

STATEMENT

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BEFORE THE

Senate Committee on Commerce, Science, and Transportation
Subcommittee on Consumer Protection, Product Safety, and Insurance

“Demand Letters and Consumer Protection: Examining Deceptive
Practices by Patent Assertion Entities”

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253 Russell Senate Office Building

Chairman McCaskill, Ranking Member Heller, and Members of the Subcommittee:

Thank you for this opportunity to speak with you today about patented innovation and the impact that licensing and threatened litigation have on our innovation-driven economy.

Today, two propositions define the American patent system and yet they stand in stark contrast to each other. On the one hand, patented innovation plays a central role in the United States in creating a prosperous economy. It drove the Industrial Revolution in the nineteenth century with the cotton gin, sewing machine, railroads, steam engines, and many other inventions, and it is driving the Digital and Biotech Revolutions today with engineered drugs, wireless communication, tablets, smart phones, and more inventions still. As former U.S. Patent & Trademark Office (PTO) Director David Kappos recently remarked, the U.S. patent system is “the greatest innovation engine the world has ever known.”¹ On the other hand, the “smart phone wars” and related patent litigation issues, as well as the commercial and legal activities of patent licensing companies, have lead many to believe that the “patent system is broken,” a mantra one reads almost daily on the Internet, in newspaper reports, and in op-eds.²

It is without a doubt that the patent licensing business model and patent litigation have become a flashpoint of controversy. One area of concern, the topic of today’s hearing, is the impact of demand letters sent by patent licensing companies, which are widely referred to as “patent assertion entities” (PAE), “non-practicing entities” (NPE) or by the more fashionable and

¹ *Innovation Act of 2013: Hearing on H.R. 3309 Before the Comm. on the Judiciary*, 113th Cong. __ (Oct. 29, 2013) (statement of David J. Kappos, Partner, Cravath, Swaine & Moore LLP), p. 2, available at <http://judiciary.house.gov/hearings/113th/10292013/Kappos%20Testimony.pdf>.

² See Adam Mossoff, *The Trespass Fallacy in Patent Law*, Florida L. Rev. (forthcoming 2013), p. 1 n. 1-2, available at <http://ssrn.com/abstract=2126595> (reviewing examples).

inflammatory term, “patent trolls.”³ For reasons that I will discuss shortly, I prefer instead to refer to these companies by their actual business model: patent licensing. Unless one works at a law firm, litigation (or threats of litigation) is not a business model; rather, the business model is licensing, in the course of which it can be necessary to threaten to sue or sue recalcitrant licensees. Since the early nineteenth century, many inventors and companies have licensed or sold their patents, rather than manufacture the technology. This has achieved tremendous efficiencies through the division of labor, and thus has been essential to America’s flourishing innovation economy.

Nonetheless, terms like “patent troll” have easily captured the public’s imagination. This has happened in part because it is undeniable that there are some rent-seeking patent owners who strategically exploit poor quality patents and the high costs of American civil litigation. Such bad actors exist in every legal system, and in fact have always existed—in the nineteenth century, the popular rhetorical epithet for these patent owners was “patent shark.”⁴ But whether such bad actors exist in large enough numbers today to cause a breakdown in the patent system requiring a systemic intervention via legislation or regulation is an entirely different question—and it is a question that remains largely unanswered.

Unfortunately, in addition to the mistaken empirical claims about patent litigation based on what the Government Accountability Office (GAO) has recognized as “nonrandom and nongeneralizable” studies,⁵ mistaken claims abound about patent licensing and its longstanding historical role in making patented innovation a commercial reality. Scholars and commentators claim that the patent licensing business model arises from a “patent marketplace [that] is a relatively new secondary market.”⁶ The inference is clear: this new commercial and legal activity requires new legislation and new regulations to address allegedly new problems.⁷ Rote repetition in scholarship, blogs, op-eds and newspaper articles, has solidified these claims into conventional wisdom among policy and legal elites. This conventional wisdom in turn is driving numerous legislative and regulatory proposals to address the allegedly systemic problems caused by the allegedly new patent licensing business model.

This conventional wisdom (like much conventional wisdom) is profoundly mistaken. We are racing to revise the patent system, a mere two years after the largest revision to the patent

³ As will be explained later, this term lacks an agreed-upon, objective definition and thus it should not be used by lawyers, commentators or scholars who care about precision and accuracy in discussions of patent law and policy. See Adam Mossoff, *The SHIELD Act: When Bad Economic Studies Make Bad Laws*, CPIP Blog (March 15, 2013), <http://cpip.gmu.edu/2013/03/15/the-shield-act-when-bad-economic-studies-make-bad-laws/>.

⁴ See Earl W. Hayter, *The Patent System and Agrarian Discontent, 1875-1888*, 34 MISS. VALLEY HIST. REV. 59 (June 1947); Earl W. Hayter, *The Western Farmers and the Drivewell Patent Controversy*, 16 AGRICULTURAL HIST. 16 (Jan. 1942). See also Dan Mitchell, *When Patent Trolls Were Simply Sharks*, FORTUNE (June 7, 2013), <http://tech.fortune.cnn.com/2013/06/07/when-patent-trolls-were-simply-sharks/>.

⁵ GOVERNMENT ACCOUNTABILITY OFFICE, INTELLECTUAL PROPERTY: ASSESSING FACTORS THAT AFFECT PATENT INFRINGEMENT LITIGATION COULD HELP IMPROVE PATENT QUALITY 26 (Aug. 2013), <http://www.gao.gov/assets/660/657103.pdf>.

⁶ Anne Kelley, *Practicing in the Patent Marketplace*, 78 U. CHI. L. REV. 115, 117 (2011).

⁷ Judge Richard A. Posner, for instance, has called for the adoption of a new legal rule “that barred enforcement of a patent that was not reduced to practice within a specified time after the patent was granted.” Richard Posner, *Patent-Trolls - Posner*, THE BECKER-POSNER BLOG (July 31, 2013), <http://www.becker-posner-blog.com/2013/07/patent-trollsposner.html>.

system since 1836,⁸ on the basis of rhetoric and anecdote instead of objective evidence and reasoned explanations. Even worse, the proposed legislative or regulatory interventions will not fix the unproven systemic problems they purport to address, but instead will cause actual damage to the dynamic innovation that the patent system promotes and secures. In the rush to enact legislation to revise the patent system, there is too little regard for the harm to innovation that will result from the weakening of patent rights and the increased legal hurdles that make it harder to license patents and enforce these patents against infringers. As David Kappos stated in his testimony before the House Judiciary Committee last week: “we are reworking the greatest innovation engine the world has ever known, almost instantly after it has just been significantly overhauled. If there were ever a case where caution is called for, this is it.”⁹

In this testimony, I will provide a brief overview on two important issues regarding the patent licensing business model and the assertion of these licensed patents that have gone largely unrecognized by those calling for legislative or regulatory changes. First, the patent licensing business model, and even the litigation of patents owned by these companies, has long been an essential feature of the American patent system, reaching back to the early nineteenth century and playing a key role in the commercial distribution of patented innovation. Second, aside from anecdotes and deeply flawed studies, there is no evidence yet of systemic harm to innovation caused by patent licensing companies requiring legislative or regulatory intervention. Even more important, such intervention carries serious risk of overreach that could harm the dynamic innovation that the patent system promotes and secures.

What is a Patent Assertion Entity or “Patent Troll”?

As a preliminary matter, it is necessary to address a fundamental problem in the patent policy debates today—the terminology used in these debates is deeply confused and has produced misleading claims and arguments that have proliferated widely among scholars and laypersons alike. This hearing concerns the assertion of patents via demand letters by PAEs or patent trolls. The FTC has defined PAEs as “firms whose business model primarily focuses on purchasing and asserting patents,”¹⁰ but this is not the accepted definition among all commentators or necessarily even among the witnesses testifying today. In fact, there is no settled, agreed-upon definition of a PAE or patent troll that is universally adopted by scholars and commentators alike.

Many commentators equate a PAE or patent troll with an NPE, another term that even the critics of these commercial entities recognize has yet to be objectively defined.¹¹ Aside from the strange locution of identifying the active commercialization of a property right in the marketplace as “non practicing”—it is tantamount to saying that landlords are “non-practicing”

⁸ See Richard Maulsby, *President Obama Signs the America Invents Act*, INVENTORS EYE, vol. 2, issue 5 (Oct. 2011), <http://www.uspto.gov/inventors/independent/eye/201110/americaninventsact.jsp> (referring to the America Invents Act of 2011 as “the most significant reform of the U.S. patent system since 1836”).

⁹ Kappos, *supra* note 1, at 2.

¹⁰ FED. TRADE COMM’N, THE EVOLVING IP MARKETPLACE: ALIGNING PATENT NOTICE AND REMEDIES WITH COMPETITION 8 n.5 (Mar. 2011), available at <http://www.ftc.gov/os/2011/03/110307patentreport.pdf>.

¹¹ See, e.g., James Bessen & Michael J. Meurer, *The Direct Costs from NPE Disputes*, p. 11, available at <http://ssrn.com/abstract=2091210> (“There is no consensus among researchers on the proper definition of NPE.”).

owners of their property rights because they do not live on their real estate parcels—this term is applied in inconsistent ways. For example, one of the first widely condemned NPEs in the high-tech industry was NTP, which successfully sued RIM (the maker of the BlackBerry) after RIM refused to license NTP’s patents on wireless email communication.¹² Prominent scholars, such as Mark Lemley and Carl Shapiro, among many others, have called NTP a “patent troll.”¹³ But NTP was a holding company formed by the inventor, Thomas Campana, Jr., and who did so only after numerous failed attempts at producing the technology.¹⁴ It seems strange that knowledgeable scholars and commentators are condemning *inventors* as “patent trolls,” when almost everyone regards inventors as rightly excluded from such pejorative labels (and especially when Campana’s patents were upheld as valid through repeated reviews both in court and under re-examination at the PTO).

The PAE, NPE and patent troll terms thus have many different definitions such that they sometimes cover and sometimes exclude universities,¹⁵ startups, firms that both manufacture and license, firms that engage in research and development and then license this patented innovation, and even individual inventors—including classic American inventors like Thomas Edison, Elias Howe (the inventor of the lockstitch in the 1840s), and Charles Goodyear (the inventor of vulcanized rubber in the late 1830s).¹⁶ One oft-cited study that has played a significant role in the patent policy debates concluded that NPEs/patent trolls imposed \$29 billion in costs on defendants in 2011.¹⁷ This study has been rightly criticized by scholars and by the GAO for many methodological and substantive failings,¹⁸ and one of these problems is its extremely broad definition of an NPE/patent troll. The authors defined an NPE/patent troll as covering almost every person, corporation, or university that sues someone for infringing a patent that it is not currently being used to manufacture a product at that moment, including even manufacturing

¹² See *NTP, Inc. v. Research in Motion, Ltd.*, 418 F.3d 1282 (Fed. Cir. 2005).

¹³ Lemley & Shapiro, *Patent Holdup and Royalty Stacking*, 85 TEX. L. REV. 2008-09 (2007) (discussing NTP as an example of how “patent trolls [can] hold up defendants by threatening to enjoin products that are predominantly noninfringing”); Gerard N. Magliocca, *Blackberries and Barnyards: Patent Trolls and the Perils of Innovation*, 82 NOTRE DAME L. REV. 1809, 1809–10 (2007) (observing that the BlackBerry litigation “was brought by a ‘patent troll,’ which is a derogatory term for firms that use their patents to extract settlements rather than license or manufacture technology”); Bruce Sewell, *Troll Call*, WALL ST. J., Mar. 6, 2006, at A14 (criticizing NTP as a patent troll).

¹⁴ See Barrie McKenna et al. *Patently Absurd*, GLOBE AND MAIL, Jan. 28, 2006, at B4 (discussing how Campana attempted to manufacture his patented invention but was unsuccessful, and thus NTP was formed in 1992 only after his earlier firm, Telefind, went bankrupt in 1991).

¹⁵ The University of Wisconsin has been called a “patent troll.” See Erin Fuchs, *Tech’s 8 Most Fearsome “Patent Trolls,”* Business Insider (Nov. 25, 2012 2:01PM), <http://www.businessinsider.com/biggest-patent-holding-companies-2012-11?op=1>.

¹⁶ Cf. Joshua D. Wright, *What Role Should Antitrust Play in Regulating the Activities of Patent Assertion Entities* (Apr. 17, 2013), p. 3, available at <http://www.ftc.gov/speeches/wright/130417paespeech.pdf> (“The entities qualifying as NPEs are wide-ranging and heterogeneous: they include all universities, which certainly do not manufacture or sell patented inventions, but also start-up companies, semiconductor design houses, and even some large, established commercial firms, like IBM. Thomas Edison would have been called an NPE, if that term existed 100 years ago ...”).

¹⁷ See Bessen & Meurer, *supra* note 11.

¹⁸ See GOVERNMENT ACCOUNTABILITY OFFICE, *supra* note 5; David L. Schwartz & Jay Kesan, *Analyzing the Role of Non-Practicing Entities in the Patent System*, 99 CORNELL L. REV. (forthcoming 2013), <http://ssrn.com/abstract=2117421> (identifying serious methodological and substantive flaws in patent litigation study by Bessen and Meurer). Cf. Christopher A. Cotropia, Jay P. Kesan & David L. Schwartz, *Patent Assertion Entities Under the Microscope: An Empirical Investigation of Patent Holders as Litigants* (Oct. 28, 2013), available at <http://ssrn.com/abstract=2346381> (finding from publicly available data substantially less litigation rates than those found by Bessen and Meurer in a study using secret, proprietary data from RPX).

companies that sue on patents deemed to be “well outside the area in which they make products.”¹⁹ The scope of this definition is breathtaking. What patent owner *isn't* currently or potentially an NPE under this definition, especially given that the innovation industries are extremely heterogeneous and constantly evolving, with companies like IBM and Nokia shifting their business models, product lines and commercial activities?

Even the more restrictive definition of a PAE that limits it to companies who “purchase and assert” patents is still not applied as evenly as it may first appear. Again, “assertion” in patent law means filing a lawsuit, but the actual business model of the majority of companies who purchase patents is licensing, not litigation. Moreover, the real-world firms to which this term has been applied are more complex and heterogeneous than is often acknowledged. For instance, one company that is widely alleged to be a PAE, Intellectual Ventures, employs hundreds of inventors who engage in research and development, and the company licenses this homegrown patented innovation along with the other patents it purchases from third-party inventors and companies. In a recent presentation on Capitol Hill, Nathan Myhrvold, the founder of Intellectual Ventures, stated that his firm is a top-ten filer for new patents in the U.S., and that he personally has received about 1200 patents.²⁰ Again, inventors and companies that produce patented innovation are being swept up in the terminology of PAE, NPE, and patent troll.

Given the variance and lack of clarity in these basic terms in the patent policy debates about patent licensing and patent litigation, I prefer instead to refer to these individuals and companies by their actual business model: patent licensing. This avoids the misleading shading of meaning that comes from loose rhetoric about mythical beasts or unverified litigation practices, and instead focuses the discussion on what these companies actually do in terms of their business model. By focusing on the business model of patent licensing, it also brings into sharper focus the historical pedigree of patent licensing, which inventors and companies have long employed to bring new patented innovation to market.

Patent Licensing as a Longstanding and Essential Feature of the American Patent System

Contrary to many claims today about PAEs or patent trolls, however they are defined, the patent licensing business model is not a new phenomenon in the commercialization of patented innovation in the marketplace. As award-winning economist Zorina Khan has explained, licensing has long been an essential feature of America’s unique patent system, which secured property rights in innovation to both inventors and to the marketplace actors who commercialized this innovation.²¹ I have also explained in my scholarship how early American legislators and judges defined patents as property rights—specifically as civil rights securing

¹⁹ Bessen & Meurer, *supra* note 11, at 10.

²⁰ See “The Future of Invention—What’s at Risk?,” available at http://youtu.be/4IINBhu7a_E.

²¹ See B. ZORINA KHAN, *THE DEMOCRATIZATION OF INVENTION: PATENTS AND COPYRIGHTS IN AMERICAN ECONOMIC DEVELOPMENT, 1790-1920*, at 9-10 (2005) (“The analysis [in this book] emphasizes the role that patents and copyrights played in the securitization of ideas through the creation of tradeable assets: intellectual property rights facilitated market exchange, a process that assigned value, helped to mobilize capital, and improved the allocation of resources. . . . Extensive markets in patent rights allowed inventors to extract returns from their activities through licensing and assigning or selling their rights.”).

fundamental property rights²²—and that this had profound implications in securing the free alienation of patents in the nineteenth-century marketplace.²³ Here, I can only briefly summarize some of this research and highlight its relevance to the concerns about patent licensing entities and their litigation practices.

In more recent scholarship, Professor Khan and other economists have shown that there was an active commercial market in both selling patents and licensing patent rights in the nineteenth century.²⁴ Many early American inventors (and third parties) embraced this market to sell, purchase, and license patented innovation.²⁵ For instance, Edison certainly meets the definition of an “NPE,” as he sold and licensed his patents, especially in his early invention-intensive career.²⁶ He also assigned outright some of his later patents, such as transferring his patented innovation in incandescent light bulbs to the General Electric Company.²⁷ Even earlier in the nineteenth century, inventors sold and licensed their patent rights. Charles Goodyear, the inventor of vulcanized rubber in 1839,²⁸ never manufactured or sold rubber products, and instead made all of his money by selling the rights to manufacture, license, sell, and use his patented innovation.²⁹ As the archetypical obsessive inventor, Goodyear was not interested at all in manufacturing or retail sales of his patented innovation.

Even more relevant to today’s policy debates, Goodyear and his assignees and exclusive licensees filed many, many lawsuits against individual end users, commercial firms, and manufacturers.³⁰ End-user lawsuits in particular were a prominent tool in their litigation strategy. Moreover, these end-user lawsuits were commonplace. As legal historian Professor Christopher Beachamp has discovered in his research, over a thousand patent infringement lawsuits were filed just in the Southern District of New York in 1883 and almost all of these were against

²² See Adam Mossoff, *Who Cares What Thomas Jefferson Thought About Patents? Reevaluating the Patent “Privilege” in Historical Context*, 92 CORNELL L. REV. 953 (2007).

²³ See Adam Mossoff, *Exclusion and Exclusive Use in Patent Law*, 22 HARV. J. L. & TECH. 321, 349-60 (2009); Adam Mossoff, *A Simple Conveyance Rule for Complex Innovation*, 44 TULSA L. REV. 707, 711-20 (2009).

²⁴ See, e.g., B. Zorina Khan, *Trolls and Other Patent Inventions: Economic History and the Patent Controversy in the Twenty-First Century*, __ GEORGE MASON UNIV. L. REV. __ (forthcoming 2014) (draft available at <http://cpip.gmu.edu/wp-content/uploads/2013/09/Khan-Zorina-Patent-Controversy-in-the-21st-Century.pdf>); Naomi R. Lamoreaux, Kenneth L. Sokoloff, and Dhanoos Sutthiphisal, *Patent Alchemy: The Market for Technology in US History*, 87 BUSINESS HIST. REV. 3 (Spring 2013).

²⁵ See Lamoreaux, Sokoloff & Sutthiphisal, *supra* note 24, at 20. Classified ads in nineteenth-century issues of *Scientific American* establish that patents and patent rights were actively offered for sale and purchased. See, e.g., *Scientific American* 383 (Aug. 12, 1854); *Scientific American* 143 (Aug. 28, 1869) [PDFs on file with author].

²⁶ See Lamoreaux, Sokoloff & Sutthiphisal, *supra* note 24, at 6 (explaining how Edison sold 20 of his early patents to third parties in order to fund his ongoing research and development).

²⁷ RANDALL E. STROSS, *THE WIZARD OF MENLO PARK: HOW THOMAS ALVA EDISON INVENTED THE MODERN WORLD* 165 (2008).

²⁸ U.S. Patent No. 3,633 (issued June 15, 1844).

²⁹ See CHARLES SLACK, *NOBLE OBSESSION: CHARLES GOODYEAR, THOMAS HANCOCK, AND THE RACE TO UNLOCK THE GREATEST INDUSTRIAL SECRET OF THE NINETEENTH CENTURY* (2002); HAROLD EVANS, *THEY MADE AMERICA: FROM THE STEAM ENGINE TO THE SEARCH ENGINE: TWO CENTURIES OF INNOVATORS* 92-100 (2004).

³⁰ For a few examples of the extensive litigation surrounding Goodyear’s patent, see Adam Mossoff, *Who Cares What Thomas Jefferson Thought About Patents? Reevaluating the Patent “Privilege” in Historical Context*, 92 CORNELL L. REV. 953 (2007) (cases cited in footnotes 174, 183, 188, and 192-194); Adam Mossoff, *A Simple Conveyance Rule for Complex Innovation*, 44 TULSA L. REV. 707, 711-20 (2009) (cases cited in footnotes 50 and 55).

farmers for infringing a single patent on well drilling technology.³¹ These end-user lawsuits were brought by a company that Professor Beachamp recognizes as falling within the definition today of a NPE—a firm engaged solely in patent licensing.³² In fact, given its extensive litigation practice, this firm would likely be classified as a PAE as well. Professor Beachamp found similar litigation practices against end users of sewing machines, cheese frames, barbed wire, and other patented innovation reaching back to the 1840s.³³

The inventor of the lockstitch in the 1840s,³⁴ Elias Howe, Jr., also licensed his patented innovation for most of his life. In fact, Howe engaged in ex post licensing: making royalty demands and suing retailers and manufacturers after discovering that they were infringing his patent rights. He also used ads to threaten liability for all purchasers of unlicensed sewing machines.³⁵ One historian identified Howe’s “main occupation” in the early 1850s as consisting entirely of “suing the infringers of his patent for royalties.”³⁶ His demands caused much ire. In fact, Howe’s assertion of his patents against noncompliant infringers refusing his licensing offers precipitated the very first “patent war”—called, at the time, the Sewing Machine War.³⁷

Even more important for understanding the practices of patent licensing and patent litigation, Howe’s litigation practices were similar to many practices today. For instance, Howe was destitute and found investors to provide third-party financing for his patent infringement lawsuits.³⁸ Ultimately, after being a principal legal pugilist in the Sewing Machine War, Howe joined the Sewing Machine Combination of 1856. This was the first patent pool in American history, which ended the Sewing Machine War and successfully licensed the patents in the sewing machine.³⁹ Moreover, similar to the end-user lawsuits by Goodyear’s assignees and other patent owners, when Howe first sued Singer and many other retailers and manufacturers,⁴⁰ these companies were the equivalent of today’s “mom and pop stores” or “start up” companies.

This brief survey establishes that the patent licensing business model has not only existed from the early nineteenth century, it has long served a significant function in the commercialization of patented innovation in the United States. Other famous early nineteenth-century inventors also extensively assigned and licensed rights in their patented innovation,

³¹ Professor Beachamp discusses his ongoing research into this issue in the panel, “End-User Lawsuits in Patent Litigation: A Bug or a Feature of Patent Law” (Aug. 29, 2013), available at <http://cpip.gmu.edu/events/teleforum-panel-end-user-lawsuits-in-patent-litigation-a-bug-or-a-feature-of-patent-law/>.

³² *Id.*

³³ *Id.*

³⁴ U.S. Patent No. 4750 (issued Sept. 10, 1846).

³⁵ See Mossoff, *The Rise and Fall of the First American Patent Thicket: The Sewing Machine War of the 1850s*, 53 ARIZ. L. REV. 165, 185 (2011) (quoting one of Howe’s advertisements that “You that want sewing machines, be cautious how you purchase them of others than [Howe] or those licensed under [Howe], else the law will compel you to pay twice over.”).

³⁶ RUTH BRANDON, A CAPITALIST ROMANCE 71-72 (1977).

³⁷ See generally Mossoff, *supra* note 35.

³⁸ See *id.* at 183.

³⁹ See *id.* at 194-202.

⁴⁰ See, e.g., *id.* at 189 (noting how “Howe quickly filed lawsuits in Boston against firms selling Singer Sewing Machines, and, as before, he sought preliminary injunctions”).

including William Woodworth (planing machine), Thomas Blanchard (lathe), and Obed Hussey and Cyrus McCormick (mechanical reaper),⁴¹ and many others. Such commercial practices continued into the twentieth century and up through today, with such innovative firms as Bell Labs,⁴² IBM,⁴³ Apple,⁴⁴ Microsoft,⁴⁵ Research in Motion (Blackberry),⁴⁶ and Nokia,⁴⁷ among others, using this long-established, successful method of patent licensing to commercialize patented innovation in the marketplace.

Moreover, the litigation practices of these patent owners, including suing numerous defendants, suing end users, and receiving third-party financing for lawsuits, among others, have been common features of the patent litigation landscape since the early nineteenth century. It is simply untrue that these commercial and legal strategies are novel developments in recent years that require novel legislative or regulatory changes. While there are certainly some bad actors, Congress must be cautious in making systemic revisions to the longstanding legal rules governing how patented innovation is commercialized and litigated. This is especially the case when such revisions are based more on rhetoric about particular types of patent owners than evidence of systemic problems that are clearly harming innovation.

The PTO and Courts Have the Tools to Address Bad Actors in the Patent System

It is significant that the commercial and legal practices about which commentators and scholars today express extensive concern have in fact been longstanding features of both the American patent system and the federal courts. The commercialization of patented innovation and resulting economic growth has occurred throughout every historical “patent war” and periods of extensive litigation against manufacturers, retailers, and end users. The creation of patented innovation and the resulting economic growth continue today because the PTO and courts already have the tools to separate the bad actors from the legitimate patent licensing companies. Even more important, the America Invents Act of 2011 (AIA), a product of a six-year policy debate and rightly recognized as “the most significant reform of the U.S. patent system since 1836,”⁴⁸ vastly expanded these tools as well.

⁴¹ See Lamoreaux, Sokoloff & Sutthiphisal, *supra* note 24, at 8.

⁴² See JON GERTNER, *THE IDEA FACTORY: BELL LABS AND THE GREAT AGE OF AMERICAN INNOVATION* chpt. 6 (reprint ed. 2013) (discussing how Bell Labs licensed the transistor to any individual or firm willing to pay the \$25,000 licensing rate).

⁴³ See David Kilpatrick, *The Future of IBM. Lou Gerstner seems to have pulled off a miracle. Sam Palmisano will have to be at least as good*, *FORTUNE* (Feb. 18, 2002), http://money.cnn.com/magazines/fortune/fortune_archive/2002/02/18/318158/index.htm (“Throughout the Gerstner years IBM has been the world leader in new patents; it earns well over \$1 billion a year licensing those patents.”).

⁴⁴ See Tom Haubert, *The Troubled Life of Patent No. 6,456,881: Tracing the Tortured Legal Trail of a Simple Smartphone Patent*, *IEEE SPECTRUM* (Apr. 23, 2013), <http://spectrum.ieee.org/at-work/innovation/the-troubled-life-of-patent-no-6456841> (describing patent purchased from Mitsubishi by Apple, and then Apple sold the patent to a “patent acquisition and licensing company” that brought patent infringement lawsuits against many high-tech companies (but not against Apple)).

⁴⁵ See Rakesh Sharma, *Six Answers About Rockstar’s Suit Against Google*, *FORBES* (Nov. 1, 2013 6:21PM), at <http://www.forbes.com/sites/rakeshsharma/2013/11/01/six-answers-about-rockstars-suit-against-google/> (discussing the patent licensing entity, Rockstar Consortium, which is backed by Apple, Microsoft, Sony, Ericsson, and Research in Motion).

⁴⁶ *Id.*

⁴⁷ See Dan Levine, *Why Nokia Didn’t Sell Its Patents to Microsoft*, *REUTERS* (Sep. 3, 2013 7:05PM EDT), <http://www.reuters.com/article/2013/09/03/us-nokia-microsoft-patents-idUSBRE9820ZZ20130903>.

⁴⁸ Maulsby, *supra* note 8.

The concern about patent licensing companies demanding royalties from or even suing alleged infringers is that many people believe that the patents are invalid. In other words, the policy concern that needs to be addressed is the validity of the underlying property right, as an owner of a *valid* patent has every right to demand licenses from unauthorized users and to seek relief in court against recalcitrant infringers. There have long existed many legal tools, and even more exist today, for challenging and weeding out such bad patents.

Consider two historical examples (among the many that exist). First, potential defendants have long had the right to bring declaratory judgment actions in federal court to invalidate patents that might be asserted against them in a future lawsuit, and the Supreme Court recently liberalized the rules even further for when someone can bring a declaratory judgment action in its 2007 decision in *Medimmune v. Genentech*.⁴⁹ Second, defendants or potential defendants have long had access to the PTO to challenge improperly issued patents. Singer instigated a lengthy proceeding at the Patent Office in 1850 in attempting to invalidate Howe's patent, for instance, and defendants in all of Howe's lawsuits repeatedly argued (and reargued) in federal court that Howe's patent was invalid as well.⁵⁰ Like any newly created asset or valuable resource, all commercially significant and valuable patents are always heavily disputed as to their validity, both in courts and at the PTO. This explains the historical prevalence of the patent wars that have occurred with every major technological leap forward.⁵¹

Today, such legal mechanisms continue to exist in the PTO and in the courts, which serve as a check on both bad actors and bad patents. In the courts, the Judicial Conference's Committee on Rules of Practice and Procedure has officially published proposed revisions to the pleading requirements in patent lawsuits, one of the sources of the much maligned minimal notice requirements in patent infringement complaints.⁵² Additionally, the Supreme Court recently granted cert in two cases that will likely result in liberalizing the rules on the issuance of sanctions in patent cases.⁵³ Such legal changes will necessarily change the calculus of individual patent owners who are bluffing in demand letters, because those bluffs may now be called and courts will both make it harder to bring the actual lawsuits and will punish bad-faith assertions.

Even more important, at the PTO, the many new, AIA-created review proceedings are just beginning to be implemented and to produce results.⁵⁴ And there are more reforms that can

⁴⁹ *MedImmune, Inc. v. Genentech, Inc.*, 127 S. Ct. 764 (2007).

⁵⁰ See Mossoff, *supra* note 35, at 187-89.

⁵¹ See Adam Mossoff, *Patented Innovation and Patent Wars: Some Historical Perspective*, A SMARTER PLANET BLOG (Jan. 11, 2013 8:00AM), available at <http://asmarterplanet.com/blog/2013/01/patented-innovation-and-patent-wars-some-historical-perspective.html>.

⁵² See Committee on the Rules of Practice and Procedure of the Judicial Conference of the United States, *Preliminary Draft of Proposed Amendments to the Federal Rules of Bankruptcy and Civil Procedure* (Aug. 2013), available at <http://www.uscourts.gov/uscourts/rules/preliminary-draft-proposed-amendments.pdf>; see also Honorable Katherine O'Malley, *Key Note Speech at Intellectual Property Owners Association Annual Meeting* (Sep. 17, 2013), p. 9, available at <http://www.ipo.org/wp-content/uploads/2013/02/IPO-Annual-Meeting-Keynote-Speech-09-17-13.pdf> (discussing this process).

⁵³ See *Octane Fitness, LLC v. Icon Health & Fitness, Inc.*, No. 12-1184, 2013 WL 1283843 (U.S. Oct. 01, 2013); *Highmark Inc. v. Allcare Health Mgmt. Sys.*, No. 12-1163, 2013 WL 1217353 (U.S. Oct. 01, 2013).

⁵⁴ See generally Kappos, *supra* note 1.

and should be adopted, such as securing full funding of the PTO to ensure complete and timely examination of patent applications. Full funding of the PTO will also ensure proper implementation of the many new administrative review programs created by the AIA to weed out invalid and vague patents that clog the innovation economy.

And for those who lack the knowledge or wherewithal to navigate these processes, there are many law firms and policy organizations, such as Public Patent Foundation, Electronic Frontier Foundation (EFF), the Berkman Center for Internet and Society, and others who are offering assistance.⁵⁵ For instance, the App Developers Alliance has created the “Law School Patent Troll Defense Network,” which involves law school clinics providing legal services to individuals or small businesses receiving demand letters or complaints.⁵⁶ Moreover, two weeks ago, EFF joined with the Berkman Center to file an inter partes review of the widely known and notorious “podcasting patent,” which has been the subject of thousands of demands letters being sent to individuals, small companies, and large companies.⁵⁷ In a world in which internet searches easily and effortlessly produce such information, it is becoming harder to maintain that recipients of demand letters lack the resources and capabilities to respond effectively.

The Harm to Dynamic Innovation from Legislative or Regulatory Overreach

It is against this backdrop that Congress must assess any proposal to intervene via commercial regulation in patent licensing and patent litigation practices. First, there is too much rhetoric and too many “nonrandom and nongeneralizable” studies in the policy debates,⁵⁸ and too little actual evidence definitively establishing that more revisions to the patent system are needed. Second, while there are certainly bad actors, there are a number of existing legal mechanisms at the PTO and in the courts to address them, especially after the enactment of the AIA just two years ago. Third, and certainly not least, there is too little regard for the serious costs that regulatory overreach imposes on the individuals and businesses who create the real-world innovative products and services that have become basic commodities of modern life.

While many pay lip service to the importance of promoting innovation, there has been too little regard given to the benefits of strong and certain patent rights and the costs of lost innovation when these rights become uncertain. In contrast to the many studies done on the alleged “costs” imposed by patent licensing companies on defendants and manufacturers, there has not been a single statistical study done on either (1) the costs imposed on patent owners in either licensing or enforcing their legal rights, or (2) the costs, especially the error costs, that

⁵⁵ On behalf of individual women lacking the funds to pay for expensive DNA testing (and thus lacking the funds to bring a lawsuit), the Public Patent Foundation brought the challenge to the patents on the BRAC1 and BRAC2 genes, which correlated with breast cancer. The Public Patent Foundation ultimately won before the Supreme Court. *See AMP v. Myriad Genetics*, 133 S. Ct. 1747 (2013).

⁵⁶ *See Law Schools Join App Developers Alliance to Fight Patent Trolls* (Oct. 10, 2013), available at <http://www.ipwatchdog.com/2013/10/15/law-schools-join-app-developers-alliance-to-fight-patent-trolls/>.

⁵⁷ *See EFF Files Challenge With Patent Office Against Troll's Podcasting Patent: Massive Crowdsourcing Effort Leads to Strong Petition Before the USPTO* (Oct. 16, 2013), available at <https://www.eff.org/press/releases/eff-files-challenge-patent-office-against-trolls-podcasting-patent>.

⁵⁸ GOVERNMENT ACCOUNTABILITY OFFICE, *supra* note 5, at 26.

further legislative or regulatory changes to patent licensing and litigation practices will impose on legitimate owners of valid patents—the modern-day Edison, Howe, and Goodyear.

This is striking and reinforces the concern that proposed legislation and regulation is being driven today more by rhetoric than by a dispassionate, reasoned consideration of all sides of the policy equation. If there is objective harm established by the knowing abuse of invalid patents via demand letters—such as, for example, cognizable harms in lost production and lost business opportunities via in terrorem threats—then such harm must first be proven via established empirical methodologies and assessed according to known legal standards.⁵⁹ If Congress intends to direct a regulatory agency to punish the licensing and litigation activities of certain types of patent owners, then such a radical alteration to the patent system should at least be supported by definitive evidence justifying such systemic changes. Otherwise, the in terrorem effect runs the other way, sweeping legitimate inventors and companies into an arbitrary regulatory environment that makes the licensing and enforcement of their patented innovation prohibitively costly.⁶⁰ As a recent letter submitted by several Senators and Representatives to Chairwoman Edith Ramirez stated:

The absence of clear parameters for the FTC’s Section 5 authority based on empirical and economic justifications engenders uncertainty in the business community. This uncertainty acts as a deterrent to innovation and creativity, which are critical drivers of the American economy and vitally important in today’s challenging economic environment.⁶¹

Such concerns are endemic in any legal intervention into patented innovation.⁶² As Commissioner Joshua Wright has similarly observed in his previous academic scholarship, after a careful review of the economic literature to date:

Our economic knowledge regarding innovation itself, conduct affecting innovation, and how to assess competitive outcomes involving tradeoffs between product market competition and innovation are far less impressive than our knowledge in a purely static setting. The costs of false positives leading to a chilling of pro-competitive innovation are significant.⁶³

⁵⁹ See Commissioner Joshua D. Wright, *Proposed Policy Statement Regarding Unfair Methods of Competition Under Section 5 of the Federal Trade Commission Act* (June 19, 2013), available at <http://ftc.gov/speeches/wright/130619umcpolicystatement.pdf>.

⁶⁰ See Donald Rosenberg, *First Rule of Patent Reform: Do No Harm*, WALL ST. J. (Sep. 10, 2013 6:54PM), (“How will the proposed changes that make it harder and more expensive to enforce these patents affect small inventors, universities and companies that legitimately seek to protect their intellectual property rights? New legislation must take care not to sacrifice their rights or those of other inventors.”).

⁶¹ Letter from Chairman Bob Goodlatte, House Comm. on the Judiciary, Ranking Member Charles Grassley, Senate Comm. on the Judiciary, Chairman Spencer Bachus, House Comm. on the Judiciary Subcomm. on Regulatory Reform, Commercial, and Antitrust Law, and Ranking Member Mike Lee, Senate Comm. on the Judiciary Subcomm. on Antitrust, Competition Policy, and Consumer Rights, to Chairwoman Edith Ramirez, Fed. Trade Comm’n (Oct. 23, 2013).

⁶² See Mossoff, *A Simple Conveyance Rule for Complex Innovation*, *supra* note 23, at 120-30 (identifying inherent difficulties in assessing or predicting commercial innovation and the high error costs this portends for commercial regulation).

⁶³ Joshua D. Wright, *Antitrust, Multi-Dimensional Competition, and Innovation: Do We Have an Antitrust-Relevant Theory of Competition Now?*, in REGULATING INNOVATION: COMPETITION POLICY AND PATENT LAW UNDER UNCERTAINTY 230 (Geoffrey A. Manne & Joshua D. Wright eds., 2010).

This is not to diminish the existence of individual bad actors and the particular harms they might be imposing via improper demand letters. But anecdotes alone do not justify legislative or regulatory action. Given the lack of an established and proven connection between these individually harmful acts and systemic harm to innovation, the lack of cognizable legal standards for acting in this area, the preexisting tools at the PTO and in courts to address the problems, and the ever-present threat of causing even greater harm to the innovation economy through legislative or regulatory overreach, this is an issue on which Congress should exercise restraint.

Conclusion

Contrary to popular myth today, the patent licensing business model has long played an essential role in distributing patented innovation through the marketplace. These commercial activities reflect the basic economic principle of the division of labor that Adam Smith famously recognized as essential to a successful free market and flourishing economy—in this context, it is the division of labor between inventors and businesspersons.⁶⁴ This fundamental economic principle is just as applicable to patented innovation as it is to any other economic activity; as Henry Ford famously said of his friend and business partner, Edison was “the world’s greatest inventor and the world’s worst businessman.”⁶⁵ Thus, it is significant, as Commissioner Wright has observed, that “[t]he PAE is a specialist in licensing and enforcing patent rights.”⁶⁶

Of course, the twenty-first century innovation economy is incredibly different from that of the nineteenth century. The exogenous market and technological variables at work in this economy are different as well. But it is still wrong to claim that the patent licensing business model and secondary markets are novel practices today. It is equally wrong to call for legislative or regulatory action based on the admittedly potent mix of mistaken historical claims, undefined and inflammatory rhetoric, the disregard of existing legal mechanisms addressing the concerns, and with little regard for symmetry of costs and benefits.⁶⁷ Whether there are benefits or harms from specific commercial and legal practices in the innovation economy is an important empirical and policy question, but such benefits or harms should no more be based on rhetoric, anecdotes, and incorrect claims about historical practices than they should be based on “nonrandom and nongeneralizable” studies.⁶⁸ Congress should exercise restraint, avoid “[a]ttempting to label and then discriminate based on identity,” and be cautious in accidentally killing “the goose laying our golden egg.”⁶⁹

⁶⁴ See ADAM SMITH, *THE WEALTH OF NATIONS* Book I Chpt.1 (1776).

⁶⁵ STROSS, *supra* note 27, at 165. Ford knew of which he spoke, because he provided Edison a total \$1.2 million in business loans, and some of which he was forced to forgive. *Id.* at 253.

⁶⁶ Wright, *supra* note 16, at 5.

⁶⁷ See Lamoreaux, Sokoloff & Sutthiphisal, *supra* note 24, at 4 (“To many critics, there is something new and unethical about profiting from intellectual property by marketing the rights rather than using it in production.”).

⁶⁸ GOVERNMENT ACCOUNTABILITY OFFICE, *supra* note 5, at 26.

⁶⁹ Kappos, *supra* note 1.