of the evidence.<sup>15</sup> There is a notion that proving clear and convincing evidence that patent claims are invalid is too high a burden because patent quality is unsatisfactory.<sup>16</sup> Many are instead proposing "preponderance of the evidence standards."<sup>17</sup> Currently, patents are presumed valid. Reformers

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the infringer. After weighing the equities, the court may still decide to issue a permanent injunction, but at least the court will have ensured that the injunction serves the public interest. *Id.* (emphasis added).

<sup>12</sup> See STAFF OF HOUSE JUDICIARY SUBCOMM. ON THE COURTS, THE INTERNET, AND INTELLECTUAL PROPERTY, 109th Cong., Patent Act of 2005 31-2 (Comm. Print 2005), available at <http://judiciary.house.gov/media/pdfs/comprint042005.pdf> (last visited Feb. 28, 2005)[hereinafter Committee Print].

<sup>13</sup> See H.R. 2795, 109th Cong. § 7 (2005).

<sup>14</sup> See Judge Pauline Newman, *Patents: Judge Newman Urges Caution, Calls for Global Perspective on Patent Reform*, PAT., TRADEMARK & COPYRIGHT DAILY, Jul. 6, 2005 [hereinafter Judge Newman].

<sup>15</sup> *Patent Law Revision, Comm. on Senate Judiciary Subcomm. on Intellectual Property*, Jun. 14, 2005, 2005, available at WLNR 9424393 (F.D.C.H.) (statement of Chuck Fish, Vice President and Chief Patent Counsel of Time Warner, Inc.) [hereinafter Fish]. See *Micron*, *supra* note 2 (arguing that the presumption of validity and the clear and convincing evidence standard is "a very tall burden" compelling defendants to enter into costly licenses instead of challenging patent validity).

<sup>16</sup> Fish, *supra* note 15; see also *supra* text accompanying note 2.

<sup>17</sup> See *id.* (advocating needing to prove only that there is a 51% probability that a patent should never have been issued).

want to eliminate that presumption. Making it easier to invalidate patents will lessen their economic value. It is likely that such a change will have a negative affect on the incentive to innovate. The combination of reducing the possibility of injunctions and lowering the burden of persuasion to prove patent invalidity may have devastating consequences to those who rely on patents as their core business, rather than on manufacturing.

## **II. The Purpose of Patent System is to Encourage Innovation, Not Manufacturing**

### **A. Encouraging Innovation, Not Manufacturing**

From reading the Patent Clause of the U.S. Constitution set forth below, it is evident that its palpable purpose was to provide Congress with the means to promote the progress of science and innovation, instead of purely advancing manufacturing and bolstering manufacturers:<sup>18</sup>

The Congress shall have Power: ....

To promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries.<sup>19</sup>

The Constitution empowers Congress to write laws encouraging the “Progress of Science and useful Arts” through granting exclusive rights to “Authors and Inventors.”<sup>20</sup> In this Article, the focus here will be on the Patent Clause and the exclusive rights of “Inventors.”<sup>21</sup> Although the Constitution fails to define the word, “Inventors”, it unquestionably does not require that they manufacturer, sell, or market their writings or ideas. Likewise, the Constitution provides no definition to the meaning of the phrase “Progress of Science and useful Arts.” There is,

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<sup>18</sup> *Crown Die & Tool Co. v. Nye Tool & Machine Works*, 261 U.S. 24, 35 (1923) (“The sole reason and purpose of the constitutional grant to Congress to enact patent laws is to promote the progress of science and useful arts by securing for limited times to inventors the exclusive right to their respective discoveries”); *but see*, *Micron supra* note 3 (inferring that the underlying justification for every Patent Act since 1790 is to provide patents to those that use patents to protect their own products or market their own technology).

<sup>19</sup> U.S. CONST. art. I, § 8, cl. 8.

<sup>20</sup> *Id.*

<sup>21</sup> This clause also applies copyright, which is beyond the scope of this article.

however, no indication that manufacturing is somehow compulsorily implicated. In fact, the words “manufacture” and “sale” are no longer even found in the Constitution.<sup>22</sup>

Like many parts of the Constitution, there is little consensus on the exact meaning of the individual words found in the Patent Clause.<sup>23</sup> Nevertheless, it is worth noting that the words ultimately chosen are in vast contrast to those found in section six of the British Statute of Monopolies of 1623.<sup>24</sup> This statute provides the origin of patent law in the common law.<sup>25</sup> Section six of the Statute of Monopolies only authorized patents for “new manufactures.”<sup>26</sup> It did not attempt to encourage or promote science broadly, but rather was written to curb the English Crown’s abuse of royal power in issuing letters patent for monopolies.<sup>27</sup> Although forbidding monopolies from taking something out of the public domain into private hands, an exception was made for “new manufactures” not previously known in Great Britain.<sup>28</sup> The

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<sup>22</sup> The words “manufacture” and “sale” once appeared in the now repealed Amendment XVIII, more commonly known as Prohibition, which read: “After one year from the ratification of this article the *manufacture, sale, or transportation of intoxicating liquors within, the importation thereof into, or the exportation thereof from the United States and all territory subject to the jurisdiction thereof for beverage purposes is hereby prohibited.*” U.S. CONST. amend. XVIII, *repealed by* U.S. CONST. amend. XXI (emphasis added).

<sup>23</sup> See Karl B. Lutz, *Patents and Science, A Clarification of the Patent Clause of the United States Constitution*, 18 GEO. WASH. L. REV. 50 (1949-1950) [hereinafter Lutz]; see Giles S. Rich, *Principles of Patentability*, 28 GEO. WASH. L. REV. 393 (1960).

<sup>24</sup> Section six of the Statute of Monopolies of 1623, reads:

Provided also and be it declared and enacted that any declaration before mentioned shall not extend to any letters patent and grants of privilege for the term of fourteen years or under, hereafter to be made, of the working sole or making of any manner of *new manufactures* within this realm, to the true and first inventor and inventors of such manufactures, which others at the time of making such letters patents and grants shall not use, so as also they be not contrary to the law nor mischievous to the State, by raising prices of commodities at home, or hurt of trade, or generally inconvenient.

See Adam Mossoff, *Rethinking Development of Patents: An Intellectual History, 1580-1800*, 52 HASTINGS L.J. 1255, 1272 (2001).

<sup>25</sup> See *Graham v. John Deere Co.*, 383 U.S. 1, 5 (1966) (stating that the Patent Clause was written against the backdrop of practices eventually excepted under the Statute of Monopolies).

<sup>26</sup> By 1787, Great Britain had recognized that the term “new manufacture” was unduly restrictive in that it excluded new processes. Lutz, *supra* note 23, at 53.

<sup>27</sup> See Mossoff, *supra* note 24 at 1270-73.

purpose was to establish new industries in Great Britain, “either by innovations made within the country, or by importing the new industry from abroad.”<sup>29</sup> Instead of adopting or mirroring the Statute of Monopolies’ language in section six, granting patents only to “new manufactures,” the U.S. Constitution broadens patent eligibility to include “useful arts” granted to “inventors” who make “discoveries.”<sup>30</sup> No records survive that specifically identify the motive behind why such a change was made.<sup>31</sup> Thus, we should extrapolate that the change was made for a reason and that it was made to move away from solely granting “new manufactures” the opportunity to be patented. That is to say, the Patent Clause was not adopted solely to protect and promote manufacturing.

#### **B. Exclusive Rights Granted in Exchange for Disclosure of Invention to the Public**

The Patent Clause balances encouraging innovation without creating monopolies that “stifle competition without any concomitant advance in the ‘Progress of Science and useful Arts.’”<sup>32</sup> The Clause grants Congress the power to create exclusive rights, but for only a limited period of time.<sup>33</sup>

The U.S. patent system does not simply reward those who are inventors with commercial success without exacting some *quid pro quo*. Another critical function of the patent system is to

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<sup>28</sup> See Mossoff, *supra* note 24 at 1270-73.

<sup>29</sup> See, Lutz, *supra* note 23, at 53-54. See Giles S. Rich, *The Relation between Patent Practices and the Anti-Monopoly Laws*, 24 J. PAT. & TRADEMARK OFF. SOC’Y 85, 92-97 (1942) (discussing the history surrounding the interface between monopolies and patents in Great Britain).

<sup>30</sup> See Lutz, *supra* note 23, at 53-54.

<sup>31</sup> *Id.* at 54.

<sup>32</sup> *Bonito Boats, Inc. v. Thunder Craft Boats, Inc.*, 489 U.S. 141, 146 (1989).

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



encourage public disclosure of inventions.<sup>34</sup> In writing the patent laws, Congress has provided inventors and their assignees with exclusive rights over their inventions for a limited period of time, in exchange for disclosing the invention, which will be eternally preserved in patent literature.<sup>35</sup> While the inventor obtains exclusive rights, the public acquires disclosure of the invention, so that those who come later can build upon what has been done previously.

Looking at the patent laws from a historical perspective, we see that Thomas Jefferson pontificated in his writings that the property of an idea lays only in it remaining secret.<sup>36</sup> There must be some incentive for one to reveal a brilliant idea. Once the idea is revealed, everyone possesses it.<sup>37</sup> As a solution to this problem, Jefferson remarked that society may step in and give exclusive rights to encourage pursuing useful and innovative ideas. “[T]he exclusive right to invention as given not of natural right, but for the benefit of society....”<sup>38</sup> Without exclusive rights as an incentive, inventors would most likely keep their inventions as a trade secret.<sup>39</sup> It would be imprudent to reveal such information to business rivals without the carrot of exclusive rights.

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<sup>34</sup> *Bonito Boats, Inc.*, 489 U.S. at 146.

<sup>35</sup> 35 U.S.C. § 154 (1994).

<sup>36</sup> Thomas Jefferson, XIII THE WRITINGS OF THOMAS JEFFERSON 326-338 (A. Lipscomb ed. 1904). (Aug. 13, 1813 Letter to Isaac McPherson.)

If nature had made any one thing less susceptible than all others of exclusive property, it is the action of the thinking power called an idea, which an individual may exclusively possess as long as he keeps it to himself, but the moment it is divulged; it forces itself into the possession of every one, and the receiver cannot dispossess himself of it...Inventions then cannot, in nature, be a subject of property. Society may give an exclusive right to the profits arising from them, as an encouragement to meant to pursue ideas which may produce utility...

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

<sup>38</sup> *Id.* Thomas Jefferson played a pivotal role in drafting the 1793 Patent Act. The Act required that, to be subject of a patent application, the invention must not have been known or used before the application. *See generally Bonito Boats, Inc.* 489 U.S. at 147.

<sup>39</sup> ADAM B. JAFFE & JOSH LERNER, INNOVATION AND ITS DISCONTENTS 8 (2004) (stating that if there were no incentives for those who discover and develop new technology, it is likely that fewer innovations would be developed, slowing progress and the benefits it brings) [hereinafter JAFFE].

Most importantly, through patenting these inventions, the public gains knowledge of inventions that would have otherwise been lost and/or remained secret.

### **III. Patents Create a Market for Innovation**

For those inventors who are not manufacturers or producers, keeping a trade secret cannot create wealth. Innovators who do not manufacture would have no incentive to develop or pursue new ideas or innovations without obtaining exclusive property rights to their inventions, which can be alienated and thereby converted into money or other tangibles. In other words, the patent system has created a market for non-manufacturing innovators that would not otherwise exist. Patents convert the intangible property of an idea into tangible property that can be bought, sold, or licensed, providing opportunities upon which businesses may be established.<sup>40</sup> “Patents protect an individual’s or firm’s investment in the development of an idea, as much as they protect the invention itself.”<sup>41</sup>

Technological innovation, like anything worth doing, is often extremely expensive and time consuming.<sup>42</sup> People would not engage in innovation if there were no reward or pay back for the time and expense. If innovation is “socially desirable, but expensive, then society needs to have institutions that direct time and money into the processes of research and development.”<sup>43</sup>

Without exclusive rights to one's invention, others would simply steal the intellectual property as free riders. “A free ride occurs when one party to an arrangement reaps benefits for which another party pays, though that transfer of wealth is not part of the agreement between

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<sup>40</sup> JAFFE, *supra* note 39, at 36.

<sup>41</sup> *Id.* at 43.

<sup>42</sup> *Id.* at 37.

<sup>43</sup> *Id.*

them.”<sup>44</sup> That is to say, without exclusive rights, others would wait for an invention to take place, steal it, and use it for their own. Over time, fewer would innovate and more would become free riders, waiting for others to invent. This would happen especially in the pharmaceutical industry where generic companies could come in and significantly undercut the patentee’s or patent licensee’s prices.

Many research and design (R&D) investments produce significant negative returns.<sup>45</sup> “Studies of pharmaceutical R&D estimate that if you screen 5,000 to 10,000 compounds for possible clinical use, on average 250 of these will show enough promise to be put into pre-clinical testing. Of these 250, five will show sufficient promise to enter clinical testing; the rest are simply abandoned.”<sup>46</sup> From there, of the five, “only one will be approved by the FDA,” which does not guarantee a big market for the drug.<sup>47</sup> To enter clinical testing with a drug can cost up to \$500 million dollars per drug.<sup>48</sup> In general only about 6% of the compounds” earn sufficient profits to recoup their own [investment] costs,” let alone enough profits “to pay for all of the losses on the other 94% of [the] compounds tested.”<sup>49</sup> In order to succeed, an innovator “must earn enough profit to cover not only their own costs and reasonable return, but also the

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<sup>44</sup> *Rothery Storage & Van Co. v. Atlas Van Lines, Inc.*, 792 F.2d 210, 212 (D.C. Cir. 1986) (involving an extensive discussion on the free rider problem).

<sup>45</sup> JAFFE, *supra* note 39, at 41.

<sup>46</sup> *Id.* at 42.

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

<sup>48</sup> *Id.*

<sup>49</sup> *Id.* (citing “PhRMA Industry Profile, Pharmaceutical Research and Manufacturers of America,” at <http://www.phrma.org/publications/publications/profile02/index.cfm> (last visited Sept., 2005)).

costs and a reasonable return on those costs for all of the failures. Otherwise, the overall investment strategy will be a loser.”<sup>50</sup>

Patents, however, provide the exclusive rights to combat the free rider problem. Patents allow inventors to define the metes and bounds of their invention, without which trespass over the property would undoubtedly and frequently occur. To be sure, patents do not prevent all theft. But, “[they do] make theft harder and hence make the property more secure.”<sup>51</sup> Having such protection creates in inventors a willingness to take risks, spending time and money on innovation.<sup>52</sup> With exclusive rights comes an opportunity to reap the benefits of one's own invention without fear that competitors would free ride and enjoy in the innovation, too. The exclusive rights in patents give those who do not manufacture an economic market incentive to assist inventors who cannot afford to acquire patent protection or defend their patent rights.

There is an important role that non-manufacturing patent owners or patent trolls play in the patent system. In order to lessen the negative connotation of the term *patent trolls*, this Article will instead refer to them as *patent marketers*.

Patent marketers pay for and prepare patent applications for those who cannot afford to pay such expensive costs and fees. After patent rights are obtained, patent marketers pay the exorbitant costs of patent litigation against infringers who refuse to take a license. Defending a patent infringement suit is extraordinarily expensive.<sup>53</sup> Based on a survey of intellectual property lawyers in 2000, the cost of defending a patent case, where \$25 million is at stake, costs

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<sup>50</sup> JAFFE, *supra* note 39, at 41.

<sup>51</sup> *Id.* at 43.

<sup>52</sup> *Id.* at 43.

<sup>53</sup> SlindFlor, *supra* note 2 (stating that any one patent lawsuit may cost Intel \$20 million plus).

about \$2 million to \$4.5 million.<sup>54</sup> For cases where \$1 million is at risk, the litigation cost was about \$300,000 to \$750,000.<sup>55</sup>

Additionally, patent marketers frequently improve the value of the intellectual property sought by redrafting pending patent application claims. Sometimes inventors fail, initially, to claim broadly enough to encompass the entire scope of their invention. Many patent marketers have expertise in providing the value-added to draft claims of appropriate and optimal scope. Normally, patent marketers utilize continuation practice techniques to rework the patent application to accomplish this end.<sup>56</sup>

Furthermore, patent marketers utilize their expertise and economic leverage to negotiate patent license agreements on behalf of their clients. In exchange for various rights to their client's intellectual property, patent marketers take on these responsibilities. Some independent inventors lose their funding or venture capital and can no longer pursue protecting their intellectual property. Without patent marketers, these inventors would lose everything and receive nothing for their inventions. Patent marketers, however, will only invest in assisting the aforementioned inventors if there is a market that justifies doing so.

The patent system currently prescribes remedies favorable to patent holders to assume the risk of obtaining patent rights. One of the most powerful remedies available for non-manufacturing patentees and patent marketers is the injunction.<sup>57</sup> An injunction makes it possible to immediately stop an alleged infringer from its prohibited activities, providing the

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<sup>54</sup> SlindFlor, *supra* note 2 at 68 (citing AMERICAN INTELLECTUAL PROPERTY LAW ASSOCIATION, REPORT OF ECONOMIC SURVEY 2001 (2001)).

<sup>55</sup> *Id.*

<sup>56</sup> Continuation practice is authorized under 35 U.S.C. §120 (2006), and 37 C.F.R. § 1.114 (2006). The purpose for continuation practice is to allow applicant to get another opportunity to submit more information, make new arguments, or present new evidence in support of patentability after an application is closed. *Id.*

<sup>57</sup> See *Smith Int'l, Inc. v. Hughes Tool Co.*, 718 F.2d 1573, 1578 (Fed. Cir. 1983).

patent owner with leverage to begin negotiations.<sup>58</sup> Without such power, non-manufacturing patentees and patent marketers would likely be ignored. Unfortunately, the injunction is the very remedy that is under grave attack. Without reducing the costs of litigation to enforce patent rights, eliminating remedies like injunctions will reduce the incentive for patent marketers to invest in patent litigation against infringers. An infringer would always prefer to infringe now and pay damages later. Entering the market, especially when the patent marketer does not manufacture, is its own reward. In general, weakening the injunction as a remedy will only benefit infringing manufacturers that have something to enjoy.

Another way patents create a market for innovation is through empowering inventors to control their destiny in how their invention will be developed. A good example is that of Thomas Edison, who wanted his inventions to provide him with a certain amount of financial independence. Without rights to his patents, his investors could have dictated his future, which would have negatively affected his incentive to innovate.

By 1880, Thomas Edison's incandescent light had been perfected.<sup>59</sup> However, there were no on-site generators or central stations yet available to provide electricity to run these lights.<sup>60</sup> Edison and the financiers who supported Edison's creation of incandescent light formed the Edison Electric Light Company (EELC), the entity that controlled the resulting patents.<sup>61</sup> In order to create more downstream income for himself, Edison constructed the industry so that

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<sup>58</sup> See *Smith Int'l, Inc.*, 718 F.2d at 1578.

<sup>59</sup> An incandescent light is light produced by heat. Patrick McGuire, et al., *Thomas Edison and the Social Construction of the Early Electricity Industry in America*, in *EXPLORATIONS IN ECONOMIC SOCIOLOGY* 213 (Richard Swedberg ed., 1993) [hereinafter, McGuire].

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

<sup>61</sup> *Id.* at 217.

central stations would provide electricity rather than separate on-site generators.<sup>62</sup> Bankers and other major investors did not want to expend massive investor capital to provide electricity to users.<sup>63</sup> Under Edison's model, individual users would have to be able to afford to generate electricity through purchasing their own infrastructure.<sup>64</sup> The financiers sought to "assign [EELC] patent rights to manufacturers and collect licensing fees."<sup>65</sup> The money would be made in selling tens of thousands of generating systems, with substantial royalty payments to EELC and dividends to shareholders.<sup>66</sup> Edison had a different view. He wanted all individuals to be able to afford light, and have the investors expend the capital outlay on building central stations.<sup>67</sup> The financiers, however, had no interest in risky capital expenditures.<sup>68</sup> Smartly, Edison believed the real profit for him would be in being part owner in the central station, where he could rely on direct return of his investments instead of through patent licensing and royalties.<sup>69</sup> As a direct owner in a business, he thought he would have a more powerful position in relation to investors and financiers.<sup>70</sup> The idea being that an inventor of components could never be in complete control over the innovation, but would remain dependent on others to

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<sup>62</sup> See McGuire, *supra*, note 59 at 218.

<sup>63</sup> *Id.* at 218, 222. Specifically, William Vanderbilt, the largest owner in natural gas stock in America and an investor in EELC, did not want to build a central station system that would compete with his investment in natural gas. *Id.*

<sup>64</sup> *Id.* at 218.

<sup>65</sup> *Id.*

<sup>66</sup> *Id.*

<sup>67</sup> *Id.* at 219.

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

<sup>69</sup> *Id.*

<sup>70</sup> *Id.*

supply or invent other necessary components.<sup>71</sup> Owning these patents as an inventor provided Edison with the power to control his own financial security.

In other situations, Edison decided to handle his intellectual property differently. For example, Edison sold some of his European patents on the telephone and telegraph to “finance the series of manufacturing companies that could make, sell, and buy his electric devices and inventions” in order to fund the forerunner to ConEdison, the Edison Electric Illuminating Company of New York (EELC-NY).<sup>72</sup>

Edison’s philosophy of how to use his patents fundamentally differed from that of many of his investors. Edison used his patents to invest capital into his businesses. His investors wanted to pay for experiments, acquire patents on the inventions and not invest capital in the electric lighting business.<sup>73</sup>

Later, Edison tried to promote his direct current (DC) system over the alternating current (AC) system used today.<sup>74</sup> AC central power stations, through the use of a transformer, could deliver power across much farther distances than DC plants.<sup>75</sup> DC loses strength over time across wires.<sup>76</sup> Small towns could locate power plants in the countryside, between towns, and

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<sup>71</sup> See McGuire, *supra*, note 59 at 218 (citing THOMAS HUGHES, NETWORKS OF POWER: ELECTRIFICATION IN WESTERN SOCIETY 1880-1930 21 (1983)).

<sup>72</sup> *Id.* at 222-24.

<sup>73</sup> *Id.* at 226 (quoting HAROLD PASSER, THE ELECTRICAL MANUFACTURERS, 1875-1900: A STUDY IN COMPETITION, ENTREPRENEURSHIP, TECHNICAL CHANGE, AND ECONOMIC GROWTH 98 (Cambridge, Harvard University Press 1953)). The J.P. Morgan-dominated executive committee of the EELC stated: “the policy of our Company [EELC]...has always been...that of merely paying the expenses of experiments and of taking out and holding patents and not investing in the actual business of lighting.” *Id.*

<sup>74</sup> IRA FLATOW, THEY ALL LAUGHED... FROM LIGHT BULBS TO LASERS: THE FASCINATING STORIES BEHIND THE GREAT INVENTIONS THAT HAVE CHANGED OUR LIVES 29-30 (1992).

<sup>75</sup> *Id.*

<sup>76</sup> *Id.* at 30.



thus share the construction and operation costs with one another.<sup>77</sup> When Edison tried to use his patent power to dictate the DC system, it was technologically inferior and was impractical. The patent owners of the AC system were able to use their power to provide a better system to consumers.

Patents allow inventors to decide how they want to structure their income stream. Such absolute authority further incentivizes innovation. Even though Edison tried to block the original AC system created by Westinghouse, the resulting systems eventually merged when Edison's company and Thomas-Houston merged to become General Electric.<sup>78</sup>

Additionally, acquiring and managing intellectual property provides opportunities to fund a strategic change in a company's core business and improves future business strategy. Some businesses, for example, have moved from a struggling business model to one that is more profitable simply through enforcing patent rights and managing intellectual property. In 2001, when profit margins in the technology sector began to decline, some technology companies switched their focus from manufacturing to enhancing intellectual property licensing.<sup>79</sup>

For example, before PCTEL created its patented modem technology, modems were expensive pieces of hardware.<sup>80</sup> PCTEL's innovation made software drive modem functions so that they became an integral part of personal computers.<sup>81</sup> This shift, however, meant modems would become inexpensive to produce and a business could no longer profit from only

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<sup>77</sup> Flatow, *supra* note 74.

<sup>78</sup> *Id.* at 42.

<sup>79</sup> See Lisa Schuchman, *Patents to the Rescue*, IP L. & BUS., Dec. 10 2004, at 46 (interviewing Martin Singer, PCTEL's chairman and chief executive officer).

<sup>80</sup> *Id.*

<sup>81</sup> *Id.*

manufacturing and selling modems.<sup>82</sup> To be profitable, the core business would need to shift and adapt to the changing times. Innovation was the key.

In 2003, PCTEL sold its core business in manufacturing and selling modems, but retained its core patents and began enforcing them against competitors.<sup>83</sup> As soon as PCTEL stopped manufacturing, it could litigate against patent infringers without risking injunctions against its core manufacturing business.<sup>84</sup> PCTEL now had nothing to enjoin, which left PCTEL less vulnerable.<sup>85</sup> Patent licensing brought in revenues that allowed PCTEL to move into producing wireless technologies. The improved intellectual property portfolio produced \$18 million in royalties and settled patent disputes through signing lucrative and priceless cross-licensing agreements.

Despite PCTEL's revenue dropping from \$76 million in 1999, to \$45 million in 2003, the gross profit margin only changed from \$37 million to \$34 million over the same time periods.<sup>86</sup> Through restructuring its core business to wireless technologies and developing a robust patent licensing program, PCTEL increased its efficiency.

Another example is Qualcomm. Qualcomm has revenues of about \$3 billion, with \$800 million coming from royalties on its patent licenses, the rest coming from sales on products.<sup>87</sup>

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<sup>82</sup> Schuchman, *supra* note 79.

<sup>83</sup> *Id.*

<sup>84</sup> *Id.*

<sup>85</sup> *Id.* See also JAFFE, *supra* note 39, at 15 (stating manufacturers are reluctant to seek injunctions against competitors for fear that such will be sought against them).

<sup>86</sup> Schuchman, *supra* note 79.

<sup>87</sup> JAFFE, *supra* note 37, at 36.

To compete with powerhouses like Motorola, Qualcomm had to rely on its patented technology to achieve financial success.<sup>88</sup>

Additionally, Biogen, a company founded in 1978, developed new genetic engineering techniques to develop pharmaceutical products.<sup>89</sup> Its patent portfolio facilitated Biogen's ability to obtain venture capital and fund the development of new products like a vaccine for hepatitis B.<sup>90</sup> Without owning the intellectual property, it is unlikely investors or industry would have been interested in partnering with Biogen to develop products.<sup>91</sup> In fact, Biogen never manufactured or sold anything tangible; it just licensed its intangible intellectual property rights.<sup>92</sup>

Not only do patents encourage innovation, but the patent process also ensures that such inventions are adequately disclosed to the public so that others may build on these new ideas.

#### **IV. Injunction Remedy is Critical in Encouraging Innovation**

Big business, manufacturers, and service providers argue that patent marketers, because they can seek injunctions as remedies in patent infringement suits, have disproportionate power over manufacturers.<sup>93</sup> A system that allows non-manufacturing patentees to pursue injunctions easily rewards them "because they can pursue litigation, threatening to shut down another company, without risk that the same strategy [might] be applied to them."<sup>94</sup> If both parties were

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<sup>88</sup> JAFFE, *supra* note 37, at 36.

<sup>89</sup> *Id.*

<sup>90</sup> *Id.*

<sup>91</sup> *Id.*

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

<sup>93</sup> Editor's Note, IP LAW & BUSINESS, Vol. 5, Issue 6, Jun. 2005.

<sup>94</sup> Fish, *supra* note 15. Micron, *supra* note 3 (stating: "[P]atent firms who do not manufacture anything... are not at risk of a [patent infringement] counterclaim.").

patent-owning manufacturers, the party bringing the suit might be vulnerable to a counterclaim of patent infringement by the other party.

Understandably, there is a concern that any “patent owner can hold a company hostage by seeking an injunction and threatening to stop the company from operating part of its business.”<sup>95</sup> But the argument is somewhat disingenuous. A non-manufacturing patentee’s ability to seek an injunction without risk of being sued for patent infringement in a counterclaim is reasonable because a non-manufacturing patentee is incapable of infringing patent rights. If one does not make, sell, offer to sell, or import any products, then one cannot infringe patent rights.<sup>96</sup> Consequently, an injunction to stop one from making, selling, offering to sell, or import a patented invention would neither be necessary nor appropriate.

There are also complaints that patentees increasingly ask for injunctions in order to “increase the likelihood of a favorable license fee.”<sup>97</sup> Patentees can use the threat of injunctions to leverage a higher royalty rate. Such injunctions can cripple an alleged infringer’s business, whether it consists of services or product sales.<sup>98</sup> Manufacturers strenuously assert that it is the

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<sup>95</sup> Fish, *supra* note 15.

<sup>96</sup> 35 U.S.C. § 154 (1994) (sets forth a patentee's exclusive rights as follows:  
Every patent shall...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>97</sup> Fish, *supra* note 15. *See Patent Law Revision, Committee on Senate Judiciary Subcommittee on Intellectual Property*, June 14, 2005, 2005 WL 1396319 (F.D.C.H) (statement of Jonathan Band, private attorney, testifying on behalf of Visa U.S.A. and The Financial Services Roundtable [hereinafter FSR] (stating that “[i]f Congress does not correct the remedies under patent law, the surge in the number of patents relating to financial services will lead to financial services institutions paying out ever-larger license fees to holders of suspect patents, to the detriment of our customers.”).

<sup>98</sup> Fish, *supra* note 15. *See Micron, supra* note 3 (stating: “[i]n recent years... increasing numbers of opportunists have exploited weakness or loopholes in the patent system to effectively achieve a ‘hold up’ of those who innovate, manufacture, and bring products to consumer markets”). *See also Micron, supra* note 3 (stating, “[t]hose sued for infringement by patent trolls] who refuse to meet [] royalty demands face an expensive patent infringement lawsuit and the grave threat of an injunction shutting down their business if they fight the patents and lose.”).

consumer who ultimately suffers the most from patent marketer lawsuits.<sup>99</sup> In order to pay for exorbitant patent litigation costs, retail prices are increased.<sup>100</sup> This situation has prompted manufacturers to complain that remedies for patent infringement need to be revamped. The outcry encompasses a fear that innovation is no longer being rewarded under the current system; only “tenacious lawyers” are the beneficiaries.<sup>101</sup>

It is true that the threat of injunction gives a patentee leverage to negotiate. However, without that threat, there is virtually no incentive for a manufacturer to take a license. A manufacturer will simply continue to infringe, drag out the litigation, and pay the reasonable royalty rate if it loses the infringement suit. Because “a patentee is required to prove that the infringement caused the patentee to suffer a loss of profits,”<sup>102</sup> non-manufacturers cannot obtain lost profits, because they do not sell or make any products. When an injunction is granted, equity is served because the injunction prevents the consumer from continued access to an allegedly infringing product.<sup>103</sup> Generally, an injunction may be the only real bargaining chip a patentee has to encourage an alleged infringer to come to the bargaining table to negotiate a license. Often the threat of money damages is not enough to convince an alleged infringer to cease its infringing activity.

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<sup>99</sup> Fish, *supra* note 15.

<sup>100</sup> *Id.*

<sup>101</sup> *See id.* *See also Micron, supra* note 3 (stating: “patent litigation is increasingly making lawyers the key players in competitive struggles rather than entrepreneurs and researchers.”).

<sup>102</sup> ERIC M. DOBRUSIN & KATHERINE E. WHITE, INTELLECTUAL PROPERTY LITIGATION: PRETRIAL PRACTICE, § 2.06 [B], 2-59 (2d ed. 2004) (citing *Bic Leisure Prods. v. Windsurfing, Int'l*, 1 F.3d 1214, 1218 (Fed. Cir. 1993)).

<sup>103</sup> Fish, *supra* note 15.

## A. What is the Current Law on Injunctions?

The U.S. Court of Appeals for the Federal Circuit (Federal Circuit) has emphasized that “[t]he standards applied to the grant of a preliminary injunction are no more nor less stringent in patent cases than in other areas of the law.”<sup>104</sup> The leading case governing preliminary injunctions in patent cases is *Smith Int’l, Inc. v. Hughes Tool Co.*<sup>105</sup> In that case the Federal Circuit adhered to the rule that patents have the attributes of personal property.<sup>106</sup> In making its decision, the court said that the “right to exclude” includes injunctions that are specifically provided for in 35 U.S.C. § 283: “The several courts having jurisdiction of cases under this title may grant injunctions in accordance with the *principles of equity* to prevent the violation of any right secured by patent, on such terms as the court deems reasonable.”<sup>107</sup>

In *Smith International*, the Federal Circuit pronounced that in determining whether a preliminary injunction should be granted, the factors to be evaluated are: (1) a showing of probability of success on the merits, this includes an evaluation of whether an attack on the patent’s validity would fail;<sup>108</sup> (2) a showing that the movant “will suffer immediate irreparable harm if the injunction is not granted;”<sup>109</sup> (3) “the possibility of harm to other interested persons from the grant or denial of the injunction;”<sup>110</sup> and (4) “the public interest.”<sup>111</sup>

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<sup>104</sup> *H.H. Robertson Co. v. United Steel Deck, Inc.*, 820 F.2d 384, 387 (Fed. Cir. 1987); Newman, *supra* note 14 (“preliminary injunctions in patent cases are decided on the same criteria –of irreparable harm and likelihood of success—as in other fields....”).

<sup>105</sup> *Smith Int’l, Inc. v. Hughes Tool Co.*, 718 F.2d 1573 (Fed. Cir. 1983). Although known for its ruling on preliminary injunctions, the analysis in this case corresponds to permanent injunctions as well.

<sup>106</sup> *Id.*; 35 U.S.C. § 261 (1994) (stating that “patents shall have the attributes of personal property.”). *See also* *Solomons v. United States*, 137 U.S. 342, 346 (“The government has no more power to appropriate a man’s property invested in a patent than it has to take his property invested in real estate....”).

<sup>107</sup> 35 U.S.C. § 283 (1994) (emphasis added).

<sup>108</sup> *Smith International*, 718 F.2d at 1578.

<sup>109</sup> *Id.*

In this leading case, the court stated that “[w]ithout this injunctive power of the courts, the right to exclude granted by the patent would be diminished, and the express purpose of the Constitution and Congress, to promote the progress of the useful arts, would be seriously undermined.”<sup>112</sup> Injunctions add leverage to a patentee’s right to exclude others in the market place.<sup>113</sup> “Without the right to obtain an injunction, the right to exclude granted to the patentee would have only a fraction of the value it was intended to have...”<sup>114</sup> Such would no longer incentivize engaging in the “toils of scientific and technological research.”<sup>115</sup>

Before *Smith International*, “[s]ome courts refuse[d] to find irreparable injury where the alleged infringer is solvent” and money damages could be determined after infringement was found.<sup>116</sup> In order to make injunctions a meaningful remedy, the Federal Circuit added a presumption of irreparable harm in circumstances where infringement and patent validity are clearly shown.<sup>117</sup> This presumption is precisely what is under attack in the proposed patent law reforms.

Beginning in June 2005, the House Judiciary Subcommittee on the Courts, the Internet, and Intellectual Property has been using a committee print as a model for drafting a patent

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<sup>110</sup> *Smith International*, 718 F.2d at 1579.

<sup>111</sup> *Id.*

<sup>112</sup> *Id.* at 1577-78.

<sup>113</sup> *Id.* at 1578.

<sup>114</sup> *Id.*

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

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

<sup>117</sup> *Id.* at 1581.

reform bill.<sup>118</sup> In section seven of the committee print, the presumption of irreparable harm is proscribed in the new proposed subsection to Title 35, 283(b):

(b) GROUNDS FOR GRANTING INJUNCTION.—A court shall not grant an injunction under this section unless it finds that the patentee is likely to suffer irreparable harm that cannot be remedied by the payment of money damages. In making such a finding, *the court shall not presume the existence of irreparable harm*, but shall consider and weigh evidence that establishes or negates an equitable factor relevant to a determination of the existence of irreparable harm, including the extent to which the patentee makes use of the invention.<sup>119</sup>

Removing the presumption of irreparable harm seriously weakens a patentee's ability to obtain a preliminary injunction. Furthermore, the proposed text requires that whether the patentee makes or uses the invention is a relevant factor to be evaluated in granting an injunction. Necessarily, for non-manufacturing patentees, the traditional presumption of irreparable harm upon a clear showing of infringement and patent validity would shift to a presumption of monetary damages. Unfortunately, monetary damages rarely are adequate compensation, especially for non-manufacturing patentees.

Monetary damages are often inadequate to compensate for infringement because the alleged infringer is able to gain market share while the litigation is pending. To better understand why money damages often fail to compensate for infringement, compare the situation to the general concept of dumping. Dumping occurs when the sale of products, usually as exports in international trade, are sold at less than their "normal value," where normal value is

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<sup>118</sup> Committee Print, *supra* note 12; *see also* Gray, *supra* note 6 (critiquing the suggested patent reform proposals).

<sup>119</sup> Committee Print, *supra* note 12; *see also* H.R. 2795, 109th Cong. § 7 (2005) (emphasis added) (laying out Congress' proposed alternative amendment to section 283: "In determining equity, the court shall consider the fairness of the remedy in light of all the facts and the relevant interests of the parties associated with the invention. Unless the injunction is entered pursuant to a nonappealable judgment of infringement, a court shall stay the injunction pending an appeal upon an affirmative showing that the stay would not result in irreparable harm to the owner of the patent and that the balance of hardships from the stay does not favor the owner of the patent.").



defined as the price for which those same products are sold in the home market.<sup>120</sup> This is accomplished when an exporter uses its high-priced home market sales to subsidize low-priced export sales.<sup>121</sup> In other words, when an exporter's home market is protected from competition, the exporter can keep its prices high domestically. From the subsidy created from the high prices at home, the exporter can dump these same goods at a lower price abroad.<sup>122</sup>

Dumping is performed to eliminate competition from the market, often to secure a monopoly, thereby driving local producers out of the market.<sup>123</sup> Dumping is illegal because foreign nationals who engage in this activity do not care if they lose money, as their goal is to gain market share.<sup>124</sup> They offset their losses from dumping by maintaining high prices in their domestic market. Like dumping, others are willing to infringe patents, but are not willing to take a license. Infringers do not care if they lose money through patent litigation costs and expenses. They are willing to buy into the market. However, if there is a threat of an injunction, they will stop infringing. An injunction prevents infringers from being able to just buy into the market. Without the threat of injunctions, there is no incentive for alleged infringers to settle cases or take a license. Limiting the ability to obtain injunctions will create a drop off in inventive activity along with the incentives for patenting. If a patent cannot be enforced, why would it be sought?

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<sup>120</sup> John H. Jackson, *Dumping in International Trade: Its Meaning and Context*, ANTIDUMPING LAW AND PRACTICE, A COMPARATIVE STUDY 2 (John H. Jackson and Edwin A. Vermulst, eds.) (citing General Agreement of Tariffs and Trade, Article VI. Oct. 30, 1947, 61 Stat. (5), (6), TIAS No. 1700, 55 UNTS 194 (1948) as amended and Vol. IV BISD).

<sup>121</sup> *Id.*

<sup>122</sup> *Id.* Home Market Sales Price – Export Sales Price = Margin of Dumping.

<sup>123</sup> *Id.*

<sup>124</sup> *Id.*

Furthermore, those who do not manufacture are not able to acquire lost profits as damages. “[T]o recover lost profits . . . [t]he patent owner must show that ‘but for’ the infringement it would have made the infringer’s sales.”<sup>125</sup> Since non-manufacturers would have no lost profits on sales, a reasonable royalty analysis is used to calculate damages.<sup>126</sup> Companies will be willing to lose short-term money in damages in order to gain market share. They would have had to pay royalties anyhow if they had taken a license. Without injunctions, the patent system will be in the direction of a compulsory licensing system that would undermine the market for intellectual property. Compulsory licensing is undesirable because it devalues the price of licenses. Being compelled to license destroys the patentee’s leverage in refusing to license unless the royalty rate is reasonable. Alleged infringers would be able to obtain licenses below their value. This would negatively affect all patentees, not just those who do not manufacture.

Keep in mind that when an alleged infringer refuses to license in favor of defending against a patent infringement action, this increases costs substantially. A refusal to license, especially when the patentee is not a manufacturer, cuts directly into the patentee's livelihood, thwarting the incentives that the patent system provides. There is no other way for a patentee to be properly compensated when a patent is infringed other than to negotiate for a license or sue for patent infringement. Non-manufacturing inventors and patent marketers are thus less likely to keep their inventions secret than manufacturers who could prosper on trade secrets. The only way to make money if one does not manufacture is to license to someone else who does.

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<sup>125</sup> *Bic Leisure Prods. v. Windsurfing Int'l*, 1 F.3d 1214, 1218 (Fed. Cir. 1993) (citing *Water Techs. Corp. v. Calco Ltd.*, 850 F.2d 660, 671 (Fed. Cir.).)

<sup>126</sup> *State Indus., Inc. v. Mor-Flo Indus., Inc.*, 883 F.2d 1571, 1577 (Fed. Cir. 1989) (holding that in order for patentee to obtain lost profit damages, patentee must show that there is a reasonable probability that but-for the infringement, patentee would have made infringer’s sales).

Companies that manufacture have a different business model. They may or may not seek many patents because they have another way to make money and can trade or cross license with other manufacturers and have access to competitors' technology.<sup>127</sup>

Experts have suggested that because Canada and many countries in Europe do not allow injunctive relief for patents that have not been manufactured nor commercialized, neither should the United States.<sup>128</sup> One should be careful not to look at other countries' patent laws out of context. For example, Canada addresses many of the antitrust or abuse of patent rights issues in its Patent Act text, whereas the U.S. addresses these issues solely by applying antitrust law and principles found in case law.<sup>129</sup>

Injunctions also encourage creativity in invention and incentive for companies to find a way around the technology if it is not willing to take a license. It will have to design or engineer around a specific solution to a problem that has been patented. When royalty rates are too high, manufacturers will be driven to develop newer technologies. This happened in the 1950s when

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<sup>127</sup> SlindFlor, *supra* note 2. "Our head is at being a successful business rather than using the IP department to make money. I'd rather have us see a lot more product-which will contribute a lot more money to the bottom line-than to maximize my assets trying to get people to take a license." *Id.*

<sup>128</sup> FSR, *supra* note 97.

<sup>129</sup> See Canada Federal Statutes Patent Act Conditions R.S.C. 1985, § 65 (2). "The exclusive rights under a patent shall be deemed to have been abused in any of the following circumstances:

- (c) if the demand for the patented article in Canada is not being met to an adequate extent and on reasonable terms;
- (d) if, by reason of the refusal of the patentee to grant a licence or licences on reasonable terms, the trade or industry of Canada or the trade of any person or class of persons trading in Canada, or the establishment of any new trade or industry in Canada, is prejudiced, and it is in the public interest that a licence or licences should be granted;
- (e) if any trade or industry in Canada, or any person or class of persons engaged therein, is unfairly prejudiced by the conditions attached by the patentee, whether before or after the passing of this Act, to the purchase, hire, licence or use of the patented article or to the using or working of the patented process; or
- (f) if it is shown that the existence of the patent, being a patent for an invention relating to a process involving the use of materials not protected by the patent or for an invention relating to a substance produced by such a process, has been utilized by the patentee so as unfairly to prejudice in Canada the manufacture, use or sale of any materials."

*Id.*

the Nixie tube, a vacuum tube, was developed for displaying numerals or other information.<sup>130</sup>

Licensing the Nixie tube was too expensive so competitors designed around it and by the 1970s developed light-emitting diodes (LEDs).<sup>131</sup> LEDs utilized lower voltages that were conducive to integrated circuit use, which was essential to miniaturizing electronic devices.<sup>132</sup>

Most importantly, the long-term public interest is with inventors and innovators, not manufacturers. Since the U.S. economy is becoming more and more intellectual property based, this is the wrong time to undermine the tools that protect such resources. Although many manufacturers are headquartered here, a lot of the actual manufacturing is preformed overseas. The strongest patent protection still exists in the United States. It is unknown what unintended consequences may occur when eliminating the availability of injunctions to non-manufacturing patent holders.<sup>133</sup>

## V. Other Options to Improve Patent Quality

In the early 1990s, Congress changed the structure of fees and financing of the U.S. Patent and Trademark Office (PTO) itself, trying to turn it into a kind of service agency whose

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<sup>130</sup> Nixie was a trademark owned by Burroughs Corporation. The term Nixie was derived from "NIX I," and abbreviation for "Numeric Indicator eXperimental No. 1." Wikipedia, *Nixie*, at <http://en.wikipedia.org/wiki/Nixie> (last visited Apr. 16, 2006).

<sup>131</sup> *Id.*

<sup>132</sup> *Id.*

<sup>133</sup> *The Patent Law Act of 2005 – Part 2, Testimony Before House Comm. on the Judiciary Subcomm. on the Courts, the Internet, and Intellectual Property*, 109th Cong. 5 (2005), available at 2005 WLNR 9238139, statement by Gary Griswold, past president American Intellectual Property Law Association [hereinafter Griswold] (stating “[amending the injunction provision of 35 U.S.C. § 283] would reduce, to some unknown degree, the possibility of patentees obtaining permanent injunctions to prevent the continued infringement of their patents following a final, unappealable judgment that their patents are valid and have been infringed.”). See Judge Newman, *supra* note 14 (stating:

The nation has a powerful interest in technologic advance, and in industrial growth. The patent system has several roles in such advance, all of which are affected by changes in the law. Any change that either weakens or strengthens the role of patents in industrial innovation can affect technology and its commercialization. So as you consider what can be improved . . . let's not lose sight of the purposes of our patent system and, more important, the larger public interest.)

costs of operation were covered by fees paid by its clients (the patent applicants).<sup>134</sup> No longer funded by tax revenues, the PTO became a “profit center” for the government, “collecting more fees than it costs to run the agency.”<sup>135</sup> This might not have been such a bad move had the fees collected actually stayed in the PTO to help hire, train, and develop patent examiners. “Patent Office revenues have soared with the rising tide of applications, but year after year Congress has allocated to the patent office for its operations hundreds of millions of dollars less than the fees collected.”<sup>136</sup> Instead, the fees collected have been diverted from the PTO to pay for whatever Congress deems more important year to year.<sup>137</sup> Such fee diversion has made it difficult for the PTO to “attract and keep highly skilled individuals to do their important work.”<sup>138</sup> The quality of patent examination has suffered as a result.<sup>139</sup>

“Changing the way [the PTO] is organized and funded alters its incentives; with different incentives, it produces different decisions, causing patent practice to change without any Congressional action to change the law.”<sup>140</sup> The PTO is chronically strained for resources and it has labored to find qualified examiners, especially in new technological areas where patents are sought, such as software, business methods, and biotechnology where the PTO did not

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<sup>134</sup> JAFFE, *supra* note 39, at 2. *The Patent Law Act of 2005, Testimony Before Comm. on House Judiciary Subcomm. on the Courts, the Internet, and Intellectual Property*, 109th Cong. 3 (2005), available at 2005 WLNR 9237401 (statement of Josh Lerner, professor of investment banking, Harvard Business School) [hereinafter Lerner].

<sup>135</sup> JAFFE, *supra* note 39, at 11.

<sup>136</sup> *Id.* at 20.

<sup>137</sup> *Figueroa v. U.S.*, 66 Fed. Cl. 139 (2005); *Comm. on House Judiciary Subcomm. on Courts, the Internet, and Intellectual Property*, 109 Cong. (2005), available at 2005 WL 2214729 (statement of Rep. Lamar Smith, Chair, Comm. on House Judiciary).

<sup>138</sup> JAFFE, *supra* note 39, at 20.

<sup>139</sup> *Id.* at 2 (referring to examples of patented inventions that are trivially obvious).

<sup>140</sup> *Id.* at 5.

previously have expertise.<sup>141</sup> If these problems with the PTO could be fixed, then the attacks on remedies like injunctions or excessive damage awards would diminish.<sup>142</sup> The problems with patent quality are the impetus for such criticism.<sup>143</sup>

There is also criticism that the prior art is not being adequately examined to ensure that inventions being patented are new and nonobvious from what has come before.<sup>144</sup> Many believe that competitors are the most knowledgeable about prior art to determine whether an invention is patentable.<sup>145</sup> This may be especially significant for technologies recently becoming patent eligible, like software and business method patents.<sup>146</sup> Often, the most relevant prior art is found in non-patent literature and in electronic formats.<sup>147</sup> There should be more databases or repositories available to better capture this art.

In 1979, the Carter Administration initiated a government study of the patent system.<sup>148</sup> This was instigated because there was incredible stagnation in industrial innovation and entrepreneurship. Patents were being invalidated through litigation. Major steps were needed to restructure the U.S. patent system such that innovation would thrive. Changes were made, and today the U.S. economy is heavily technology-based. Without such improvements, the decline

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<sup>141</sup> JAFFE, *supra* note 39, at 12.

<sup>142</sup> See FSR, *supra* note 97.

<sup>143</sup> *Id.*

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

<sup>145</sup> Lerner, *supra* note 134 (stating: “Our proposed reforms start with the recognition that much of the information needed to decide if a given application should be approved is in the hands of competitors of the applicant, rather than the PTO.”).

<sup>146</sup> Katherine E. White, *An Efficient Way to Improve Patent Quality for Plant Varieties*, 3 NW. J. TECH. & INTELL. PROP. 79, 81-82 (2004).

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

<sup>148</sup> 125 Cong. Record 11911 (Daily Ed., Feb. 27, 1979, 20 House Report No. 96-1307, 96th Cong., 2d Sess. (1980), p. 18.).

probably would have continued. Before undoing the work that has been done, careful thought must go into the process. Encouraging innovation is the key, not manufacturing.

## **V. Conclusion**

In order for the United States to transform to meet the needs of the global economy, this country must continue to be a leader in innovation. To remain a dominant economic and powerful force, the United States must continue to encourage and further incentivize inventive people to innovate. This country must refrain from calls from Big Business and manufacturers to amend the patent laws in a way that will quell innovation in the name of promoting manufacturing. Although there may be public policy reasons for propping up the manufacturing sector, such action should not be undertaken through transforming the patent system. As manufacturing is moving off shore, it is not an appropriate time for such action. Patent laws historically have been, and should continue to be, used to promote innovation and the progress of science. Most importantly, the long-term public interest is with inventors and innovators, not manufacturers.