

NOTE

Keeping Non-Practicing Entities out of the Courtroom: Amending the Innovation Act to More Effectively Address the Abuse of the Patent Infringement Claim

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ABSTRACT

There has been a growing abuse of patent infringement litigation by non-practicing entities (“NPEs”), or “patent trolls.” NPEs normally purchase patents in bulk from distressed or bankrupted technology companies and force other businesses and individuals who are allegedly infringing on those patents into high-priced licensing agreements, settlements, or litigation. To address this problem (and other problems in the U.S. patent system) the 114th Congress previously considered patent reform legislation, namely, the Innovation Act (H.R. 9), which was specifically aimed at thwarting NPEs. This Note argues that this legislation was not a sufficient reform, however, because it would not effectively prevent NPEs from suing and would negatively impact legitimate plaintiffs. Instead, Congress must take a more drastic stance against NPEs in the 115th Congress and reintroduce an amended version of the Innovation Act that rids the patent law system of this growing problem.

INTRODUCTION

Roberta Hurley is a small business owner in Old Lyme, Connecticut.¹ She owns Southeastern Employment Services, which is a company that

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¹ Monica Buchanan, *Patent Trolls Target Local Business*, NBC CONN. (May 17, 2013, 12:47 AM), <http://www.nbcconnecticut.com/troubleshooters/Patent-Trolls-Target-Local-Business-207799121.html>.

helps individuals with disabilities find jobs.² In 2013 she received a letter from FolNer LLC, which threatened to sue her company for using the scan-to-email function on her copy machine unless she licensed that function for \$75,000.³ What Roberta did not know at the time was that FolNer is a “non-practicing entity” (“NPE”)—an entity which is otherwise commonly (and pejoratively) known outside of the patent law field as a “patent troll.”⁴ FolNer apparently owned the software patents that covered this function and threatened many other small companies that knew little to nothing at all about patent law.⁵ Roberta herself explained that, for small business owners, “[t]he letters are very threatening. If you don’t know what’s happening, they’re pretty scary.”⁶

Roberta and the other small businesses threatened by FolNer are not alone. There are many NPEs similar to FolNer that target small businesses, as well as larger, more well-known NPEs that target major corporations such as Apple and Amazon.⁷ In fact, stories such as Roberta’s have become the norm in patent litigation. For example, RPX Corporation researchers determined that in 2012, NPEs brought sixty-two percent of all patent litigation in United States district courts (about 3,000 lawsuits).⁸ Moreover, because these numbers reflect only the cases that actually made it all the way to litigation, it is easy to imagine the large number of disputes that were settled through licensing agreements or other forms of payment, just

² *Id.*

³ *See id.*; *see also* *Patents: Last Week Tonight with John Oliver (HBO)*, YOUTUBE (Apr. 19, 2015), https://www.youtube.com/watch?v=3bxcc3SM_KA.

⁴ *See* Daniel A. Tagliente, Comment, *Shooting Blanks: The Ineffectiveness of the Executive Branch’s Entrance into the Great Patent Troll Hunt*, 45 SETON HALL L. REV. 311, 313 (2015); Buchanan, *supra* note 1.

⁵ *See* BakerHostetler, *Patent Troll Receives Push Back*, BAKERHOSTETTLER: IP INTELLIGENCE (June 7, 2013), <https://www.ipintelligencereport.com/2013/06/07/patent-troll-receives-push-back/>; Buchanan, *supra* note 1.

⁶ Buchanan, *supra* note 1.

⁷ *See* Xun (Michael) Liu, Note, *Joinder Under the AIA: Shifting Non-Practicing Entity Patent Assertions Away from Small Businesses*, 19 MICH. TELECOMM. & TECH. L. REV. 489, 490, 494 (2013); *see also* Editorial Staff, *Don’t Be a Victim: Protecting Your Small Business from Patent Trolls*, BUSINESS.COM, <http://www.business.com/patent-and-intellectual-property/protecting-your-small-business-from-patent-trolls/> (last updated Feb. 22, 2017) (explaining that in 2005, Amazon grudgingly decided to settle a dispute with an NPE for \$40 million); *RPX Data Update: Patent Litigation Volatility Persists as Strategies Shift*, RPX CORP.: RPX BLOG (Jan. 3, 2017), <http://www.rpxcorp.com/2017/01/03/rpx-data-update-patent-litigation-volatility-persists-as-strategies-shift/> (discussing amount of NPE activity in different years).

⁸ Colleen Chien, *Patent Trolls by the Numbers*, PATENTLY-O (Mar. 14, 2013), <http://patentlyo.com/patent/2013/03/chien-patent-trolls.html>; *see also* John A. Amster, *The Patent Troll Toll*, INTELL. PROP. MAG., June 2013, at 33.

as many NPEs like FolNer hope for.⁹ Not surprisingly, since 2010 these numbers have risen, most likely due to the monetary success NPEs have seen in the last few years.¹⁰ Accordingly, to prevent the growing practice of this legal form of extortion, something must be done to completely rid NPEs of the ability to sue for patent infringement. Otherwise, NPEs will continue to stifle the overarching goals and guiding principles of the patent system by taking advantage of hard-working individuals like Roberta Hurley, as well as American businesses in general.

This Note argues that the 115th Congress should reintroduce an amended version of the Innovation Act¹¹ in which section 3(a)(1) is replaced with a new pleading requirement. In conjunction with this pleading requirement, this Note explains that Congress must also include definitions for “Practicing Entity” and “Class Number” under section 2 (“Definitions”) of the Innovation Act (i.e., to be included as sections 2(3)–(4)).

This Note proceeds in two parts. Part I provides an overview of the patent law system and one of its most pressing issues: the NPE. Specifically, this Part introduces the “guiding principle” of the United States patent law system, explains the origins of the NPE and how the typical modern-day NPE operates, and discusses the shortcomings of current efforts to combat NPEs. Part II proposes a congressional amendment, explains how that amendment would effectively prevent NPEs from suing for patent infringement, discusses how the amendment would not negatively affect practicing entities or original inventors, and addresses additional consequences and counterarguments regarding the proposed solution. This Note concludes by reiterating the need for patent legislation that prevents NPEs from bringing patent infringement suits, the shortcomings of the previous Innovation Act’s heightened pleading requirements, and the potential benefits of the proposed solution.

⁹ See Amster, *supra* note 8, at 33 (“Defendants in NPE cases almost always settle.”); Liu, *supra* note 7, at 494–97 (explaining that small businesses often settle with NPEs because of the prohibitive costs of litigation).

¹⁰ See RPX CORP., 2015 NPE ACTIVITY HIGHLIGHTS 4 (2016), <https://www.rpxcorp.com/wp-content/uploads/sites/2/2016/01/RPX-2015-NPE-Activity-Highlights-FinalZ.pdf> (noting the rise in patent infringement cases from 2010 to 2015); RPX CORP., *Patent Risk Digest* (Sept. 2015), <https://www.rpxcorp.com/patent-risk-digest/september-2015/> (explaining that 2015 saw an even greater rate of patent troll litigation than 2012).

¹¹ Innovation Act, H.R. 9, 114th Cong. (2015).

I. BACKGROUND: THE NPE PROBLEM

A. *The Patent System and Its “Guiding Principle”*

The Constitution forms the basis of the modern-day U.S. patent law system.¹² Patents are the tool through which Congress decided to “promote the Progress of Science and useful Arts.”¹³ Once an individual is granted a patent, he has “the right to exclude others from making, using, offering for sale, or selling the invention throughout the United States.”¹⁴ “[I]f the invention is a process,” the patent holder has “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.”¹⁵ Moreover, a patent holder can enforce this right against a non-patent holder “infringer,” regardless of that infringer’s knowledge or intent to infringe on a patent.¹⁶

Although these extensive patent rights may appear overly powerful, when used properly, they serve to benefit society. That benefit to society is the “guiding principle” of the patent system. By granting exclusive patent rights for limited periods of time, the patent system “induces . . . inventor[s] ‘to invent, to disclose, and to invest with the goal of bringing the claimed invention to market.’”¹⁷ In other words, the extensive rights that are granted to patent holders, along with the potential financial rewards patent holders could foster through investments and commercialization, induce inventors to innovate and create new inventions. Together, innovation, disclosure of inventions, investment, and commercialization all serve to “maximize the welfare of society as a whole.”¹⁸

¹² See U.S. CONST. art. I, § 8, cl. 8 (giving Congress the 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”).

¹³ *Id.*

¹⁴ 35 U.S.C. § 154(a)(1) (2012). This includes the right to prevent the importation of the invention into the United States. *See id.*

¹⁵ *Id.*

¹⁶ See 35 U.S.C. § 271 (2012); *see also* Blair v. Westinghouse Elec. Corp., 291 F. Supp. 664, 670 (D.D.C. 1968) (“[I]nfringement may be entirely inadvertent and unintentional and without knowledge of the patent.”), *aff’d sub nom.* Blair v. Dowd’s Inc., 438 F.2d 136 (D.C. Cir. 1970); Sharon Brawner McCullen, Comment, *The Federal Circuit and Ninth Circuit Face-off: Does a Patent Holder Violate the Sherman Act by Unilaterally Excluding Others from a Patented Invention in More than One Relevant Market?*, 74 TEMP. L. REV. 469, 475 (2001).

¹⁷ Daniel J. McFeely, Comment, *An Argument for Restricting the Patent Rights of Those Who Misuse the U.S. Patent System to Earn Money Through Litigation*, 40 ARIZ. ST. L.J. 289, 300 (2008) (quoting CRAIG ALLEN NARD ET AL., THE LAW OF INTELLECTUAL PROPERTY 651 (2006)).

¹⁸ *Id.* (quoting CRAIG ALLEN NARD ET AL., THE LAW OF INTELLECTUAL PROPERTY 329

Thomas Jefferson, whom many believe is the “founding father” of the U.S. patent system, acknowledged this guiding principle in his support for the creation of the patent system when he said that the “exclusive right to invention [is] given not of natural right, but for the benefit of society.”¹⁹ Additionally, since the enactment of the Patent Act of 1790²⁰—the original legislation that first created the U.S. patent system—the U.S. Supreme Court has supported the guiding principle of the patent system while contributing important interpretations of it.²¹ For example, in *Diamond v. Chakrabarty*,²² the Supreme Court emphasized that Congress created exclusive patent rights to incentivize inventors whose innovative efforts will positively affect society and create better lives for U.S. citizens.²³ In *Bonito Boats, Inc. v. Thunder Craft Boats, Inc.*,²⁴ the Supreme Court also stressed the importance of invention disclosure and the benefit it brings to society when it said that the patent system “embodies a carefully crafted bargain” in which patents are granted in consideration for the “disclosure of new, useful, and nonobvious advances in technology . . . ‘and the consequent benefit to the community.’”²⁵ Most recently, in *J.E.M. Ag Supply, Inc. v. Pioneer Hi-Bred International, Inc.*,²⁶ the Supreme Court reemphasized its interpretation of the patent system’s guiding principle, quoting *Diamond* for the proposition that “[t]he subject-matter provisions of the patent law have been cast in broad terms to fulfill the constitutional and statutory goal of promoting ‘the Progress of Science and the useful Arts’ with all that means for the social and economic benefits envisioned by Jefferson.”²⁷

(2006)).

¹⁹ Letter from Thomas Jefferson to Isaac McPherson (Aug. 13, 1813), THE FOUNDER’S CONST., http://press-pubs.uchicago.edu/founders/documents/a1_8_s12.html (last visited Aug. 1, 2017) (“Society may give an exclusive right to the profits arising from [inventions], as an encouragement to men to pursue ideas which may produce utility, but this may or may not be done, *according to the will and convenience of the society.*” (emphasis added)).

²⁰ Patent Act of 1790, ch. 7, 1 Stat. 109.

²¹ *Id.* See generally Eric Golas Salbert, *Duck, Duck, Bilski: Searching for a Law-Progress Equipose*, 3 J. BUS., ENTREPRENEURSHIP & L. 339, 345 (2010); Press Release, U.S. Pat. & Trademark Off., The U.S. Patent System Celebrates 212 Years (Apr. 9, 2002), <https://www.uspto.gov/about-us/news-updates/us-patent-system-celebrates-212-years>.

²² 447 U.S. 303 (1980).

²³ *Id.* at 307 (explaining that inventors positively affect society “through the introduction of new products and processes of manufacture into the economy” (quoting *Kewanee Oil Co. v. Bicron Corp.*, 416 U.S. 470, 480 (1974))).

²⁴ 489 U.S. 141 (1989).

²⁵ *Id.* at 150–51 (quoting *United States v. Dubilier Condenser Corp.*, 289 U.S. 178, 186 (1933)).

²⁶ 534 U.S. 124 (2001).

²⁷ *Id.* at 131 (quoting *Diamond*, 447 U.S. at 315).

Together, these opinions solidify the idea that along with the disclosure of their inventions, “[p]atent holders . . . should be expected to pursue some form of commercialization, or introduction into the market by some other means, so that the innovation and its fruits may be enjoyed by society.”²⁸ In other words, patent rights should only be granted to those who benefit society, not to those who merely use patent rights to benefit themselves.

B. *The Non-Practicing Entity*

1. *The Origins of a Problematic Practice*

As a threshold matter, it is important to note that the basic idea of an NPE is that it is an entity, normally a corporation,²⁹ that acquires patents and later asserts those patents against alleged infringers through litigation (many times threatened litigation) without ever practicing or utilizing, or intending to practice or utilize, the patented invention in question.³⁰ Although NPEs seem to have just recently become a major issue within the patent law world, they have actually been around since the late 1700’s (though on a much smaller scale).³¹ For example, Eli Whitney created and patented the cotton gin in 1794, and later ran a business manufacturing and selling cotton gins for about three years.³² Whitney did not enjoy much commercial success from this patent, however, in part because the invention was easy to replicate.³³ Thus, Whitney’s business eventually went bankrupt and he was “reduced to suing plantation owners in the South” for patent infringement.³⁴ Whitney was therefore acting as an NPE (arguably the first NPE of the U.S. patent system).³⁵

That being said, Whitney at least started out with the intention of running a business and commercializing his patented invention,³⁶ so writers and legal scholars tend to label George Selden as the first true NPE.³⁷

²⁸ McFeely, *supra* note 17, at 303.

²⁹ See Chien, *supra* note 8 (explaining that ninety-four percent of lawsuits brought by NPEs in 2012 were brought by corporate NPEs).

³⁰ See McFeely, *supra* note 17, at 289.

³¹ Robert H. Resis, *History of the Patent Troll and Lessons Learned*, INTELL. PROP. LITIG. (Am. Bar Ass’n), Winter 2006, at 1.

³² See *id.*

³³ *Id.*

³⁴ *Id.*

³⁵ *Id.* (“Whitney can be fairly identified as perhaps the first [NPE] in our nation’s history.”).

³⁶ See *id.*

³⁷ See, e.g., *id.* at 2; Richard Snow, *The Father of All Patent Trolls*, FORBES (July 30, 2013, 11:13 AM), <http://www.forbes.com/sites/forbesleadershipforum/2013/07/30/the->

George Selden was a New York patent attorney who, in 1879, drafted and filed a patent application for a wagon powered by an engine despite the fact that no one in the United States had been able to get the engine-powered wagon to work, including Selden.³⁸ Selden was granted this broad patent (which essentially covered “the *idea* of an automobile”) in 1895.³⁹ By 1899, Selden began threatening to sue automakers in the United States, many of whom had automobile patents of their own.⁴⁰ Ultimately, many automakers caved to Selden’s threats, even though he had never actually built or practiced his patented invention.⁴¹

Then, Selden, along with several other automakers that were licensees of his patent, founded an organization named the Association of Licensed Automobile Makers (“ALAM”).⁴² This organization’s primary purpose, like the NPEs of today, was to seek out and sue every individual or business in the United States that it believed was infringing on Selden’s patent with the hopes of forcing high licensing fees onto them.⁴³ By the time Henry Ford faced ALAM in court in 1909 and was finally able to show that Ford and other major automakers were not infringing on the outdated engine covered by Selden’s patent, ALAM had already amassed around \$70 million from its litigation and licensing practices—which, after accounting for inflation, is about \$1.805 billion in 2017.⁴⁴ It is therefore easy to see how Selden’s and ALAM’s monetary success, even if it was temporary, may have set the stage for modern-day NPEs and convinced others to follow in their footsteps.

2. The Modern-Day “Patent Trolls”

Modern-day NPEs, such as Intellectual Ventures,⁴⁵ have become much

father-of-all-patent-trolls/ (discussing Selden’s NPE activity).

³⁸ See Snow, *supra* note 37.

³⁹ *Id.* Selden’s patent was for “the production of a safe, simple and cheap road locomotive light in weight, easy to control, and possessed of sufficient power to overcome any ordinary inclination.” *Id.*

⁴⁰ See Resis, *supra* note 31, at 2; Snow, *supra* note 37.

⁴¹ See Melvin D. Barger, *How Henry Ford Zapped a Licensing Monopoly*, FOUND. FOR ECON. EDUC. (Dec. 1, 2001), <http://fee.org/freeman/how-henry-ford-zapped-a-licensing-monopoly/>.

⁴² *Id.*; see Resis, *supra* note 31, at 2, 5.

⁴³ See Barger, *supra* note 41; Snow, *supra* note 37. This essentially allowed ALAM to decide “who should be allowed to build and sell cars.” Barger, *supra* note 41.

⁴⁴ See Snow, *supra* note 37; Inflation Calculator, [WWW.IN2013DOLLARS.COM](http://www.in2013dollars.com/1909-dollars-in-2017?amount=70000000), <http://www.in2013dollars.com/1909-dollars-in-2017?amount=70000000> [<https://perma.cc/Y3UL-GEF6>] (last visited Aug. 1, 2017).

⁴⁵ Intellectual Ventures is “one of the Top-Five owners of US Patents,” holding at least 30,000 patents (most, if not all, of which were acquired from other companies), and considered by many to be one of the largest and most aggressive NPEs in the United States.

more sophisticated since George Selden first began the practice.⁴⁶ As explained earlier, these NPEs have become pejoratively known as “patent trolls.”⁴⁷ NPEs are given this label primarily due to their negative reputation as entities whose purpose is to make money off patents they are not practicing and never intend to practice.⁴⁸ As simple as that reputation may make their practice appear, however, modern-day NPEs are “typically complex and experienced legal entities that knowingly exploit weaknesses in the legal system.”⁴⁹

For example, due to the high cost of patent litigation, many companies view going to court against an NPE as a worst-case scenario.⁵⁰ Thus, NPEs “typically derive most of their revenue from settlements and licensing agreements rather than damages awarded via lawsuit.”⁵¹ Most importantly, the majority of the lawsuits brought by NPEs are against small companies and startups.⁵² NPEs purposefully do this because smaller companies “do not have the capacity and legal experience” to effectively protect themselves against this aggressive litigation strategy, making it easier for NPEs to force high licensing fees upon them.⁵³ Studies suggest that this

Dennis Crouch, *Intellectual Ventures: Revealing Investors*, PATENTLY-O (May 18, 2011), <http://patentlyo.com/patent/2011/05/intellectual-ventures-revealing-investors.html>; see also Jim Kerstetter & Josh Lowensohn, *Inside Intellectual Ventures, the Most Hated Company in Tech*, CNET (Aug. 21, 2012, 6:57 AM), <http://www.cnet.com/news/inside-intellectual-ventures-the-most-hated-company-in-tech/>.

⁴⁶ See Neal S. Vickery, Note, *Don't Forget About the Little Guys: Trolls, Startups, and Fee Shifting*, 13 COLO. TECH. L.J. 171, 175 (2015) (explaining that “[NPEs] are typically complex and experienced legal entities” and that despite their typically poor litigation record, “the business model itself [of NPEs] is ‘not only surviving, but thriving’” (quoting Mark A. Lemley & A. Douglas Melamed, *Missing the Forest for the Trolls*, 113 COLUM. L. REV. 2117, 2124 (2013))).

⁴⁷ See *supra* note 4 and accompanying text.

⁴⁸ See McFeely, *supra* note 17, at 294. In fact, the term “patent troll” was coined in 1999 by Peter Detkin, who at that time was an assistant general counsel for Intel, Corp. “in response to a patent infringement lawsuit initiated against Intel, Corp. by TechSearch,” a small NPE that purchased “underused or underexploited patents” from failing companies. *Id.* (quoting Michael Kanellos, *Intel Hit by \$500 Million Lawsuit*, CNET (Aug. 3, 1998, 7:05 PM), <https://www.cnet.com/news/intel-hit-by-500-million-lawsuit/>).

⁴⁹ Vickery, *supra* note 46, at 175.

⁵⁰ *Id.*

⁵¹ *Id.*

⁵² See *id.* at 174 (“[A]t least 55 percent of unique defendants in [NPE] initiated lawsuits reported income of less than \$10 million in annual revenue, and between 66–82 percent reported less than \$100 million.” (citing Colleen Chien, *Startups and Patent Trolls*, 17 STAN. TECH. L. REV. 461, 471 (2014))); see also Chien, *supra* note 8 (explaining that patent troll suits against “low-tech” companies such as financial service providers and retail stores have gradually increased since 2005, and that in 2012, patent trolls “sued more non-tech companies than tech companies”).

⁵³ Nicolas Janssens de Bisthoven, *Patent Trolls and Abusive Patent Litigation in*

practice cost companies almost \$11 billion in 2012 and that those costs continue to increase each year.⁵⁴

It is important to point out, however, that although the business methods and litigation tactics of NPEs appear improper and somewhat immoral, they are all in fact legal and in line with U.S. Patent and Trademark Office procedures.⁵⁵ Yet, it seems quite clear that NPEs are in no way following the guiding principle that Thomas Jefferson and the Supreme Court established for the U.S. patent system: benefitting society through the promotion of innovation.⁵⁶ The conclusion that NPEs benefit only themselves and not society can be deduced by looking at the financial impact and burden they impose on the entities that they sue. NPEs are “stifl[ing] innovation and job growth by harassing . . . companies” with litigation—particularly the small companies that they tend to target—and many individuals, such as President Barack Obama and members of Congress, have taken notice.⁵⁷

C. *Fighting Back via Legislation*

1. *A Recognized Need for Reform*

The first piece of legislation that specifically targeted NPEs was the Patent Reform Act of 2005.⁵⁸ This Act, the concept of which was not implemented in law until the passage of the Leahy-Smith America Invents Act (“AIA”)⁵⁹ in 2011, essentially made it “more difficult [for NPEs] to

Europe: What the Unitary Patent Package Can Learn from the American Experience? 17 (Stanford – Vienna Transatlantic Tech. Law Forum, Working Paper No. 19, 2013), https://www-cdn.law.stanford.edu/wp-content/uploads/2015/07/janssens_wp19.pdf (“[NPEs] speculate on the potential value of patents, attempt to acquire them cheaply from individual inventors, then bankrupt companies or small businesses [NPEs] don’t practice their patents, they ‘assert’ them.”).

⁵⁴ See Amster, *supra* note 8, at 33.

⁵⁵ See Janssens de Bisthoven, *supra* note 53, at 22 (“Although ethically questionable, the activities of patent trolls are thus not unlawful.”). More specifically, an entity may legally purchase a patent although it is not the inventor of the invention in question and assert it against alleged infringers even when the purchasing entity does not intend to exploit that patented invention. *Id.*

⁵⁶ See *supra* Section I.A.

⁵⁷ Vickery, *supra* note 46, at 174; see Edward Wyatt, *Obama Orders Regulators to Root Out ‘Patent Trolls,’* N.Y. TIMES: BUS. DAY (June 4, 2013), <http://www.nytimes.com/2013/06/05/business/president-moves-to-curb-patent-suits.html>.

⁵⁸ Patent Reform Act of 2005, H.R. 2795, 109th Cong. (2005); see Tagliente, *supra* note 4, at 318 (identifying the Patent Reform Act as the first piece of legislation to target NPEs).

⁵⁹ Leahy-Smith America Invents Act, Pub. L. No. 112-29, 125 Stat. 284 (codified as amended in scattered sections of 35 U.S.C.).

obtain injunctive relief in patent litigation.”⁶⁰ However, recognizing that this would not be enough to deter NPEs from suing, President Obama and the executive branch announced a “plan to solve the [NPE] problem through five Executive Actions and seven legislative suggestions” in June of 2013 (three months after the AIA had come into effect).⁶¹ Because Congress has typically held the role of creating and proposing legislation related to the patent system, this executive branch decision to “enter and police the patent realm” evidenced the urgent need to resolve the NPE issue, which still exists today.⁶²

The June 2013 Executive Actions and legislative recommendations touched on various aspects and issues of the patent system, and many of their ideas were eventually included in several congressional bills, such as the Patent Litigation and Innovation Act,⁶³ the Innovation Protection Act,⁶⁴ and the Stopping the Offensive Use of Patents Act.⁶⁵ Despite containing many useful ideas, the June 2013 Executive Actions and legislative recommendations “fail[ed] to adequately address the most critical way in which [NPEs] exploit the patent system: abusive patent litigation.”⁶⁶ Thus, the Innovation Act was crafted to address that shortcoming.⁶⁷

2. *The Innovation Act (H.R. 9)*

On February 5, 2015, Representative Bob Goodlatte (R-VA)

⁶⁰ Tagliente, *supra* note 4, at 318.

⁶¹ See *id.* at 320–25; Press Release, The White House, Office of the Press Sec’y, FACT SHEET: White House Task Force on High-Tech Patent Issues (June 4, 2013), <https://www.whitehouse.gov/the-press-office/2013/06/04/fact-sheet-white-house-task-force-high-tech-patent-issues> (explaining that the five executive actions and seven legislative recommendations were “designed to protect innovators from frivolous litigation and ensure the highest-quality patents in our system”).

⁶² Tagliente, *supra* note 4, at 325.

⁶³ Patent Litigation and Innovation Act of 2013, H.R. 2639, 113th Cong. (2013).

⁶⁴ Innovation Protection Act, H.R. 1832, 114th Cong. (2015).

⁶⁵ Stopping the Offensive Use of Patents (STOP) Act, H.R. 2766, 113th Cong. (2013); Tagliente, *supra* note 4, at 325 n.109, 326, 336–38. Congress has not passed any of these Acts. For the current statuses of H.R. 2639, H.R. 1832, and H.R. 2766, see CONGRESS.GOV, <https://www.congress.gov> (last visited Sept. 22, 2017).

⁶⁶ Tagliente, *supra* note 4, at 325 & n.109 (noting that the seven legislative recommendations and five Executive Actions address “many different areas of the patent system,” such as “the basis on which patents should be granted [and] the identification of patent holders during the course of litigation,” but do not “directly address[] limiting the number of abusive lawsuits filed or how to make it more difficult for a party to initiate an abusive patent infringement action”).

⁶⁷ See Michael A. Silliman, *Proposed Patent Reform in 2015: The Patent Act & the Innovation Act*, BAKER BOTTS (July 2015), <http://www.bakerbotts.com/ideas/publications/2015/07/ip-report>.

introduced the Innovation Act (H.R. 9).⁶⁸ The bill, which had twenty-seven cosponsors by the end of the 114th Congress, was officially titled “to amend title 35, United States Code, and the Leahy-Smith America Invents Act to make improvements and technical corrections, and for other purposes.”⁶⁹ The bill’s overarching objective was to “target[] the abusive patent litigation which has been central to the debate on [NPEs].”⁷⁰ Among other things, the bill would have “heighten[ed] the pleading requirement for patent cases; [made] it easier for the prevailing party in a patent litigation to receive its fees; [and] limit[ed] the scope of discovery.”⁷¹

Supporters of the Innovation Act argued that it would fix many issues currently plaguing the patent system and patent litigation, specifically those issues pertaining to NPEs.⁷² However, the bill also had its fair share of

⁶⁸ Innovation Act, H.R. 9, 114th Cong. (2015). Specifically, this was a reintroduction of the 2013 version of the Innovation Act. Representative Bob Goodlatte originally introduced the bill to the House of Representatives of the 113th Congress as H.R. 3309, and the House passed it on December 5, 2013. *See* Innovation Act, H.R. 3309, 113th Cong. (2013); *H.R. 3309 – Innovation Act*, CONGRESS.GOV, <https://www.congress.gov/bill/113th-congress/house-bill/3309/actions?q=%7B%22search%22%3A%5B%22hr3309%22%5D%7D&r=2> [<https://perma.cc/CHB4-QDXE>] (last visited Aug. 3, 2017) (information accessed under “Actions” tab showing that the bill was “Passed/agreed to in [the] House” on December 5, 2013). However, the bill was never passed by the Senate. *See* Silliman, *supra* note 67.

⁶⁹ H.R. 9. Despite the bill’s bipartisan support, it eventually stalled in the House. *See* *H.R. 9 – Innovation Act*, CONGRESS.GOV, <https://www.congress.gov/bill/114th-congress/house-bill/9/all-actions?q=%7B%22search%22%3A%5B%22hr9%22%5D%7D&r=2> [<https://perma.cc/65ZH-887P>] (last visited Aug. 3, 2017) (information under “Actions” tab).

⁷⁰ Steve Brachmann, *House Judiciary Approves Innovation Act Despite Clear Lack of Consensus*, IPWATCHDOG (June 14, 2015), <http://www.ipwatchdog.com/2015/06/14/house-judiciary-approves-innovation-act/id=58728/>; *see also* Ryan Davis, *Patent Troll Bill Advances with House Panel’s Endorsement*, LAW360 (June 11, 2015, 7:28 PM), <http://www.law360.com/articles/665466> (explaining that Representative Goodlatte said that the patent system “was never intended to be a playground for litigation extortion and frivolous claims” and that “the bill will end such suits while protecting legitimate patent rights” (first quote quoting Representative Goodlatte’s opening statement at the June 11, 2015 markup of the Innovation Act, available at *Markup of: H.R. 9, the Innovation Act*, HOUSE OF REPRESENTATIVES JUDICIARY COMM. (June 11, 2015), <https://judiciary.house.gov/markup/markup-of-h-r-9-the-innovation-act/> [<https://perma.cc/9YE5-G28F>])).

⁷¹ Michael Rosen, *A Closer Look at Patent Troll Legislation (pt. 1): Pleading Requirements*, TECH POLICY DAILY (Nov. 18, 2013, 6:00 AM), <http://www.aei.org/publication/closer-look-patent-troll-legislation-pt-1-pleading-requirements/>.

⁷² *See, e.g.,* Samantha Hurst, *Re-Introduced Innovation Act May Stop Patent Trolls from Targeting Crowdfunding Startups*, CROWDFUND INSIDER (Feb. 11, 2015, 3:59 PM), <http://www.crowdfundinsider.com/2015/02/62587-re-introduced-innovation-act-may-stop-patent-trolls-from-targeting-crowdfunding-startups/> (explaining that the Innovation Act “gives startups a chance to fight against” NPEs in patent infringement cases because it would “require more transparency, shift costs of discover [sic] and shift legal fees when plaintiffs bring particularly baseless suits”). Representative Darrell Issa (R-CA) has also stated that the venue provision of the Innovation Act would “stop the unreasonable venue

opponents who believed that it was too broad because “[e]verything it does to [an NPE] it does to a legitimate inventor.”⁷³ Specifically, those opponents—many of whom are representatives of independent investors, universities, tech startups, venture capitalists, and pharmaceutical companies—feared that several of the bill’s broad proposals could, for example, “hurt investment in small inventors and startups” by “rais[ing] more doubts that a venture capital firm can recoup its investment” (since, like many NPEs, the only asset many of those small inventors and startups have are their intellectual property rights).⁷⁴ Moreover, those opponents also argued that the broad proposals could ultimately “mak[e] it more difficult for legitimate inventors to enforce their own IP rights.”⁷⁵

One such proposal that received its share of criticism was one for a heightened pleading standard.⁷⁶ Opponents of this proposal argued that it

shopping” that NPEs typically practice. Davis, *supra* note 70 (quoting statement of Representative Issa at the June 11, 2015 markup of the Innovation Act, available at *Markup of: H.R. 9, the Innovation Act, supra* note 70).

⁷³ Steve Brachmann, *Innovation Act Delayed in House amid Bipartisan Bicameral Disapproval*, IPWATCHDOG (July 15, 2015), <http://www.ipwatchdog.com/2015/07/15/innovation-act-delayed-in-house-amid-bipartisan-bicameral-disapproval/id=59858/> (quoting Representative Thomas Massie (R-KY) at an anti-Innovation Act coalition press conference on July 14, 2015).

⁷⁴ *Id.* (discussing statements of Representatives Bill Foster (D-IL) and Scott Peters (D-CA) at the anti-Innovation Act coalition press conference on July 14, 2015).

⁷⁵ *Id.* (discussing statements of Representative Scott Peters at the anti-Innovation Act coalition press conference on July 14, 2015).

⁷⁶ The proposed heightened pleading standards would have required a complaint alleging direct or indirect patent infringement to contain:

- (1) An identification of each patent allegedly infringed.
- (2) An identification of all claims necessary to produce the identification (under paragraph (3)) of each process, machine, manufacture, or composition of matter (referred to in this section as an ‘accused instrumentality’) that is alleged to infringe any claim of each patent that is identified under paragraph (1).
- (3) For each claim identified under paragraph (2), an identification of each accused instrumentality alleged to infringe the claim.
- (4) For each accused instrumentality identified under paragraph (3), an identification with particularity, if known, of—
 - (A) the name or model number (or a representative model number) of each accused instrumentality; or
 - (B) if there is no name or model number, a description of each accused instrumentality.
- (5) For each accused instrumentality identified under paragraph (3), a clear and concise statement of—
 - (A) where each element of each claim identified under paragraph (2) is found within the accused instrumentality; and
 - (B) with detailed specificity, how each limitation of each claim identified under paragraph (2) is met by the accused instrumentality.

Innovation Act, H.R. 9, 114th Cong. § 3(a)(1) (2015).

would raise the pleading standard too high and force plaintiffs alleging patent infringement to “plead facts they may not know without discovery.”⁷⁷ Moreover, even if the heightened pleading standard set forth in the Innovation Act made it more difficult for NPEs to file patent infringement complaints and thus dissuaded them from suing, that effect would also be felt by legitimate plaintiffs attempting to enforce their patent rights.⁷⁸ More importantly, NPEs would still be able to bring patent infringement suits (it would just be a little more difficult for them to do so) and use the threat of those suits to force alleged infringers into licensing agreements. Indeed, if legitimate plaintiffs are to have their pleading burden increased for the sole purpose of preventing NPEs from bringing patent infringement suits, then it is only fair to enforce a more drastic pleading requirement that would effectively achieve that goal instead of merely making it more difficult for everyone to file a complaint.

II. PROPOSAL: A STATUTORY SOLUTION

A. *Proposed Statutory Language*

To effectively prevent NPEs from suing for patent infringement while maintaining a fairly low pleading burden for legitimate plaintiffs, the 115th Congress should reintroduce an amended version of the Innovation Act in which section 3(a)(1) is completely replaced with the following language:

(1) AMENDMENT.—Chapter 29 of title 35, United States Code, is amended by inserting after section 281 the following:

§ 281A. Pleading requirements for patent infringement actions

(a) PLEADING REQUIREMENTS.—In a civil action in which a party asserts a claim for relief arising under any Act of Congress relating to patents, a party alleging infringement must include in the initial complaint, counterclaim, or cross-claim for patent infringement an affidavit that shows that the party is either:

(1) The original inventor of the patent allegedly infringed upon; or

⁷⁷ See Davis, *supra* note 70 (discussing Representative John Conyers (D-MI) statement at the June 11, 2015 markup of the Innovation Act, available at *Markup of: H.R. 9, the Innovation Act*, *supra* note 70); see also Rosen, *supra* note 71 (explaining that, at times, a “patent-holder requires [a] defendant’s confidential business information in order to present its infringement case” and that “[c]urrently, the patent-holder can access these materials during discovery, but under the Innovation Act, it would have to prepare its infringement charts [for its complaint] without the benefit of this information”).

⁷⁸ See Brachmann, *supra* note 73. “Everything [the Innovation Act] does to [an NPE] it does to a legitimate inventor.” *Id.* (quoting Representative Thomas Massie at an anti-Innovation Act coalition press conference on July 14, 2015).

(2) *A practicing entity.*

In conjunction with this pleading requirement, Congress must also include the following definitions of “Practicing Entity” and “Class Number” under section 2 (“Definitions”) of the reintroduced Innovation Act (i.e., to be included as section 2(3)–(4)):

(3) *PRACTICING ENTITY.*—*The term “Practicing Entity” means an entity that—*

(A) *Commercializes, or intends to commercialize—*

(i) *The patented invention allegedly infringed upon; or*

(ii) *A patented invention classified under the same patent Class Number as the patent allegedly infringed upon.*

(4) *CLASS NUMBER.*—*The term “Class Number” means the “Section,” “Class,” and “Subclass” symbols of the Cooperative Patent Classification.*⁷⁹

This amendment will not define the requisite degree of commercialization or intent to commercialize for section (3)(A), as those issues are better left for the courts to decide. That being said, in order for this solution to work properly, courts should construe commercialization and an intent to commercialize similarly to how “use in commerce” and an “intent to use in commerce” are construed in trademark law.⁸⁰ For example, in *SmithKline Beecham Corp. v. Omnisource DDS LLC*,⁸¹ the Trademark Trial and Appeal Board found that Omnisource did not have the requisite intent to use the “AQUAJET” trademark in commerce at the time it filed its trademark registration application because it had no documentation to demonstrate any “plans relating to manufacture, licensing, marketing or use of the mark.”⁸² Thus, if courts properly construe these terms, this

⁷⁹ The Cooperative Patent Classification replaced the U.S. Patent Classification system in 2015. See *Cooperative Patent Classification (CPC) – FAQ*, THOMSON REUTERS, <http://ip-science.thomsonreuters.com/m/pdfs/dwpcovkinds/CPC.pdf> (last visited Aug. 3, 2017); see also *About CPC*, COOPERATIVE PAT. CLASSIFICATION, <http://www.cooperativepatentclassification.org/about.html> (last visited Aug. 3, 2017).

⁸⁰ Under trademark law, “‘use in commerce’ means the bona fide use of a mark in the ordinary course of trade, and not made merely to reserve a right in a mark.” 15 U.S.C. § 1127 (2012). If an individual has yet to have used a mark in commerce, courts must objectively determine whether the individual actually had a “bona fide intention” to use the mark in commerce at the time of registration based on all of the circumstances in the case. See *Lane Ltd. v. Jackson Int’l Trading Co.*, 33 U.S.P.Q.2d 1351, 1355 (T.T.A.B. 1994). Another individual can oppose and disprove that intention by introducing evidence showing that the applicant lacks “any documentary evidence . . . regarding [that] intent.” *Commodore Elecs. Ltd. v. CBM Kabushiki Kaisha*, 26 U.S.P.Q.2d 1503, 1507 (T.T.A.B. 1993).

⁸¹ 97 U.S.P.Q.2d 1300 (T.T.A.B. 2010).

⁸² *Id.* at 1304.

legislation will ultimately have a devastating effect on the current NPE practice, with little effect on other entities. While there may be alternative solutions, this solution is practical and may be more likely to be passed by Congress.

B. The Solution's Effect on NPEs

1. NPEs Will Not Be Able to Sue for Patent Infringement

Although it may not be immediately clear what effect the proposed solution would have on NPEs, in considering the different ways NPEs acquire and assert their patent rights, it becomes quite evident how this solution could prevent NPEs from suing for patent infringement altogether. For example, as explained above, NPEs typically acquire and assert patent rights by (1) obtaining a large array of patents through various methods (such as purchasing patents from bankrupt companies or licensing patents from individual inventors), (2) searching for potential infringers of those patents, and (3) threatening to file patent infringement suits against those alleged infringers.⁸³ If the alleged infringers do not agree to license the allegedly patented technology, the NPE then brings a lawsuit against the alleged infringer by filing a complaint.⁸⁴ Under the requirements of the proposed solution, however, the typical NPE that merely purchases patents in order to assert them with no intention of ever commercializing the patented technology would be unable to submit the required affidavit proving that it is (1) the original inventor of the allegedly infringed patent or (2) a practicing entity (according to the proposed definition). Thus, the typical NPE would be unable to sue for patent infringement, and, most importantly, it would be unable to threaten alleged infringers and force them into high-priced licensing agreements. In other words, the framework and business strategy of the typical NPE would cease to exist.

This result would hold true regardless of the different methods and strategies an NPE uses to acquire its patents. For example, if an NPE licensed a patent from its original inventor, it would still be unable to file a patent infringement complaint under the proposed solution unless it commercialized or intended to commercialize that patent. If, instead of

⁸³ See *supra* notes 30–31 and accompanying text; see also McFeely, *supra* note 17, at 294, 297 (discussing NPEs' typical mode of operation and illustrating that NPEs may purchase patents from bankrupt companies); Diane Bartz, *Obama Takes Action to Curb Frivolous Patent Lawsuits*, REUTERS (June 4, 2013, 6:44 AM), <http://www.reuters.com/article/us-usa-obama-patents-idUSBRE9530KJ20130604> (mentioning that NPEs buy and license patents from individual inventors).

⁸⁴ See McFeely, *supra* note 17, at 297 (“Demands for licensing and threats of litigation (with actual litigation when necessary) are the ways in which the [NPE] makes its money.”).

licensing or purchasing patents from their original inventors or owners, the same NPE from the previous example employed the original inventor of a patent and thus owned the patent through assignment,⁸⁵ the NPE would again be unable to file a complaint for patent infringement because it would still not meet any of the requirements of the proposed statute. Under the proposed solution, the only person that could file a complaint for a patent infringement suit and yet not commercialize or intend to commercialize the patented invention would be the “original inventor,” which does not include an NPE, because a corporation can never be an original inventor.⁸⁶ Thus, regardless of the route an NPE takes to acquire its patents, so long as it is not commercializing, or intending to commercialize, it will be unable to sue for patent infringement.

2. Potential Routes for NPEs to Gain the Right to Sue

There are some alternative routes that NPEs could take when faced with the barrier to litigation created by the proposed solution. First, NPEs could begin to commercialize their own patents, or at least show that they intend to commercialize the allegedly infringed patent.⁸⁷ Then, as a practicing entity, they could sue for the infringement of (1) a patented invention it is commercializing, (2) a patented invention it intends to commercialize, or (3) a patented invention that is classified under the same patent Class Number as one of the patented inventions it does

⁸⁵ See 35 U.S.C. § 261 (2012) (covering patent assignment); 37 C.F.R. § 3.1 (2016) (definition of “assignment”). Employed inventors often assign their patented inventions to their employers. See Uttam G. Dubal et al., *Employment Agreements for Employee-Inventors Should Be Drafted to Assign Patent Rights at the Time the Agreement Is Signed Rather than Requiring Later Acts*, FINNEGAN (May 14, 2012), <http://www.finnegan.com/resources/articles/articlesdetail.aspx?news=08385db5-202a-4e98-92f0-df1d4080cfa3>. This assignment agreement will normally be a part of the inventor’s employment contract. See *id.*

⁸⁶ Under U.S. patent law, an “inventor” is an *individual* who conceives of the patented invention or contributes to the conception of the invention. See MANUAL OF PATENT EXAMINING PROCEDURE § 2137.01 (9th ed., rev. 7 2015); Patrick, *Patent Reformers Favor Corporate Interests over Inventor’s Rights*, GAMETIME IP (Feb. 23, 2011), <https://gametimeip.com/2011/02/23/patent-reformers-favor-corporate-interests-over-inventors-rights/> (“In the US, unlike much of the world, patents are applied for by *inventors*, not corporations. . . . Inventions are conceived of and reduced to practice *by human beings*, not fictitious corporations.”).

⁸⁷ Should the courts construe “commercialize” similarly to “commerce” from trademark law, then, at the very least, an NPE would need to “sell or transport [its patented] goods . . . such that the sale or transport would be subject to Congress’s power under the Commerce Clause.” *Christian Faith Fellowship Church v. adidas AG*, 841 F.3d 986, 989 (Fed. Cir. 2016). Alternatively, the NPE would need to sell and render its patented services. See *Couture v. Playdom, Inc.*, 778 F.3d 1379, 1381 (Fed. Cir. 2015) (citing 15 U.S.C. § 1127 (2012)); *supra* note 80 and accompanying text (discussing “use in commerce” under trademark law).

commercialize or intends to commercialize.⁸⁸ If an NPE did not want to directly commercialize one of its own patents, it could purchase an already existing practicing entity and continue to commercialize its patents. Once it did this, the NPE would gain the right to sue for patent infringement through its practicing subsidiary for any of the three reasons stated above.

There are likely several other ways in which an NPE could gain the right to sue for patent infringement under the proposed solution, but the two examples listed above perfectly show the results of an NPE's quest to obtain the right to sue: the fueling of innovation through the commercialization of patented inventions, and the infusion of funds into already existing practicing entities, which in turn also fuels innovation. Thus, the proposed solution would essentially leave only a few available routes for an NPE to sue, all of which are in line with the guiding principle of patent law.⁸⁹ However, although these alternative routes to the right to sue would be available, it is not necessarily guaranteed that NPEs would even choose to follow them.

First, the monetary barrier alone would likely dissuade NPEs from commercializing their patented inventions or purchasing an already existing practicing entity. The typical NPE, as a corporation, normally has "more lawyers and accountants' on staff than it does engineers, and the engineers it does have spend their time evaluating patents and searching for infringers, not developing products or new technologies."⁹⁰ Thus, the cost for an NPE to completely restructure itself and obtain the employees and resources necessary to create and sustain the commercialization of a patented invention would likely be significant. This is less likely to be an issue for an NPE that decides to purchase an already existing practicing entity because the entity would already be properly structured and employed. Thus, the purchase of an already existing entity could turn out to be the most viable route for NPEs to gain the ability to sue for patent infringement. That being said, regardless of the route an NPE chooses, it would likely have to take a monetary risk to become a practicing entity, and many NPEs may not be willing to take that risk. Additionally, once an NPE enters the market and becomes a practicing entity, it must then worry about being sued for patent infringement by other practicing entities or being countersued when suing an alleged infringer.⁹¹

⁸⁸ See generally *supra* Section II.A. The significance of this third class of patents is explained in Section II.D.

⁸⁹ See generally *supra* Section I.A.

⁹⁰ See McFeely, *supra* note 17, at 297–98 (quoting Elizabeth D. Ferrill, Comment, *Patent Investment Trusts: Let's Build a PIT to Catch the Patent Trolls*, 6 N.C. J.L. & TECH. 367, 374 (2005)).

⁹¹ Cf. Grace Heinecke, *Pay the Troll Toll: The Patent Troll Model Is Fundamentally*

NPEs will have to consider many more factors and potential risks associated with becoming practicing entities, all of which could cost them a lot of money.⁹² Despite these risks, however, it is likely that at least some NPEs would do everything necessary to continue their patent assertion business. Yet, many NPEs, most likely the smaller ones, may decide that all of the financial risks and burdens are not worth the possibility of a reward at the end of a patent infringement suit.

C. The Solution's Impact on the Practicing Entities and Original Inventors

Despite the significant impact the proposed solution would have on NPEs, most practicing entities would be unaffected because they would fall within the proposed definition of a practicing entity, and would thus be allowed to bring a patent infringement suit. Moreover, unlike the Innovation Act's proposed pleading requirements, the proposed solution cuts down NPEs' ability to file patent infringement suits without imposing such a high pleading burden on legitimate plaintiffs. For example, a practicing entity could easily show that it commercializes an allegedly infringed patented invention because the affidavit required under the proposed solution would only require information that the plaintiff itself would have readily available.⁹³ Most importantly, the practicing entity would not need the extensive information regarding the alleged infringer's product that is required under the Innovation Act's current heightened pleading requirement.⁹⁴

Original inventors would also be largely unaffected by the proposed solution. In order to sue another party for patent infringement, an original inventor would only need to show in the affidavit that his name appears as the inventor on the allegedly infringed patent. Thus, for example, an original inventor would still be able to sue a corporation that is using his

at Odds with the Patent System's Goals of Innovation and Competition, 84 FORDHAM L. REV. 1153, 1173–74 (2015) (“Because patent trolls do not produce goods with the patents they hold, they have an advantage over those who do manufacture goods as they are not subject to countersuits.”).

⁹² For example, “[w]ell-known companies that make consumer products . . . have an interest in avoiding a reputation of victimizing others,” which is essentially what the NPE business method does. *Id.* at 1174. Additionally, unlike NPEs, practicing entities have to worry about the risk of injunctions that could halt the sale of their product. *See id.*

⁹³ Again making the analogy to trademark law, a plaintiff could provide documentary evidence to prove that it commercializes or intends to commercialize a patented invention similar to how a trademark applicant can provide documentary evidence to prove the actual use of a trademark in commerce or a “bona fide intention” to use a trademark in commerce. *See supra* notes 80–82 and accompanying text.

⁹⁴ *See supra* note 77 and accompanying text.

patented invention and refusing to license it from him. Although this does leave open the possibility that original inventors could essentially become one-man NPEs, this outcome is still acceptable because it is common for patents to be one of an inventor's most important assets. Having the ability to assert a patent is particularly important to inventors when they are starting a new business based on that patent.⁹⁵ Otherwise, large corporations would be able to use an original inventor's patented invention without any repercussions, making it nearly impossible for inventors and their startups to enter certain industries or markets. Moreover, allowing original inventors to maintain their ability to sue, even if that means condoning NPE-like behavior, still aligns with the guiding principle of patent law because inventors inherently fuel innovation by creating, patenting, and disclosing their inventions, even if they are not commercializing them at the time they bring a patent infringement suit.

D. Additional Consequences and Counterarguments Regarding the Proposed Solution

1. The Solution's Effect on Universities and Other Similar Entities

There are certain consequences stemming from the proposed solution that may negatively affect some entities that are not typically considered to be NPEs. Under the proposed solution, for example, many universities would be unable to sue for patent infringement because they are not original inventors, and few of them, if any, are practicing entities.⁹⁶ Due to the way universities acquire and assert their patents, they are more similar to an NPE than they are a practicing entity.⁹⁷ A perfect example of this NPE-like behavior can be seen in the recent case of *Carnegie Mellon University v. Marvell Technology Group, Ltd.*,⁹⁸ where Carnegie Mellon sued Marvell “for infringing two [of its] patents related to hard-disk

⁹⁵ See Darian M. Ibrahim, *Financing the Next Silicon Valley*, 87 WASH. U. L. REV. 717, 750–51 (2010) (explaining that patents are important to startups because they can also attract potential investors and venture capitalists); *Patent Strategy for Tech Startups: Protecting Intellectual Property*, MARS (Apr. 23, 2014), <https://www.marsdd.com/mars-library/patent-strategy/> (discussing the different ways in which patents are a vital tool for startups when dealing with other companies in the same commercial market).

⁹⁶ See Jacob H. Rooksby, *Innovation and Litigation: Tensions Between Universities and Patents and How to Fix Them*, 15 YALE J.L. & TECH. 312, 327–28 (2013) (explaining that universities “are not in the business of commercializing their patents through direct manufacturing, distribution, and marketing of any ultimate products or services their patents cover”).

⁹⁷ See *id.* at 328; Vickery, *supra* note 46, at 175 (explaining that the term NPE “may also include early-stage startups and universities that do not make a product”).

⁹⁸ 807 F.3d 1283 (Fed. Cir. 2015).

drives.”⁹⁹ Marvell, which is a large practicing entity that “designs and sells semiconductor microchips,”¹⁰⁰ ultimately settled the dispute with Carnegie Mellon for \$750 million.¹⁰¹

Unlike most NPEs, however, universities fuel the research and innovation of new technologies by providing researchers and professors with funding, equipment, workspaces, and many more valuable tools that they depend on to innovate.¹⁰² Further, universities benefit society by educating their students and providing them with resources that may not be available to them otherwise. Again, the perfect example of this is Carnegie Mellon University, which plans to dedicate a “substantial majority” of its settlement money from the *Marvell* suit (approximately \$250 million) to benefit its students in various ways—such as “helping qualified students afford a Carnegie Mellon education” and “supporting programs that enhance the student experience.”¹⁰³ Actions like this present a strong argument for adding universities as one of the entities with the ability to sue for patent infringement in the proposed solution because they benefit society and thus align with the guiding principle of patent law.¹⁰⁴ At least for now, however, universities are not explicitly included in the proposed solution as entities that may bring a patent infringement suit for a variety of reasons.

For example, the Congressmen overseeing the passage of the reintroduced Innovation Act can use the various congressional resources at their disposal to determine how universities typically utilize the proceeds of their patents and the extent to which those proceeds affect universities’ operations. Should Congress determine that most universities do not use their patent proceeds for the benefit of their students (as Carnegie Mellon did)¹⁰⁵ or for other beneficial purposes that promote innovation, then Congress could leave universities out of the proposed solution. Further, simply adding “universities” to the proposed solution may be too narrow in

⁹⁹ *Id.* at 1288, 1300 (noting that the two patents at issue were assigned to the university by two of its researchers).

¹⁰⁰ *Id.* at 1291.

¹⁰¹ CMU Media Relations, *Carnegie Mellon University and Marvell Technology Group Ltd. Reach Settlement*, CARNEGIE MELLON U.: NEWS (Feb. 17, 2016), <http://www.cmu.edu/news/stories/archives/2016/february/settlement.html>.

¹⁰² For example, Carnegie Mellon’s website explains that the university’s mission is to “creat[e] and disseminat[e] knowledge,” and that its intellectual property policy “is designed to encourage faculty to conduct cutting-edge research.” *Patent Lawsuit FAQs*, CARNEGIE MELLON U., <http://www.cmu.edu/patent-lawsuit/faq/index.html> (last visited Aug. 3, 2017).

¹⁰³ *Id.*

¹⁰⁴ In other words, the additional language to cover universities would be added as section 281A(a)(3) in the proposed solution.

¹⁰⁵ See *supra* note 103 and accompanying text.

scope and could potentially leave out research institutions that may not qualify as a “universities,” but still require the ability to sue for patent infringement nonetheless. Thus, Congress should use its resources to determine how broad the scope of this addition should be. Ultimately, because universities are peculiar entities that fall right in the middle of the NPE-to-practicing entity spectrum,¹⁰⁶ the determination of whether they should be added to the proposed solution goes beyond the scope of this Note.

2. *The Solution’s Effect on the Patents That Practicing Entities Do Not Commercialize or Intend to Commercialize*

Another consequence stemming from the proposed solution would be that practicing entities would not be able to sue for the infringement of their patents that they did not commercialize (or intend to commercialize) unless that allegedly infringed patent was in the same Class Number as a patented invention that they commercialized (or intend to commercialize).¹⁰⁷ For example, a practicing entity that only commercialized software patents in the tech industry would not be able to sue for the alleged infringement of a random pharmaceutical patent it also owned. On the other hand, the tech company would be able to sue for the infringement of another software patent that it did not commercialize because that patent would be in the same Class Number as the software patents the tech company did commercialize. Although many practicing entities may not like this outcome, it is still in line with the guiding principle of patent law because practicing entities should not be allowed to use their patents to stagnate innovation and create barriers to entry into industries in which they do not commercialize.¹⁰⁸ Instead, practicing entities should use their patents to defend themselves and compete with rivals in the industries in which they do commercialize.

Critics may find this outcome inadequate because it ultimately allows individuals and practicing entities to sue for patents they do not practice. However, if the proposed solution was broader in scope—for example, if it did not make the exceptions for original inventors, intent to commercialize,

¹⁰⁶ Similar to NPEs, most university-owned patents are licensed for revenue, but, unlike NPEs, universities license their patents with the intention of gaining revenue through the commercialization of the patented inventions and not through the threat of litigation (or litigation itself). See Rooksby, *supra* note 96, at 319 (noting the forces deterring universities from threatening infringement litigation); Vickery, *supra* note 46, at 183 (referring to universities as “beneficial organizations that could be considered [NPEs]”).

¹⁰⁷ See *supra* Section II.A; text accompanying note 88.

¹⁰⁸ See generally Christopher R. Leslie, *The Anticompetitive Effects of Unenforced Invalid Patents*, 91 MINN. L. REV. 101, 114 (2006) (“It is hardly controversial that patents represent a barrier to entry in many markets.”).

or infringed patents that have the same Class Number as a commercialized patent¹⁰⁹—there would be several other unrealistic consequences that would hurt instead of help, the patent system and society in general. First and foremost, inventors would not be able to assert their own patents unless they were able to acquire the funds necessary to begin commercializing their inventions. Thus, small inventors would have less of an incentive to innovate, and starting a business based on a patented invention would be nearly impossible because competitors could just infringe on that patented invention with no repercussions until the business began commercializing it. This consequence would go entirely against the guiding principle of patent law: it would create enormous barriers to entry in certain industries, stagnate innovation, and essentially reserve patents for the already practicing corporations.

Additionally, corporations would be unable to prevent competitors from “designing around” their patents. For example, pharmaceutical companies often receive patents for modifications, substitutions, or equivalents of drugs that they commercialize, not because they intend on commercializing those additional patents, but because those patents prevent other corporations from selling those alternative drugs.¹¹⁰ If an innovative pharmaceutical company could not sue for the infringement of those patented alternative drugs that it does not commercialize, then it would be unable to prevent competitors from undercutting its sales and stealing its business.¹¹¹ Most importantly, the innovative pharmaceutical company would have no incentive to spend money on research to create new drugs if its competitors could merely wait for it to come out with a new drug and steal its business with a cheaper alternative.¹¹² Thus, society would suffer because pharmaceutical companies would be less willing to invest money into the research and development of new drugs.

¹⁰⁹ See *supra* Section II.A.

¹¹⁰ See Sean M. Flaim, Comment to *Why Are You Allowed to Patent Something with No Intention of Using It?*, QUORA (Apr. 18, 2014), <https://www.quora.com/Why-are-you-allowed-to-patent-something-with-no-intention-of-using-it> (explaining that alternative patents are meant to protect already patented products from having “cheap and substantially similar copies” made by competitors).

¹¹¹ See *id.*

¹¹² Cf. Benjamin N. Roin, *The Case for Tailoring Patent Awards Based on Time-to-Market*, 61 UCLA L. REV. 672, 751–52 (2014) (noting that “[m]ore so than in any other industry, the revenues that pharmaceutical companies earn from their patents appear to have a significant effect on their willingness to invest in R&D” and explaining that longer patent terms in the pharmaceutical industry would increase the time before companies could create cheaper generic versions of patented drugs, thus allowing the patent-holding company to make more money off of patented drugs, which would encourage drug companies to spend more on research and development of drugs).

On the other hand, under the proposed solution's "Class Number" exception, the innovative pharmaceutical company from the example above would be able to sue for the infringement of its alternative drug patents that have the same Class Number as a patent it does commercialize. In other words, the alternative drug patent would need to have the same Section, Class, and Subclass symbols as the commercialized drug patent under the "Cooperative Patent Classification."¹¹³ For example, if the innovative pharmaceutical company commercialized a drug that was an ammonia compound, the patent on that ammonia compound would have a Class Number of "C01C."¹¹⁴ The pharmaceutical company would then be able to sue a competitor that infringed on any of its other patents that had the same C01C Class Number (which, in this example, means any alternative drugs that are ammonia compounds). Although this exception may seem to be endorsing NPE-like behavior, it is a necessary compromise that will benefit society and promote innovation in various industries.¹¹⁵

Ultimately, these are only two examples of how a solution with a broader scope—such as one that did not allow anyone to sue for infringement of patents except practicing entities that commercialized the allegedly infringed patent—would negatively impact the patent system and society in general. These two examples demonstrate that the proposed solution is not overly broad, but is instead tailored to prevent NPEs from suing for patent infringement.

CONCLUSION

NPEs present one of the biggest problems with the U.S. patent system today. The 114th Congress introduced several different reforms to solve this problem, but much of its proposed legislation did not effectively prevent NPEs from suing for patent infringement and negatively affected legitimate plaintiffs. One such proposed reform was the heightened pleading requirement of the Innovation Act (H.R. 9), which would have required much more detail in complaints claiming patent infringement and thus would have made it more difficult for all entities, not just NPEs, to file suits against patent infringers. The 115th Congress should follow the 114th Congress's strong lead on patent reform by reintroducing an amended version of the Innovation Act that replaces its heightened pleading

¹¹³ See *supra* Section II.A; text accompanying note 88.

¹¹⁴ See COOPERATIVE PATENT CLASSIFICATION, AMMONIA; CYANOGEN; COMPOUNDS THEREOF 1 (2017), <http://www.cooperativepatentclassification.org/cpc/scheme/C/scheme-C01C.pdf>.

¹¹⁵ Under this exception, not only would companies continue investing into the research and development of new products, they would continue to research and patent alternative products, thus creating a steady flow of innovation.

requirement with this Note's proposed solution, which is narrowly tailored to prevent NPEs from suing for patent infringement while keeping much of the current patent system unchanged. In line with the guiding principle of U.S. patent law, the proposed solution—if implemented by the 115th Congress—would greatly benefit not only the patent system, but society in general.