Legislative Responses to Patent Assertion Entities

David O. Taylor*

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* Assistant Professor of Law, SMU Dedman School of Law; J.D., 2003, Harvard Law School; B.S., 1999, Texas A&M University. This Article was funded in part by the Marla and Michael Boone Faculty Research Fund. I am grateful for the opportunity to present this Article at the 16th Annual Intellectual Property Symposium: Patent Assertion Entities at the University of Texas School of Law. Thanks to Stefanie Fusco, Dave Schwartz, and Chris Seaman for their helpful comments, and to Angela Oliver for her helpful research assistance. Special thanks to Rachel, Caroline, Emily, and Joshua Taylor. The views expressed in this Article, as well as any errors, are my own.
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I. Introduction

Patent assertion entities. Patent monetizers. Patent trolls. Merely mentioning them makes many shudder. By definition they exist only to extract revenue from users of technology. They do so by first obtaining rights to enforce patents—the right to sue for past damages and the right to seek prospective injunctive relief—and then by threatening to enforce those rights on their technology-using targets. What they seek are settlements in exchange for releases from liability for past infringement and licenses to practice their patented technology in the future or judgments providing damages and injunctions. Their threat point is patent litigation, with all of its headaches, expense, and risk. In short, if you are a user of technology (and who isn’t?) there is reason to shudder.

1 Some patent assertion entities employ engineers and scientists, apply for patents, and then, rather than develop products using their patented technology, seek to license their patented technology. Kristen Osenga, Formerly Manufacturing Entities: Piercing the "Patent Troll" Rhetoric, 47 CONN. L. REV. 435, 444–45 (2014) (noting that non-practicing entity (NPE) Intellectual Ventures employs hundreds of inventors). Other patent assertion entities previously employed engineers and scientists and applied for patents and only after failed attempts to commercialize their technology sought to obtain some return on their previous investment in research and development through a licensing model. Id. at 465 (noting that NTP, Inc. adopted a licensing business model only after failed attempts to commercialize its patented wireless telecommunications technology). Still, other patent assertion entities have never employed engineers and scientists but instead purchase patents from ongoing or failed developers. Id. at 462 (highlighting Rockstar Consortium’s winning bid for the patent portfolio then owned by soon-to-be-bankrupt Nortel Networks). Additionally, some patent assertion entities use the licensing revenue on patents covering technology they no longer practice to fund research and development of new technologies. Id. at 476 (describing Conversant’s use of licensing revenue from its patents on DRAM microchips, which Conversant no longer manufactures, to fund development of new flash memory technologies).

2 Enforcement occurs through both out-of-court licensing negotiations and through in-court patent litigation.

3 Patent assertion entities seek injunctions to increase their bargaining power in an effort to obtain greater settlements, not to prohibit competition vis-à-vis their own use of the patented technology. Patent assertion entities are NPEs; by definition, they do not practice their patented technology. Not all NPEs, however, are patent assertion entities. Universities, for example, are NPEs, but they do not exist only to extract revenue from users of technology through enforcement of their patents; universities seek to educate students, collect tuition, obtain private and government grants, explore the outer limits of engineering and science, and expand their influence and reputations.

4 See Mark A. Lemley & A. Douglas Melamed, Missing the Forest for the Trolls, 113 COLUM. L. REV. 2117, 2126 (2013) (noting that some NPEs rely on the high cost of patent litigation to bring about nuisance-value settlements).
While the existence of patent assertion entities is not new, in recent years they have proliferated, spawning debate concerning their impact on the patent system and, more broadly, on technological innovation. In the last two years alone there has been a robust debate among law professors about whether patent assertion entities help or hinder innovation, about the best empirical methods to study patent assertion entities to identify their impact on innovation and the conclusions to be drawn from these empirical studies, and about appropriate reforms to address perceived problems associated with patent assertion entities.

Despite the fear that they instill in their targets—or perhaps because of it—patent assertion entities arguably serve a beneficial purpose in the patent system. As specialists in the field of patent enforcement, theoretically they should be able to help individual inventors and small businesses obtain a return on their investment in research and development. Developers of technology who have obtained patents but lack experience in the complex field of patent licensing and litigation, or perhaps the financial wherewithal to engage in the costly endeavor of patent litigation, might be unable (or at least less likely) to force infringers to pay for their infringement. And one of the central features of the patent system is to reward inventors

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5 See, e.g., Naomi R. Lamoreaux et al., Patent Alchemy: The Market for Technology in US History, 87 BUS. HIST. REV. 3, 36 (2013) ("Opportunism in the market for technology gets much more media attention nowadays than it did in the nineteenth century. However, it is not clear that the 'troll' problem is commensurately more serious than it was in the earlier period.") (citation omitted).

6 See David S. Olson, On NPEs, Holdups, and Underlying Faults in the Patent System, 99 CORNELL L. REV. ONLINE 140, 140 (2014) (noting the "very rapid growth in NPE patent assertion in recent years").


8 See, e.g., Bessen & Meurer, supra note 7, at 409 (acknowledging that small to mid-sized patent owners may gain value from patents because of NPEs); Schwartz & Kesan, supra note 7, at 428 (recognizing the argument that NPEs may assist small to mid-sized patent owners in obtaining value from patents); U.S. GOV'T ACCOUNTABILITY OFFICE, GAO-13-465, INTELLECTUAL PROPERTY: ASSESSING FACTORS THAT AFFECT PATENT INFRINGEMENT LITIGATION COULD HELP IMPROVE PATENT QUALITY 35 (2013) ("[I]nventors who do not have the resources or skills to enforce patents on their own benefit from partnering with [patent monetization entities] that specialize in patent monetization . . .").

9 See James F. McDonough III, Comment, The Myth of the Patent Troll: An Alternative View of the Function of Patent Dealers in an Idea Economy, 56 EMORY L.J. 189, 210 (2006) ("This relatively high cost has the effect of inhibiting the abilities of individual inventors and small entities to enforce their patents against large corporations.").
monetarily for their inventions. The prospect of this reward encourages future inventors to invest in research and development and to file patent applications disclosing their inventions for the world to understand and improve. In short, to the extent patent assertion entities assert patent claims that are truly valid, infringed, and enforceable; obtain reasonable settlements and judgments reflecting the value of use of their patented technology; and return a substantial portion of their settlements and judgments to inventors, the patent system is working, as it is designed, to reward invention and disclosure.

But the reality is that patent assertion entities are seen as a plague on the patent system. As with used car salesmen, few like them. They are viewed as "sharks," "trolls," "orcs," "middlemen," "pirates," and "dealers." In short, they are seen as undeserving of the money that they obtain; the money that they obtain, according to critics, should either stay in the hands of technology users or be given to the inventors of the technology. Indeed, according to a recent critique by two law

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10 See Schwartz & Kesan, supra note 7, at 439 (identifying "rewarding inventors" as a policy interest of the patent system).
11 See Lemley & Melamed, supra note 4, at 2121 ("The patent system is designed to encourage innovation by giving inventors the exclusive right to their technologies for a limited period of time.").
12 See Schwartz & Kesan, supra note 7, at 455 (arguing that the larger issue surrounding NPEs requires looking "beyond the identity of the patentee" to whether the asserted patents are valid, enforceable, and infringed, or whether the defendants are "merely easy targets for a nuisance lawsuit").
14 See Bessen & Meurer, supra note 7, at 411 (arguing that payments to inventors constitute only about 20 percent of defendants' direct "costs," where these "costs" include settlements and judgments plus legal expenses defending patent lawsuits).
16 See, e.g., Lemley & Melamed, supra note 4, at 2118 (discussing use of the term "troll").
17 See Transcript of Oral Argument at 26, eBay Inc. v. MercExchange, L.L.C., 547 U.S. 388 (2006) (No. 05-130) ("[M]aybe we should think of it more as Or{c}s, now that we have a new generation, but at this point troll is the word that gets . . . used.").
18 See, e.g., Schwartz & Kesan, supra note 7, at 430 ("Some argue that NPEs are bad on the ground that they function as middleman between the original inventor and the infringer.").
20 See, e.g., McDonough, supra note 9, at 200 (proposing that patent trolls be called "patent dealers").
21 See generally Bessen & Meurer, supra note 7, at 397 (criticizing patent assertion entities as exacting a $29 billion tax on innovation in 2011). Any failure of patent assertion entities to return substantial value to inventors may at least in part reflect any of various market defects. One potential defect is a lack of competition in the market for patent assertion. To the extent patent assertion entities have to compete with each other, they have to return more value to patent owners from which they acquire the rights to enforce patents. Other market defects, including imperfect information
legislature.

Legislative Responses to Patent Assertion Entities

professors, patent trolls levied “a $29 billion tax on innovation” in 2011.22 Despite concerns with this number—including the fact that it includes the very payments from infringers to patent owners that the patent system seeks to force23—the “$29 billion tax” criticism of patent assertion entities has gone viral, as shown by references to it in Congressional hearings, judicial briefs, academic legal discourse, and even the popular press.24

Patent assertion entities, however, in and of themselves are not the problem.25 To the extent they assert patent claims that should be held invalid, not infringed, or unenforceable; obtain unreasonable judgments or settlements; or fail to return a substantial portion of these settlements and judgments to inventors, patent assertion entities primarily highlight underlying problems with the patent system.26 And there are three primary problems with the patent system that some patent assertion entities exploit: poor patent quality, problems with patent litigation, and various asymmetries in the patent system.27 When there is criticism generally of patent assertion entities, the root of these criticisms usually is at least one of these three primary problems.28

held by patent owners regarding the value of their patents and how to engage in licensing and litigation, may also contribute to any failure of the market to return substantial value to inventors.

22 Id. at 416.
23 Schwartz & Kesan, supra note 7, at 439 n.72.
25 See Lemley & Melamed, supra note 4, at 2120 ("[T]he focus on patent trolls obscures a more complex set of challenges confronting the patent system.").
26 See id. at 2121 ("Patent trolls alone are not the problem; they are a symptom of larger problems with the patent system.").
27 See infra Part II.
28 As an example, take President Obama’s assertion that patent trolls are “just trying to essentially leverage and hijack somebody else’s idea and see if they can extort some money out of them.” Gene Sperling, Taking on Patent Trolls to Protect American Innovation, THE WHITE HOUSE BLOG (June 4, 2013, 1:55 PM), http://www.whitehouse.gov/blog/2013/06/04/taking-patent-trolls-protect-american-innovation. If a patent owner is leveraging “someone else’s idea,” then the patent pre-
This article analyzes the current state of affairs regarding patent reform legislation—some enacted, some not—and the extent to which it addresses the primary problems with the patent system that some patent assertion entities exploit. Part II begins by identifying these primary problems: poor patent quality, problems with patent litigation, and various asymmetries in the patent system. Part III then analyzes the extent to which legislation addresses these three problems. Part IV finally considers whether legislative reform rather than judicial or agency reform is the best avenue to address these problems.

II. Problems with the Patent System that Some Patent Assertion Entities Exploit

Law professors seem to be converging around the idea that patent assertion entities, in and of themselves, are not really the problem, but that there are existing problems with the patent system that some patent assertion entities exploit. In my view, the primary problems some patent assertion entities exploit can be put into three categories: (1) poor patent quality, (2) problems with patent litigation, and (3) various asymmetries. In this Part, I identify and expound upon these problems.

A. Poor Patent Quality

The first problem with the patent system that some patent assertion entities exploit is poor patent quality. One way to think of poor patent quality is the idea that too many patents do not satisfy the existing standards of patentability. There is data, for example, supporting the idea that the patents asserted by patent assertion entities are more likely to be found invalid in court. If the idea is not in the prior art, then the patent owner has the right to exclude its use during the term of the patent. In that sense, at least, it is the patent owner's idea. Thus, President Obama's criticism may relate to patent quality but not on the form of the entity asserting patent rights, or whether it engages in any activity other than asserting patent rights. In the alternative, his criticism may relate to concern for those who do not copy the original inventor's idea but instead independently develop the same technology later.

See generally Christopher A. Cotropia & Mark A. Lemley, Copying in Patent Law, 87 N.C. L. Rev. 1421 (2009) (analyzing the law governing copying and presenting results of a study indicating few patent infringement cases involve copying). If this alternative explanation is correct, the concern relates to information asymmetry. In this article, I address both patent quality and information asymmetry. See infra Parts II.A & II.C.1.

While most criticisms of patent assertion entities relate to their exploitation of these primary problems, some practicing entities also exploit these problems; these problems are not necessarily unique to patent assertion entities.

See Lemley & Melamed, supra note 4, at 2189 (stating that trolls' patents are more likely to be invalidated on prior art grounds).
the existing standards governing eligibility, novelty, non-obviousness, and the enablement, written description, and definiteness requirements. Thus, pursuant to this view both the PTO and the courts too often incorrectly allow patents to issue and remain in force. If this is the problem, of course, then better enforcement of existing standards is the appropriate response. More resources, for example, should be given to the PTO and to courts to enforce existing standards. The PTO should hire better examiners and administrative judges, provide more and better training, allow examiners and administrative judges to spend more time reviewing applications, and provide better procedures to invalidate issued patents. Courts should be given extra funds to hire law clerks to work on patent cases. This critique would also seemingly support increased specialization and expertise of specialized courts.

Another way to think of poor patent quality is the idea that the existing standards of patentability are too lax. According to this second critique, the standards themselves need to change to eliminate more patents. More inventions, for example, should fall within the judicial exceptions for patentability; a claim should identify a greater difference with the prior art to satisfy the non-obviousness requirement; the specification should be required to include more detail to satisfy the enablement and written description requirements; and a claim should be required to include more detail to satisfy the definiteness requirement. This critique supports aggressive modifications to substantive patentability standards by the President and Congress as well as courts with control over the interpretation of these standards—the Federal Circuit and the Supreme Court. Related to this critique is the idea that there are too many patents such that there is a patent thicket. Instead of numerous patents each claiming incremental improvements, say the critics, the patent system would do better with fewer patents claiming blockbuster advances.

B. Problems with Patent Litigation

The second problem is really a collection of problems with patent litigation: uncertainty, a lack of effective disincentives to poor quality patent assertions, excessive cost, and problems with remedies.

32 But see Mark A. Lemley, Rational Ignorance at the Patent Office, 95 NW. U. L. Rev. 1495, 1497 (2001) (“Because so few patents are ever asserted against a competitor, it is much cheaper for society to make detailed validity determinations in those few cases than to invest additional resources examining patents that will never be heard from again.”).


34 McDonough, supra note 9, at 203 (“In the patent thickets, a technology is prone to underuse because of the high costs of licensing resulting from multiple ownership stakes in the same technology.”).

1. Uncertainty

According to Federal Circuit Judge Jay Plager, there is an "endemic problem of uncertainty in law and the judicial decisional process, and particularly in patent law." Uncertainty exists in patent law, in particular, because of the difficulty in drafting clear claims and in predicting how courts will interpret these patent claims to define the scope of the right to exclude; these uncertainties infect the invalidity and infringement analyses. But the level of uncertainty in patent law is high based in part on the Supreme Court's repeated rejection of bright line rules adopted by the Federal Circuit to govern various substantive doctrines, including eligibility, non-obviousness, definiteness, the doctrine of equivalents, and injunctive relief. Moreover, a recent, contributing factor to the current level of uncertainty in patent law is the numerous doctrinal changes to the patent system given recent legislation and Supreme Court cases. This uncertainty raises costs for patent litigants. Some patent assertion entities may take advantage of this uncertainty and cost by targeting potential infringers that are particularly risk averse, including small businesses.

2. Lack of Effective Disincentives to Poor Quality Patent Assertions

Another problem with patent litigation has been the lack of appropriate disincentives to address poor quality patent assertions. Poor quality patent assertions includes the assertion of poor quality patents—patents that are likely invalid—but also the assertion of patent claims that, even if valid, are likely not infringed. The lack of clarity in patent claims and their correct interpretation leads to poor patent assertions, but so has the lack of an effective incentive for patent owners not to adopt a very broad interpretation of a claim in an effort to prove infringement. For example, while broad interpretations increase the risk of invalidation based on the novelty, non-obviousness, enablement and written description requirements, these


37 See David L. Schwartz, The Rise of Contingent Fee Representation in Patent Litigation, 64 Ala. L. Rev. 335, 349 (2012) ("[T]here is a high degree of uncertainty in how the patent claims will be interpreted."). The difficulty of drafting claims likely correlates to the complexity of the underlying technologies.


40 See John M. Golden, The Supreme Court as "Prime Percolator": A Prescription for Appellate Review of Questions in Patent Law, 56 UCLA L. Rev. 657, 657 (2009) ("[I]n recent years, the Supreme Court has spoken repeatedly and forcefully on questions of substantive patent law.").

41 See Chien, supra note 7, at 465.

42 See Schwartz, supra note 37, at 349–50 (noting the uncertainty of claim construction). This lack of clarity, to the extent it correlates to the underlying technologies, may explain why certain technologies experience poor patent assertions more often than other technologies.
defenses must be proven by clear and convincing evidence in litigation.\textsuperscript{43} Moreover, until recently, the Federal Circuit required a district court to find both subjective bad faith and objective reasonableness before finding a case exceptional and awarding fees to the prevailing party in a patent infringement case.\textsuperscript{44} And only in rare cases have courts sanctioned attorneys for bringing frivolous patent infringement claims.\textsuperscript{45} Finally, while risk of fee shifting, sanctions, and reputational concerns might guide the conduct of some patent owners, these concerns matter less when the patent owner is a patent assertion entity created for the sole purpose of owning and enforcing a particular patent or set of patents, it does not have substantial cash or other assets, and its relationship to particular individuals or other companies is opaque. In this situation, the patent assertion entity may be able to avoid any blowback from a patent assertion, let alone a poor quality assertion.

3. Excessive Cost

Another problem with the patent system is the excessive cost of patent litigation.\textsuperscript{46} In effect, this high cost allows for excessive rent seeking by patent owners. Critics cite various causes of the excessive cost.\textsuperscript{47} The technical nature of the litigation, including its need for expert testimony on issues of invalidity and infringement and attorneys with expertise in both law and technology, no doubt contributes to the expense and may be unavoidable. Procedural complexity, including the use of separate claim construction hearings, no doubt also contributes to the expense. One cause of the movement among district courts to adopt fairly complex local patent

\begin{itemize}
  \item Microsoft Corp. v. i4i Ltd. P'ship, 131 S. Ct. 2238, 2242 (2011) (holding that defenses to patent infringement claims must be proved by clear and convincing evidence); \textit{but see generally} David O. Taylor, \textit{Clear but Unconvincing: The Federal Circuit's Invalidity Standard}, 21 \textit{Fordham IP, Media, and Ent. L.J.} 293 (2011) (criticizing this standard).
  \item Brooks Furniture Mfg., Inc. v. Dutailier Int'l, Inc., 393 F.3d 1378, 1381 (Fed. Cir. 2005) (noting that in the absence of misconduct, "exceptional" cases exist only when subjective bad faith and objective reasonableness exist), \textit{abrogated by} Octane Fitness, LLC v. ICON Health & Fitness, Inc., 134 S. Ct. 1749 (2014). The Supreme Court rejected the Federal Circuit's strict rule in favor of requirement that a case be "uncommon," "rare," or "not ordinary" with respect to either the strength of the parties' litigating position or the unreasonable manner in which the case was litigated. \textit{Octane Fitness}, 134 S.Ct. at 1756. This holding created an incentive for a patent owner not to adopt an unreasonably broad interpretation of a claim, at least to the extent the patent owner is not judgment proof.
  \item See, \textit{e.g.}, View Eng'g, Inc. v. Robotic Vision Sys., Inc., 208 F.3d 981, 982 (Fed. Cir. 2000).
  \item Any allegation of excess must identify a point of comparison. In this regard, consider that an empirical study has shown that relative to other litigation, intellectual property litigation is significantly more expensive. \textit{See Emery G. Lee III & Thomas E. Willging, \textit{Fed. Judicial Ctr., Litigation Costs in Civil Cases: Multivariate Analysis} 8 (2010) ("In terms of nature-of-suit categories, Intellectual Property cases had costs almost 62% higher, all else equal, than the baseline 'Other' category."). And, while not comparative, consider a survey of patent litigation practitioners showing that in 2013, even for relatively low-risk patent lawsuits, parties incurred a median total cost of $700,000 in all lawsuits with less than $1 million at risk and a median total cost of $600,000 in lawsuits brought by NPEs with less than $1 million at risk. \textit{Am. Intellectual Prop. Law Ass'n, 2013 Report of The Economic Survey} 34-35 (2013).
  \item See, \textit{e.g.}, Schwartz & Kesan, \textit{supra} note 7, at 448 (noting the high cost of discovery in litigation).
\end{itemize}
rules is to reduce cost associated with disputes over the appropriate procedure for disclosing infringement and invalidity contentions, claim construction positions, and expert reports, but perhaps these procedures are too complex and compliance is too costly.48 Another cause of expense is the complexity of substantive patent law. Consider, for example, that prosecution history estoppel is the exception to the exception to non-infringement, and yet it has its own exceptions.49 As another example, consider that there are no less than fifteen factors relevant to determining a reasonable royalty, and they are still non-exclusive.50 A third example is the complexity of the analysis of so-called means-plus-function limitations.51 The complexity of these substantive patent law doctrines and others also contributes to the need for more expensive work by attorneys, technical experts, and damages experts. Critics also cite excessive discovery costs, including costs associated with electronic discovery, in patent litigation.52 As a result of these costs, critics seek reductions in the cost of patent litigation or low cost alternatives to litigation.

4. Problems with Remedies

Other problems with patent litigation include problems with its remedies. The law currently, for example, does not ensure that reasonable royalties—the main remedy patent assertion entities seek—reflect only the value of the patented technology rather than the value of the ability to impose risk of liability, negotiation costs, and litigation costs on accused infringers.53 Likewise, it is seen as problematic if courts grant patent owners injunctions that prohibit the use of entire devices

48 N.D. ILL. LPR Preamble (stating in the Preamble of the Local Patent Rules that the rules are intended to "provide a standard structure for patent cases that will permit greater predictability and planning for the Court and the litigants" by "eliminate[ing] the need for litigants and judges to address separately in each case procedural issues that tend to recur in the vast majority of patent cases"); Megan M. La Belle, The Local Rules of Patent Procedure, 46 Az. St. L.J. (forthcoming 2015) (discussing the reasons for the creation of the first local patent rules in the Northern District of California as reducing cost and delay and describing the Eastern District of Texas local patent rules as requiring defendants to "conduct extensive discovery quickly and expensively or settle the case").

49 See Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co., 535 U.S. 722, 740 (2002) (explaining that "[t]here are some cases, however, where the amendment cannot reasonably be viewed as surrendering a particular equivalent," an explanation which introduces exceptions to prosecution history estoppel, which is an exception to infringement under the doctrine of equivalents, which is an exception to non-infringement under the requirement of literal infringement).


52 See Bessen & Meurer, supra note 7, at 402 ("[E]scalation in patent-litigation costs . . . [is due to] the growth in electronic discovery in the past decade").

53 Taylor, supra note 13, at 116 ("[V]aluation of patented technology does not include any discounts associated with the risk of liability, relief, or enforcement. Nor does it include any discounts associated with disproportionate costs of patent litigation.").
when only particular components of those devices infringe.\textsuperscript{54} In both ways, the patent system may be giving patent owners too much of a reward for the infringement of their patents.\textsuperscript{55} And given that patent licensing occurs in view of the remedies that a patent owner receives or can expect to receive in patent litigation, these problems may infect licensing agreements.\textsuperscript{56} Mark Lemley and Carl Shapiro have made the case, not without dispute, that this is so—that hold up and royalty stacking have inflated both negotiated and court-awarded royalties.\textsuperscript{57}

C. Various Asymmetries

The third problem is really a group of problems related to the patent system’s asymmetries: information asymmetry, cost asymmetry, and risk asymmetry.

1. Information Asymmetry

There are two goals commonly associated with the patent system: to encourage invention and to disseminate information regarding inventions.\textsuperscript{58} The patent system is not, at least directly, meeting its goal of disseminating information regarding inventions if engineers and scientists purposely avoid reading patents.\textsuperscript{59} Yet

\textsuperscript{54} See, e.g., Apple Inc. v. Samsung Elecs. Co., 735 F.3d 1352, 1372 (Fed. Cir. 2013) (expressing approval of the district court’s concern that “entire products would be enjoined based on ‘limited non-core features’”); eBay Inc. v. MercExchange, L.L.C., 547 U.S. 388, 396–97 (2006) (Kennedy, J., concurring) (“When the patented invention is but a small component of the product the companies seek to produce and the threat of an injunction is employed simply for undue leverage in negotiations, legal damages may well be sufficient to compensate for the infringement and an injunction may not serve the public interest.”).

\textsuperscript{55} See id.

\textsuperscript{56} Mark A. Lemley & Carl Shapiro, \textit{Patent Holdup and Royalty Stacking}, 85 Tex. L. Rev. 1991, 1993, 2021–22 (2007); eBay, 547 U.S. at 396 (Kennedy, J., concurring) (“[A]n injunction, and the potentially serious sanctions arising from its violation, can be employed as a bargaining tool to charge exorbitant fees to companies that seek to buy licenses to practice the patent.”).


\textsuperscript{58} Craig Allen Nard, \textit{The Law of Patents} 3 (3d ed. 2013) (“[P]atent law can be viewed as an incentive-based system of laws that offers a potential financial reward as an inducement to invent, to disclose technical information, to invest capital in the innovation process, and to facilitate efficient use and manufacturing of invention through licensing.”); Bilski v. Kappos, 561 U.S. 593, 648–53 (2010) (recognizing the goals of encouraging innovation and disseminating information about inventions).

\textsuperscript{59} I say directly because if it is true that the filing of a patent application frees inventors to make other public disclosures about their inventions—and those inventors would not otherwise make those public disclosures—then in an indirect way the patent system is reaching the goal of dissemination of information regarding inventions. See Jason Rantanen, \textit{Peripheral Disclosure}, 74 U. Pitt. L. Rev. 1, 21–34 (2012) (describing examples of ways inventors may disclose their technology only after filing a patent application).
that is what some engineers and scientists reportedly do.60 The problem that the patent system has not solved is how to disseminate effectively information regarding inventions—and the fact that they are patented—from inventors to potential users; this is information asymmetry. Certainly the purpose of the enablement and written description requirements is to increase the quality of the disclosure.61 Furthermore, the marking requirement encourages constructive notice of at least some types of patents (system but not method patents) with respect to at least some patent owners (those who practice patented technologies or license others to do so).62 But these requirements do not provide a mechanism of dissemination. In terms of the existing mechanism, the PTO now as a default rule publishes patent applications eighteen months after filing in addition to publishing patents when they issue, and it provides search capabilities in person at the PTO and on the PTO's website.63 Furthermore, the PTO maintains a searchable database of assignment records.64

Beyond this, the PTO has provided its core databases to Google, and Google has created its own web interface and its own searching capabilities.65 Nevertheless, it is a continuing concern that information regarding inventions fails to reach other potential inventors and users of technology; this failure results in unnecessary and inefficient redundant invention,66 as well as so-called inadvertent infringement and litigation rather than licensing.67 The former, redundant invention, is caused by ex ante information asymmetry: the failure of information exchange and the result-

61 See Rantanen, supra note 59, at 6 (“Underlying conventional disclosure theory is the idea that patent law promotes information dissemination by forcing inventors to reveal the technological underpinnings of their inventions, a function it achieves through the requirements of enablement, written description, and best mode.”).
62 See Am. Med. Sys., Inc. v. Med. Eng’g Corp., 6 F.3d 1523, 1538 (Fed. Cir. 1993) (“The purpose of the constructive notice provision is to give patentees the proper incentive to mark their products and thus place the world on notice of the existence of the patent.”) (internal quotation marks omitted).
63 35 U.S.C. § 122(b) (2013) (“Each application for a patent shall be published, in accordance with procedures determined by the Director, promptly after the expiration of a period of 18 months from the earliest filing date for which a benefit is sought under this title.”); see also Search for Patents, USPTO.GOV, http://www.uspto.gov/patents-application-process/search-patents (last modified Feb. 3, 2015) (providing access to searchable databases along with search guidance).
64 Assignment Search, USPTO.GOV, http://assignment.uspto.gov (last visited Feb. 12, 2015) (providing all recorded assignment information since August 1980). Notably, the underlying law does not require the owners of patent rights to record their rights, even though it provides incentives to those that do. See 35 U.S.C. § 261 (2013) (“An interest that constitutes an assignment, grant or conveyance shall be void as against any subsequent purchaser or mortgagee for a valuable consideration, without notice, unless it is recorded in the Patent and Trademark Office . . . .”).
ing imbalance of information between original inventors and later inventors and users before re-invention or use of the patented technology begins. The latter, inadvertent infringement and litigation, rather than licensing, is caused by ex post information asymmetry: the failure of information exchange and the resulting imbalance of information between original inventors and later inventors and users even after re-invention or use of the patented technology begins.68

2. Cost Asymmetry

Patent litigation is, generally speaking, more expensive for accused infringers than patent owners. In terms of who bears the costs, typically accused infringers themselves bear the cost of paying attorneys to represent them by the hour, while patent owners may be able to avoid bearing the upfront cost of attorney's fees using contingent fee arrangements.69 In terms of the costs of discovery, accused infringers must always collect documents from engineers, scientists, and business representatives associated with the accused product or service, and this collection may be substantial depending on the number of document custodians. By contrast, while patent owners must always collect relevant documents from inventors and representatives that sought to license or enforce the patents, they probably need to collect documents from engineers, scientists, and business representatives only if they are arguably practicing their own patented technology. Thus, the cost asymmetry between an accused infringer and a patent owner is more pronounced when the patent owner is a patent assertion entity. In terms of the analysis required to be performed, accused infringers must, for example, scour the earth for prior art to the claimed invention and prepare invalidity contentions related to each piece of prior art to meet their burden to prove invalidity by clear and convincing evidence, while patent owners by comparison need only review technical documentation collected by accused infringers, depose the responsible engineers and scientists, and prepare one set of infringement contentions for each accused product or service to meet their burden to prove infringement by a preponderance of the evidence. While this cost asymmetry is an aspect of patent litigation that can be exploited by patent owners, including patent assertion entities, it is not necessarily an inherent problem.

68 Some relate information asymmetry to problems with notice. Bessen & Meurer, supra note 7, at 393–94 ("For most other inventions, especially software and business methods, notice failure means that innovative firms are targeted in patent infringement suits through no fault of their own."). But in patent law, notice typically refers to notice of existing infringement. See, e.g., Funai Elec. Co. v. Daewoo Elecs. Corp., 616 F.3d 1357, 1373 (Fed. Cir. 2010) (analyzing whether a letter provided notice of infringement). As a result, as it is commonly understood in patent law, notice relates only to what I call ex post information asymmetry.

69 See Lemley & Melamed, supra note 4, at 2163 (noting that patent infringement suits brought on a contingency fee basis often result in lower litigation faults for the patent holder than the accused infringer); see also Schwartz, supra note 37, at 343–44 (describing contingent lawyers as "venture capitalist[s]") who improve access to the legal system by lowering the cost of infringement litigation).
3. Risk Asymmetry

Risk asymmetry is another aspect of patent litigation that, like cost asymmetry, can be exploited by patent owners but is not necessarily an inherent problem. Patent litigation is, of course, risky. Consider, first, patent owners’ risk. Patent owners risk a judgment that the asserted patents are invalid, not infringed, or unenforceable—judgments that affect the patent owners’ ability to obtain cash in the future. Even if the patent owner has already licensed the asserted patents and therefore has an income stream, such a judgment typically does not require a patent owner to reimburse its licensees for past payments. Such a judgment would merely prevent the patent owner from obtaining future royalty payments from those licensees, plus past damages and future royalty payments from the accused infringer. Furthermore, even if the patent owner practices its patented technology, this judgment would merely increase competition and decrease its profitability in the future. In other words, the patent owner in these situations does not have to pay a dime out of pocket, absent the extreme case where a judge finds the case exceptional or frivolous. Now consider the risk borne by accused infringers. Accused infringers risk a judgment that the asserted patents are not invalid, infringed, and enforceable. These judgments may lead to orders to pay the patent owner lost profits or reasonable royalties and to discontinue profitable sales or uses of products and services. In other words, the accused infringer is risking a judgment that will cause it to pay money out of pocket and lose profit in the future. In short, the risk of a short-term cash emergency is much more significant for accused infringers rather than patent owners. And this risk is particularly acute when the accused infringer is an individual or small business. As with cost, the difference in risk between patent owners and accused infringers is more significant if the patent owners are non-practicing entities, such as patent assertion entities, as compared to practicing entities. As already mentioned, patent owners that are practicing entities face the added risk of increased competition and decreased profitability in the future; patent assertion entities do not bear any such risk. Likewise, patent owners that are practicing entities also face the risk of counterclaims of patent infringement; non-practicing entities by definition do not face such risk because they do not make products or provide services.

III. Legislative Responses to the Patent System’s Problems

Congress as well as state legislatures have considered and enacted legislation in the last few years targeting the patent system and patent assertion entities’ exploitation of problems with it. In this Part, I survey this recent patent reform legislation, considering the extent to which it addresses the three primary problems that I have identified that some patent assertion entities exploit.

70 See Chien, supra note 7, at 473 (explaining the “strained settlement dynamic” that startups experience, which has caused at least one startup to give equity in its company to settle a claim brought by a patent assertion entity).
A. The America Invents Act

The first piece of legislation worthy of consideration is one that Congress enacted in 2011, the Leahy-Smith America Invents Act (AIA). As I will show, various aspects of the AIA addressed poor patent quality, at least indirectly some of the problems associated with patent litigation, and the asymmetries related to cost and risk. The AIA did not, however, in any significant degree address the information asymmetry in the patent system, and it only in a few respects directly addressed the problems with patent litigation.

1. Patent Quality

The most extensive revisions to the patent statute made by the AIA arguably relate to the shift from a first-to-invent paradigm to a first-inventor-to-file paradigm. These revisions, however, did little to improve patent quality. Rather, they attempted to bring U.S. patent law more in line with foreign patent systems by focusing entitlement to a patent more closely on identifying the first to file a patent application rather than the first to invent, even though the retention of a one-year grace period ensures that U.S. patent law is still unique compared to these foreign patent systems. Likewise, other revisions are probably neutral regarding patent quality.

Other provisions of the AIA, however, hold great potential to improve patent quality. The most significant of the provisions affecting patent quality relate to the revision of old procedures and the creation of new procedures governing the review of issued patents. In particular, the transitional program for business method patents, inter partes review, and post-grant review all seek to ensure that the patents the PTO issues comply with existing standards of patentability. These proceedings provide opportunities for the Patent and Trademark Office, and in particular its newly-named and expanded Patent Trial and Appeal Board (PTAB), to reconsider the patentability of issued patents, and the PTO has seized these op-

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72 Id. §§ 2, 3.
73 Id. § 3 (grace period codified at 35 U.S.C. § 102(b)(1) (2013)); Peter Lee, Patents and the University, 63 DUKE L.J. 1, 69 (2013) ("The retention of a one-year grace period is rather unique to the United States; many other jurisdictions have an 'absolute novelty' regime in which any public disclosure of an invention prior to filing a patent application destroys novelty.").
74 See, e.g., America Invents Act § 18.
75 See, e.g., Id. §§ 9 (venue), 17 (advice of counsel), 19 (jurisdiction and procedural matters), 25 (priority examination for important technologies).
76 Id. § 18.
77 Id. § 6.
78 Id. § 7.
opportunities to invalidate most claims it has been presented. Commenting on this development, the then-Chief Judge of the Federal Circuit called these new PTAB panels “death squads, killing property rights.”

Parts of the AIA also changed other procedures at the PTO, which may also impact patent quality. Allowing third parties to submit prior art to examiners during the original examination of a patent application, for example, may increase the ability of examiners to identify the best prior art to compare to the claims in pending patent applications. Likewise, to the extent the AIA ensures that the PTO does not have its funds diverted to other government initiatives (what is called fee diversion), the PTO may use these funds to ensure quality examination of pending patent applications.

While these aspects of the AIA hold the potential to improve patent quality, what cannot be ignored is the fact that little, if anything, in the AIA changed substantive patent law in an effort to improve patent quality. For example, the AIA did not tighten the non-obviousness requirement or increase any of the disclosure requirements. And it is important at least to recognize that other revisions may hurt patent quality. The elimination of the ability to allege a violation of the best mode requirement in litigation, for example, takes the teeth out of the requirement; it seems unlikely that the PTO will obtain information related to potential existing and undisclosed best modes in anything other than exceptional circumstances. The PTO will now rely mainly on practitioners complying with their ethical obligation to disclose this information, whereas accused infringers in litigation had the ability to obtain discovery related to potential violations of the best mode requirement. Likewise, to the extent the new law is interpreted to eliminate the potential prior art status of secret commercial uses by patent applicants, the AIA permits the patent-

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79 See, e.g., Brian J. Love & Shawn Ambwani, Inter Partes Review: An Early Look at the Numbers, 81 U. Chi. L. Rev. Dialogue 93, 101–02 (noting that in inter partes review proceedings decided on the merits, 77.5 percent of instituted claims were either invalidated or claimed).
81 America Invents Act § 8.
82 Id. § 22.
83 Id. § 18.
84 Id. § 15.
85 See Kimberly-Clark Worldwide, Inc. v. First Quality Baby Prods., LLC, 911 F. Supp. 2d 800, 805 (E.D. Wis. 2012) (acknowledging a party’s argument that under the America Invents Act secret commercial uses are no longer prior art but declining to analyze the argument as the updated statutory language was not yet in effect); Mark A. Lemley, Does “Public Use” Mean the Same Thing It Did Last Year? 2 (Stanford Law Sch. Pub. Law & Legal Theory, Working Paper No. 2394153), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2394153 (“Under this interpretation of the new law, an inventor can use its process in secret for commercial purposes, potentially forever, and still file a patent on that invention at some point in the future.”).
ing of inventions long after their creation without encouraging public disclosure shortly after their first commercial use, contrary to the incentive-based public disclosure justification for extending patent protection. Thus, in terms of patent quality, the AIA may effectively permit patents to issue on old inventions.

2. Problems with Patent Litigation

Now consider the extent to which the AIA addressed problems with patent litigation. On the one hand, little of the AIA directly addressed problems with patent litigation, and those that did arguably have little impact. The legislative fix to the statutory provision governing the jurisdiction of the Federal Circuit, for example, affects few cases, even if it did solidify the role of the Federal Circuit as the exclusive intermediate appellate court in the United States to hear appeals from judgments of claims of patent infringement. And even if the new statutory provision governing joinder of accused infringers provided certainty given a prior split of authority regarding the proper interpretation of Rule 20 of the Federal Rules of Civil Procedure, that new provision largely proved unnecessary and even misguided given a subsequent interpretation of Rule 20 by the Federal Circuit. Moreover, while the new provision forces patent owners to sue unrelated accused infringers in separate cases and this may reduce cost for some individual defendants who no longer find themselves embroiled in a lawsuit with numerous other defendants, it may increase cost for some accused infringers. It has spawned motion practice related to joinder and transfer—procedural rather than substantive issues that alone will not excuse alleged infringement. On the other hand, this new provision restricting joinder may have succeeded in increasing the disincentive for poor quality assertions by allowing accused infringers to each have their shot at proving the asserted patent is invalid and not infringed in separate trials. But the impact of this provision on cost and incentives for filing questionable cases seems marginal at

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85 Lemley, supra note 84, at 2 ("Far from encouraging disclosure, on this interpretation the effect of the AIA is to encourage secrecy and delay in patenting."); Mark A. Lemley, The Myth of the Sole Inventor, 110 Mich. L. Rev. 709, 745–49 (2012) (discussing disclosure as a traditional justification for the patent system).

86America Invents Act § 19 (amending 28 U.S.C. § 1295(a)(1) to ensure the Federal Circuit has jurisdiction over appeals from cases involving compulsory counterclaims of patent infringement and abrogating Holmes Grp., Inc. v. Vornado Air Circulation Sys., Inc., 535 U.S. 826 (2002)).


89 Id. at 657 n.15 (highlighting the decision in In re EMC Corp., 677 F.3d 1351 (Fed. Cir. 2012), where the Federal Circuit concluded that “joinder is not appropriate where different products or processes are involved”).

90 See id. at 689 (noting that the varied interpretations of Rule 20 cause uncertain and costly motion practice).

91 Cf. WiAV Networks, LLC v. 3Com Corp., No. C 10-03448 WHA, 2010 WL 3895047, at *2 (N.D. Cal. Oct. 1, 2010) (applying prior law and emphasizing that accused infringers have “competing interests and strategies” and so should be “entitled to present individualized assaults on questions of non-infringement, invalidity, and claim construction”).
best. And nothing in the AIA impacts remedies in patent infringement cases. In short, there is little in the AIA directly improving patent litigation in any substantial way.

Yet the AIA may be understood as addressing at least some of the problems associated with patent litigation by creating (or improving) alternatives to it. The new review proceedings and the related provisions, at least to the extent they result in stays of patent litigation, indirectly impact both the lack of disincentives to poor quality assertions and the excessive cost of litigation, even if they do not increase certainty or impact the law governing remedies. And they may have significant impact.

These review procedures provide disincentives to poor quality assertions for at least three reasons. First, they do so because the PTAB applies the broadest reasonable interpretation of the claims rather than the narrower interpretation a court would apply. Second, they do so because the PTAB applies a preponderance burden of proof rather than the clear and convincing burden of proof required to invalidate claims in litigation. Third, these procedures will provide disincentives to poor quality assertions if in practice there is an increased ability to stay infringement litigation in favor of these proceedings. As a result of these factors, these proceedings put a finger on the scale in favor of accused infringers on the matter of invalidity. They limit the ability of patent owners to adopt broad interpretations of their patents for purposes of proving infringement; assertion of a poor quality patent or a broad interpretation of a patent for purposes of an infringement analysis may come back to bite the patent owner more often because these proceedings favor the accused infringer as compared to litigation and these proceedings may be used in the alternative to litigation.

These proceedings also may reduce the cost of patent litigation, in some cases substantially. To the extent that courts do not permit these proceedings to duplicate litigation, but instead allow these proceedings to resolve disputes regarding invalidity (a crucial question), they will reduce cost because these proceedings are cheaper to navigate compared to infringement litigation in court. In this regard, the Federal Circuit has ordered the Eastern District of Texas to stay litigation in favor of a covered business method review proceeding. The statute, however, does not provide

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92 See America Invents Act § 6.
93 See, e.g., id. § 6 (provision regarding stay of civil action pending post-grant review codified at 35 U.S.C. § 325(a)(2)).
94 In re Cuozzo Speed Techs., LLC, 778 F.3d 1271, 1281 (Fed. Cir. 2015) (“We conclude that Congress implicitly adopted the broadest reasonable interpretation standard in enacting the AIA.”).
95 35 U.S.C. § 316(e) (2013) (“In an inter partes review instituted under this chapter, the petitioner shall have the burden of proving a proposition of unpatentability by a preponderance of the evidence.”).
96 See, e.g., VirtualAgility Inc. v. Salesforce.com, Inc., 759 F.3d 1307, 1320 (Fed. Cir. 2014) (holding that a district court abused its discretion when it denied a stay pending covered business method review).
97 See id.
an accused infringer with a clear right to a stay of infringement litigation in favor of these procedures. To the extent courts stay litigation in favor of, for example inter partes review, savings may be substantial; reports indicate that inter partes review costs substantially less than litigation. This no doubt is at least in part due to reduced discovery and the accelerated timeline Congress imposed on the PTAB to resolve these proceedings.

3. Asymmetries

Of the three asymmetries that some patent assertion entities exploit—information, cost, and risk asymmetries—the AIA impacts two, cost and risk. Considering cost, as discussed above the AIA provides review procedures available to challenge the validity of issued patents rather than patent litigation. In these proceedings, costs to patent owners and accused infringers may be more equal given the relative absence of discovery costs. Attorneys on a contingency basis may still represent patent assertion entities, and accused infringers still have the increased costs associated with locating prior art. Furthermore, there is still cost asymmetry in patent litigation, if litigation cannot be avoided or stayed. So cost asymmetry still exists. Considering risk, as discussed above the PTAB applies the broadest reasonable interpretation of the claims rather than the interpretation a court would apply, and furthermore the PTAB applies a preponderance burden of proof rather than the clear and convincing burden of proof required to invalidate claims in litigation. These differences substantially increase the risk of invalidity borne by a patent owner in one of the modified or new proceedings where the patentability of issued patents is reconsidered.

B. State Legislation Regarding Bad Faith Patent Licensing

As shown, the AIA impacted all three of the primary problems with the patent system that some patent assertion entities exploit. It directly addressed poor patent

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98 In 2012, the PTO estimated the average cost of patent litigation to be $2.769 million where the damages fell between $1 million and $25 million. Rules of Practice for Trials Before the Patent Trial and Appeal Board and Judicial Review of Patent Trial and Appeal Board Decisions, 77 Fed. Reg. 6879, 6903 (Feb. 9, 2012) (to be codified at 37 C.F.R. pts. 42, 90) (citing the AIPLA Report of the Economic Survey 2011). In contrast, the USPTO estimated that preparing a petition for inter partes review would cost just $46,000, plus a fee (now lowered) of $27,200. Id. at 6896. If instituted, the inter partes trial proceeding was estimated to cost about $193,000 (60 percent of the reported cost of other contested proceedings). Id. at 6905.

99 See 35 U.S.C. § 316(a)(5) ("[D]iscovery shall be limited to—(A) the deposition of witnesses submitting affidavits or declarations; and (B) what is otherwise necessary in the interest of justice; . . . .").

100 Id. § 316(a)(11) (requiring that the final determination in an inter partes review be issued within 1 year of institution or within 18 months for good cause).

101 In re Cuozzo Speed Techs., LLC, 778 F.3d 1271, 1281 (Fed. Cir. 2015) (concluding that for inter partes review proceedings "Congress implicitly adopted the broadest reasonable interpretation standard in enacting the AIA").

102 35 U.S.C. § 316(e) ("In an inter partes review instituted under this chapter, the petitioner shall have the burden of proving a proposition of unpatentability by a preponderance of the evidence.").
quality by focusing on the procedure used to analyze patentability. It did not directly address the problems with patent litigation, but nevertheless impacted some of them, albeit insubstantially. And it impacted the cost and risk asymmetries, but not the information asymmetry in the patent system.

As it turns out, state legislation has focused on information asymmetry, at least the ex post variety. Various states have enacted legislation in the past two years to address bad faith patent licensing practices. As of this writing, eighteen states have done so: Alabama, Georgia, Idaho, Illinois, Louisiana, Maine, Maryland, Missouri, New Hampshire, North Carolina, Oklahoma, Oregon, South Dakota, Tennessee, Utah, Virginia, Vermont, and Wisconsin. These laws do not improve the quality of patents, eliminate problems associated with patent litigation, or significantly impact ex ante information asymmetry or risk asymmetry. Instead, these new laws target the patent system’s ex post information asymmetry: the failure of information exchange and the resulting imbalance of information between original inventors and later inventors and users after re-invention or use of the patented technology begins. The effort to correct ex post information asymmetry, moreover, has the effect of reducing cost asymmetry.

Consider, as one example, Vermont’s new consumer protection statute directed to patent licensing practices. Vermont, which was the first state to enact such a law, enacted the new law in part “to help its businesses avoid [litigation] costs by encouraging the most efficient resolution of patent infringement claims.” The legislation explains in more detail:

In order for Vermont companies to be able to respond promptly and efficiently to patent infringement assertions against them, it is necessary that they receive specific information regarding how their product, service, or technology may have infringed the patent at issue. Receiving such information at an early stage will facilitate the resolution of claims and lessen the burden of potential litigation on Vermont companies.

In this language, Vermont made it clear that it enacted its law to improve the amount and quality of the information patent owners provide potential infringers when patent owners seek to license their contracts prior to litigation.

Vermont’s law seeks to provide these benefits, first, by broadly outlawing “bad faith assertion[s] of patent infringement.” Second, it lists factors that a “court may consider... as evidence that a person has made a bad faith assertion of patent infringement.” These factors include whether the demand letter contains certain information: “(A) the patent number; (B) the name and address of the patent owner or owners and assignee or assignees, if any; and (C) factual allegations concerning

104 See generally VT. STAT. ANN. tit. 9, §§ 4195-4199 (2013).
105 Id. § 4195(a)(4).
106 Id. § 4195(a)(5).
107 Id. § 4197(a).
108 Id. § 4197(b).
the specific areas in which the target’s products, services, and technology infringe the patent or are covered by the claims in the patent.” The statute makes it clear that a court may consider the disclosure of this information as evidence that a patent owner has not made a bad faith assertion of patent infringement. Thus, Vermont’s statute seeks to ensure the disclosure of information that may be useful to resolve disputes over liability for infringement short of litigation and its expense. In this way, the statute levels the playing field between patent owners and accused infringers with respect to information that may be helpful to resolve disputes, which holds the potential to level the playing field with respect to cost.

C. The Innovation Act

Given the AIA, the new state laws governing bad faith patent licensing, and collectively their direct impact on (1) patent quality, (2) on some of the problems with patent litigation, and (3) on all three asymmetries in the patent system, the questions that come to mind are “what is left to fix?” and “what more can and should be done?” The glaring omission of these previous attempts to reform the patent system is any direct attempt to solve the problems with patent litigation. Moreover, little in these prior efforts at reform have impacted ex ante information asymmetry. With these omissions in mind, consider the Innovation Act.

Congress first attempted to pass the Innovation Act in its last term, and it will do so again in its current term. While there were multiple proposals put forward last term by different groups and members of Congress, the Innovation Act actually passed the House of Representatives in 2014. It stalled, however, in the Senate. Nevertheless, the legislation is not dead. On February 5, 2015, Representative Goodlatte reintroduced the Innovation Act. Given that when the legislation passed the House of Representatives in the previous Congress it did so with bipartisan support, there is good reason to think that it will pass the House again this term. There are also indications that the Senate may be interested in passing it (or a

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109 Id. § 4197(b)(1).
110 VT. STAT. ANN. tit. 9, § 4197(c)(1).
115 H.R.3309 - Innovation Act, supra note 112.
modified version of it) this term. Thus, it is important to consider how the Innovation Act would address the three primary problems with the patent system.

1. Patent Quality

The Innovation Act would not directly impact patent quality other than changes in a section of the Innovation Act described as improvements or technical corrections to the AIA. The first change impacting patent quality would make post-grant review more attractive to challengers. It would limit the preclusive effect of post-grant review to future cases where the challenger attempts to argue that a claim is invalid on any ground that the challenger actually raised during the post-grant review. The Innovation Act would eliminate the current, broader preclusive effect of post-grant review that prohibits a challenger from challenging validity in court on any ground that the challenger reasonably could have raised during that review. Thus, this first change would modify a procedure that has impact on whether parties would utilize post-grant review to ensure that patents comply with the requirements of the Patent Act.

The second change impacting patent quality would actually reduce the ability of post-grant review and inter partes review to invalidate issued patents. It would do so by requiring the PTAB to conduct these review proceedings using the claim construction that a court would use by "construing each claim of the patent in accordance with the ordinary and customary meaning of such claim as understood by one of ordinary skill in the art and the prosecution history pertaining to the patent," rather than using the broadest reasonable construction. This change therefore makes it more difficult for the PTAB to conclude that a patent claim is invalid because the claim will be less likely to cover prior art or come as close to covering prior art, and the claim will also be less susceptible to invalidation based on the enablement and written description requirements given its narrower breadth.

The third change affecting patent quality would be the expansion of the transitional post-grant review proceeding for covered business method patents. The Innovation Act would expand the categories of prior art that could be presented in one of these proceedings beyond prior art that qualifies under the pre-AIA 35 U.S.C. § 102(a) to also encompass prior art that qualifies under the pre-AIA 35 U.S.C. § 102(e), which in effect would allow patents and patent applications to qualify as

116 Dustin Volz, Casting Blame on Harry Reid, John Cornyn Charts Path Forward on Patent Reform, NATIONAL JOURNAL (JAN. 29, 2015), http://www.nationaljournal.com/tech/casting-blame-on-harry-reid-john-cornyn-charts-path-forward-on-patent-reform-20150129 (noting Senate Majority Whip John Cornyn's statement that Majority Leader Mitch McConnell is "anxious to give this subject floor time once it is voted out of committee").


119 Id. § 9(b)(1).

120 See In re Cuozzo Speed Techs., LLC, 778 F.3d 1271, 1281 (Fed. Cir. 2015).
prior art using their filing dates rather than their later publication dates. This change would therefore expand the universe of prior art available to invalidate claims; the ability to challenge covered business method patents on additional invalidity grounds would increase the quality of the patents that survive this transitional program.

A fourth change impacting patent quality is the codification of the non-statutory obviousness-type double-patenting doctrine for patents subject to the first-inventor-to-file provisions of the AIA. The codification of this doctrine would ensure that multiple patents covering nearly the same technology are held by one entity rather than multiple entities, addressing to at least some degree the concern with disaggregation of patent rights and resulting patent thickets, which may be considered to be a problem with patent quality.

The only other provisions related to patent quality relate to studies the Innovation Act would require. One would require the Comptroller General of the United States to "conduct a study on patent examination at the Office and the technologies available to improve examination and improve patent quality." Another would require the Comptroller to study "the volume and nature of litigation involving business method patents," focusing on "examining the quality of business method patents asserted in suits alleging patent infringement."

2. Problems with Patent Litigation

Rather than focus on changes impacting patent quality, the Innovation Act primarily seeks to address two of the four problems with patent litigation: the lack of disincentives to poor quality patent assertions and the high cost of patent litigation. It does not address problems with uncertainty and remedies. As a result, none of the recent legislation (the AIA, state laws governing patent licensing, and the Innovation Act) addresses these problems.

First, the Innovation Act addresses the lack of appropriate disincentives to poor quality patent assertions by effectively reversing the current approach to fee shifting in patent litigation. Currently, 35 U.S.C. § 285 grants district courts discretion to shift fees in exceptional cases. The Innovation Act would effectively flip this rule on its head and require courts to award attorney’s fees absent mitigating circumstances. The new test would require a court to shift fees “unless the court finds that the position and conduct of the nonprevailing party or parties were reasonably justified in law and fact or that special circumstances (such as severe economic hardship to a named inventor) make an award unjust.” In effect, rather than presume that

123 Id.
124 Lemley & Melamed, supra note 4, at 2121.
125 H.R. 3309, § 8.
126 Id.
127 Id. § 3.
fees should not shift to prevailing parties, courts would be required to presume that fees should shift to prevailing parties. The current approach is consistent with the American rule, which requires parties bringing lawsuits—even prevailing plaintiffs—to bear their own attorney’s fees. The Innovation Act represents a step in the direction of the English rule, requiring losing parties to pay the prevailing party’s attorney’s fees. Moreover, the Innovation Act seeks to give teeth to fee shifting—and thus to the disincentive to bring poor quality patent assertions—by requiring that courts grant motions to join interested parties if a prevailing party shows that the losing party “has no substantial interest in the subject matter at issue other than asserting such patent claim in litigation,” with some exceptions. To the extent interested parties become parties to the lawsuit and subject to the risk associated with fee shifting, including not just the monetary impact but also the reputational damage associated with a court ordering it to pay for a poor quality assertion, these interested parties should be less inclined to support poor quality assertions.

Second, the Innovation Act seeks to reduce the cost of patent litigation in several ways. It seeks to do so, first, by severely limiting discovery prior to resolution of disputes over claim construction. In the words of the Innovation Act, “if the court determines that a ruling relating to the construction of terms used in a patent claim asserted in the complaint is required, discovery shall be limited, until such ruling is issued, to information necessary for the court to determine the meaning of the terms used in the patent claim.” The Innovation Act goes on to identify exceptions to this basic rule, situations where timely resolution necessarily affects the rights of the parties, situations where resolving a motion filed before a ruling on claim construction is necessary to prevent manifest injustice, situations where a competitor seeks a preliminary injunction, and situations where the parties agree to waive the restriction on discovery.

More fundamentally, the Innovation Act would require the Judicial Conference of the United States to develop rules and procedures to address specific issues and to implement specific proposals identified by Congress “to address the asymmetries in discovery burdens and costs” in patent litigation. The issues and proposals relate to restricting the ability to obtain documentary evidence, shifting the cost of discovery to the party seeking it, limiting discovery of electronic communications, providing clear rules regarding the extent of discovery of electronic communications, and effectively eliminating discovery in many cases beyond “core documentary evidence” given the requirements to pay not only the costs but also the attorney’s fees of the party producing the additional documents and to post a bond to

128 Id.
129 Id. The exceptions relate to service, jurisdiction, venue, notice, and situations where the interested party renounces its interest. Id.
130 Id.
131 H.R. 3309, § 3.
132 Id. § 6.
ensure payment absent good cause to modify these requirements.133 If the Innovation Act passes and the Judicial Conference develops these rules and procedures, to a large extent they will result in common local rules governing patent litigation.134 That, indeed, appears to be the goal of the Innovation Act.135 In addition, the Judicial Conference would be required to develop case management procedures to expedite disposition of cases.136

Beyond these attempts to improve patent litigation by reducing poor quality assertions and discovery costs, the Innovation Act, like the AIA, points in the direction of an alternative to patent litigation. In particular, the Innovation Act would require the Director of the Administrative Office of the U.S. Courts to “examine the idea of developing a pilot program for patent small claims procedures in certain judicial districts within the existing patent pilot program.”137 Presumably this alternative to traditional litigation would substantially limit cost by, among other things, limiting discovery.

3. Asymmetries

Beyond technical corrections to the AIA that would impact patent quality and other provisions that would address two of the four significant problems with patent litigation, the Innovation Act also addresses the asymmetries in the patent system.

a. Ex ante information asymmetry

The Innovation Act would impact ex ante information asymmetry. The Innovation Act would not only require most parties asserting infringement to disclose information regarding the assignee, interested parties, and their parent entities to the accused infringer, but it also would require this information to be sent to the PTO.138 Moreover, the Innovation Act would require certain information to be exchanged when the party asserting infringement is not a publicly traded entity, where that information would include the names and contact information of interested individuals.139 The PTO would be required to put this information, as well as other information about the lawsuit, the parties, and the asserted patents, on its website.140 In addition, the Innovation Act would require the PTO to study additional ways “to ensure greater transparency and accountability in patent transactions occurring on the

133 Id.
134 See La Belle, supra note 48 (arguing in favor of national patent procedural rules).
135 H.R. 3309, § 6 ("Not later than 6 months after the date on which the Judicial Conference has developed the rules and procedures required by this subsection, each United States district court and the United States Court of Federal Claims shall revise the applicable local rules for such court to implement such rules and procedures.").
136 Id.
137 Id. § 8.
138 Id. § 4. The Act, furthermore, requires that this information be updated within 90 days of the transfer of rights in the patents, with particular penalties related to fees and enhanced damages if the information is not kept up to date. Id.
139 Id.
140 Id. § 7.
secondary market.” The idea behind all of these changes is that the availability of this information to the public would allow for potential users of technology to seek to license the patented technology in advance of using it.

b. Ex post information asymmetry

The Innovation Act addresses ex post information asymmetry in no less than six ways. First, the Innovation Act would dramatically increase the pleading standard for most patent infringement cases. Patent owners would be required to identify in their pleading, unless the information is not “reasonably” or “readily” accessible, numerous things including basic information like the asserted patents, the asserted claims, and the accused instrumentalities for each asserted claim by description, name, or model. The most significant departure from the current notice pleading standard, however, is the requirement that for each accused instrumentality the patent owner must provide a “clear and concise statement of where each element of each claim . . . is found within the accused instrumentality; and . . . with detailed specificity, how each limitation of each claim . . . is met by the accused instrumentality.” There are additional requirements to plead specific information related to the acts of indirect infringement, the authority of the party alleging infringement and the jurisdiction of the court, the principal business of the party alleging infringement, a list of other complaints alleging infringement of the same asserted patents, whether any standard setting body has declared the asserted patents to be essential or potentially essential to any standard, and whether any government has imposed specific licensing requirements.

141 H.R. 3309, § 8.
142 These provisions may also seek to expose the particular people involved in patent assertions to perhaps limit their willingness to engage in poor quality assertions given reputational concerns. Thus, these provisions may also provide a disincentive for poor quality assertions.
143 The heightened pleading standards would not apply to infringement claims brought under 35 U.S.C. § 271(b)(2). H.R. 3309, § 3.
144 The Innovation Act confusingly uses both “reasonably” and “readily.” Id.
145 Id.
146 Id.
147 Id. There are at least three significant concerns with the proposal to raise pleading standards in patent cases. First, as a preliminary matter the proposal is largely unnecessary given the power of district courts to order parties to make mandatory disclosures early in lawsuits and the fact that various courts’ local patent rules require patent owners asserting infringement to provide detailed infringement contentions early in litigation. See, e.g., E.D. Tex. Patent P. R. 3-1. To the extent the Innovation Act indicates that other information should be disclosed, local patent rules may be amended to require these disclosures. Second, because the proposal is a heightened pleading standard, it might bar the gate to litigation in cases where discovery is necessary to provide the required “detailed specificity” of infringement. This depends, of course, on whether courts would allow patent owners some discovery prior to dismissing cases. Third, this proposal would overturn the generally applicable Federal Rules of Civil Procedure, which favor notice pleading and apply the same rules to all types of litigation. The burden would appear to be on Congress to justify such blatant exceptionalism, which contradicts the basic policies undergirding the Federal Rules of Civil Procedure, and the idea that the formulation of the Federal Rules of Civil Procedure reflect a careful balance and separation of powers among the three branches of the federal government, where
Second, the Innovation Act also seeks to reduce ex post information asymmetry by influencing how courts decide claims asserting fraud related to patent licensing, alleged violations of consumer protection laws, and motions seeking shifting of fees based on exceptional circumstances. In particular, the Innovation Act would indicate it is the "sense of Congress" that parties should not "send out purposely evasive demand letters to end users alleging patent infringement;" that a demand letter should "include basic information about the patent in question, what is being infringed, and how it is being infringed;' and that "[a]ny actions or litigation that stem from these types of purposely evasive demand letters to end users should be considered a fraudulent or deceptive practice and an exceptional circumstance when considering whether the litigation is abusive."\textsuperscript{148}

Third, the Innovation Act seeks to reduce ex post information asymmetry by restricting the ability to award enhanced damages for willful infringement based on pre-suit notification of infringement to situations where certain information is included in the pre-suit notification. In particular, the Innovation Act would require the pre-suit notification to identify with particularity the asserted patent, the accused product or process, and the ultimate parent entity of the party claiming infringement, and to "explain[] with particularity, to the extent possible following a reasonable investigation or inquiry, how the product or process infringes one or more claims of the patent."\textsuperscript{149}

Fourth, the Innovation Act might impact ex post information asymmetry by requiring most parties asserting infringement to disclose to the accused infringer the identity of the owner of the asserted patents, any entity with a right to sublicense or enforce the patents, any entities with financial interests in the patents or in the plaintiff, and the ultimate parent entity of any of the entities.\textsuperscript{150} One would think, however, that this information should already be available to accused infringers through discovery.

Fifth, to the extent the Innovation Act codifies a version of the existing customer-suit exception to the first-to-file rule,\textsuperscript{151} it seeks to ensure that patent owners cannot take advantage of ex post information asymmetry to railroad customers into settlements. Customers often have less information regarding the technology at issue, about the patent system, and about patent litigation in particular. Manufacturers of the allegedly infringing product, by contrast, will have more of all of this information, or at least a greater financial interest and ability to obtain this information. By ensuring that customers have the ability to stay patent litigation in

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\textsuperscript{148} H.R. 3309, § 3.

\textsuperscript{149} Id.

\textsuperscript{150} Id. § 4.

\textsuperscript{151} Id. § 5.
favor of litigation by manufacturers, the Innovation Act seeks to reduce the information gap between patent owners and accused infringers.

Sixth, the Innovation Act would require the PTO to “develop educational resources for small businesses to address concerns arising from patent infringement” and to “provide education and awareness on abusive patent litigation practices.” These educational resources would also help increase the information accused infringers have regarding the patent system and patent litigation in particular. In addition to these provisions impacting ex post information asymmetry, the Innovation Act would require the Director of the Administrative Office of the U.S. Courts to study “the prevalence of the practice of sending patent demand letters in bad faith and the extent to which that practice may, through fraudulent or deceptive practices, impose a negative impact on the marketplace.”

c. Cost asymmetry

The Innovation Act also seeks to reduce cost asymmetry between patent owners and accused infringers by limiting discovery prior to resolution of claim construction disputes. If courts are able to resolve claim construction disputes that have significant impact on the viability of the patent owner’s assertion of liability, then lawsuits may be dismissed or may settle prior to the significant additional sums of money that the accused infringers would otherwise be required to spend to engage in discovery. As discussed above, the Innovation Act also seeks to force the Judicial Conference of the United States to develop rules and procedures to implement specific proposals identified by Congress “to address the asymmetries in discovery burdens and costs” in patent litigation.

d. Risk asymmetry

Lastly, in terms of the ways the Innovation Act would impact asymmetries in the patent system, it would also impact risk asymmetry. Some of the changes—the reduction of costs and the reduction of cost asymmetry—would have an indirect impact on risk asymmetry. Changing the fee-shifting presumption in favor of shifting fees to prevailing parties absent exceptional circumstances, for example, would create more risk for patent owners. Other provisions more directly attack risk asymmetry. With respect to assertions against end users and codification of the customer-suit exception, for example, the Innovation Act seeks to ensure that patent assertion entities cannot take advantage of the risk patent litigation imposes on end users. The Innovation Act would better balance risk borne by the patent owner and the accused infringer by allowing for the elimination of lawsuits against customers in favor of litigation by manufacturers, which presumably have more of a long term

152 Id. § 7.
153 Id. § 8.
154 H.R. 3309, § 3.
155 Id. § 6.
156 Id. § 5.
interest in contesting the infringement claim and greater financial wherewithal to sustain the cost of patent litigation.

IV. Alternatives to Use of Legislation to Address The Patent System’s Problems: Judicial and Agency Reform

In Part III, I first showed that the AIA and the new state laws regarding bad faith patent licensing practices have addressed to varying degrees the three primary problems some patent assertion entities exploit. To summarize (and overgeneralize), the AIA primarily impacts patent quality, cost asymmetry, and risk asymmetry by creating alternative lower-cost options compared to patent litigation for invalidity claims, while the new state laws primarily impact ex post information asymmetry by requiring patent license demand letters to include certain information. I also showed that the pending Innovation Act would primarily impact two of the four problems with patent litigation (its lack of disincentives to poor quality assertions and its excessive cost), as well as the information, cost, and risk asymmetries in the patent system.

Notably, none of this legislation addresses two of the problems with patent litigation: its uncertainty and problems with its remedies. Perhaps that is because Congress recognizes that the courts are better equipped to address these problems, because of concerns with separation of powers, or because courts are already addressing these problems. In fact, the Federal Circuit has made it all too clear that it is concerned (some would say overly concerned) about certainty in patent law. Furthermore, the Supreme Court and the Federal Circuit both have been fairly active in recent years tackling important concerns regarding injunctive relief and damages.

Relatedly, having considered these efforts at legislative reform and their impact on the primary problems with the patent system that some patent assertion entities exploit—and given that Congress is considering passing the Innovation Act—one cannot help but ask one last important question: whether legislative reform is the best avenue to address problems with the patent system that the AIA and state legislators did not address or that they did not address adequately? Or if instead, judicial or agency action would be better? In this Part, I briefly address this question.

157 In addition to failing to address these two problems related to patent litigation, the legislation has not to any significant degree addressed ex ante information asymmetry.

158 See generally Taylor, supra note 38, at 440.


160 See generally, e.g., Ericsson, Inc. v. D-Link Sys., Inc., 773 F.3d 1201 (Fed. Cir. 2014) (addressing the proper calculation of a reasonable royalty in the context of infringement of a patent subject to a reasonable and non-discriminatory licensing commitment to a standard setting organization); Uniloc USA, Inc. v. Microsoft Corp., 632 F.3d 1292 (Fed. Cir. 2011) (rejecting the so-called 25% rule of thumb).
A. Judicial Reform

As I have described, there are serious concerns with patent assertion entities exploiting problems with the patent system. But with the exception of the problems with patent litigation, the AIA and state laws regarding patent licensing practices have already addressed many of these problems. And to the extent further reform is necessary to address problems with patent litigation, there remains a significant question whether Congress is the right entity to seek to correct these problems.

Courts in particular have a vital role to play in correcting the problems associated with patent litigation, a problem that recently enacted legislation has not directly addressed. One of the most basic reasons this is so is the fact that courts have more experience and expertise concerning the problems with patent litigation. But in addition there are significant separation-of-powers concerns with the President and Congress enacting a law that effectively governs the day-to-day control of patent litigation by trumping the Federal Rules of Civil Procedure. Courts' experience and expertise combined with separation-of-powers concerns, at least in part, probably explain why the Senate did not pass the Innovation Act in 2014. While the Chairman of the Senate Judiciary Committee blamed a lack of consensus "among competing companies," the Innovation Act received strong criticism from judges, including Judge O'Malley from the Federal Circuit, and from the Judicial Conference of the United States. Indeed, one must ask whether there is justification for the exceptional nature of some of the reforms proposed in the Innovation Act, and Exhibit A, in this sense, is the requirement that the Judicial Conference of the United States develop rules and procedures to address specific issues and to implement specific proposals identified by Congress. Significantly, it seems to me that no one has made the case that Congress should not defer to the ju-

163 Ryan Davis, Troll Bills Would Usurp Courts' Power, Fed. Circ. Judge Says, LAW360.COM (Sept. 27, 2013, 4:34 PM) (indicating Judge O'Malley said she was "'stunned'" that reform legislation focused on litigation case management proposals, that many of the proposals "'go way beyond where anyone should want Congress to tread,'" and that "'[o]nce you intrude on the inherent authority of courts to actually manage each case before them, you're breaking down the division between the branches of government, and there is grave danger in doing that'").
164 H.R. REP. No. 113-279, at 116 (2013) (quoting a letter from the Chair of the Committee on Rules of Practice and Procedure of the Judicial Conference of the United States stating that "legislation that mandates the contents of federal rules contravenes the longstanding Judicial Conference policy opposing direct amendment of the federal rules by legislation instead of through the deliberative process in the . . . Rules Enabling Act").
165 Innovation Act, H.R. 3309, 113th Cong. § 6 (1st Sess. 2013). See Gugliuzza, supra note 161, for an example of criticism of this provision.
Legislative Responses to Patent Assertion Entities

diciary given its comparative institutional competence and concerns with separation of powers.

Consider the relative absence of debate concerning the competence and propriety of legislation, rather than judicial action, to correct problems with patent litigation. As one example, in the fall of 2013, numerous law professors signed a letter in support of the Innovation Act.\textsuperscript{166} Notably, in their letter these law professors did not present any argument explaining why Congress, rather than courts, should take action to correct problems with patent litigation.\textsuperscript{167} Likewise, they did not explain what makes patent law so unique that the President and Congress should overturn the Federal Rules of Civil Procedure in several respects and deprive district courts of case management discretion.\textsuperscript{168} In short, the law professors did not address why legislation rather than judicial reform was necessary or appropriate. These issues were not even part of the debate.

In my view, it is an important first question whether legislation rather than judicial reform is necessary or appropriate, particularly with respect to some of the more exceptional provisions in the Innovation Act that ignore or overlook courts’ institutional competence and can be seen as impinging on the power of the judiciary to govern its procedures. District courts, for example, may use their power to implement changes to their local patent rules. The Federal Circuit too has shown that it can adapt its application of the law in light of newly expressed concerns.\textsuperscript{169} Thus, it may be possible to address at least some of the problems with patent litigation without resorting to legislation; at a minimum there probably should be a presumption that courts can handle problems with patent litigation that patent assertion entities exploit. Perhaps it was implicit in the law professors’ letter that the existence of problems in patent litigation is a direct result of the inability or unwillingness of courts to correct these problems. But it seems to me there ought to be an open debate concerning whether courts have failed to correct these problems once these problems have become clear. Moreover, particularly in 2013, there had been little discussion of, not only the necessity and appropriateness, but also the ability of particular reforms to correct perceived problems with patent litigation.\textsuperscript{170} And there had been no significant investigation of the impact the legislation’s specific proposed reforms on the level of innovation in this country.

\textsuperscript{167} Id.
\textsuperscript{168} Id.
\textsuperscript{169} See generally J. Jonas Anderson, Patent Dialogue, 92 N.C. L. Rev. 1049, 1063–64 (2014) ("[T]he most important changes to the patent system in recent years have been the result of the Federal Circuit reacting to policy signals from the Supreme Court and Congress.").
\textsuperscript{170} An exception is the customer-suit exception, which one law review article addressed prior to the House voting in favor of the Innovation Act. See generally Brian J. Love & James C. Yoon, Expanding Patent Law’s Customer Suit Exception, 93 B.U. L. REV. 1605 (2013) (recommending an expansion, by courts or Congress, of the existing customer-suit exception).
A robust debate regarding whether legislation rather than judicial reform is necessary or appropriate to solve problems with patent litigation would include consideration of some basic questions related to certain aspects of the Innovation Act:

- First, why codify the customer-suit exception to the first-to-file rule? The exception already exists in the common law. Is it not being used by courts? Is it not effective? Is there a split of authority creating confusion and encouraging forum shopping?\(^{171}\)

- Second, why create a special statutory section for patent law requiring detailed allegations in complaints when this approach is contrary to two of the fundamental ideas behind the creation of the Federal Rules of Civil Procedure, the adoption of one common set of rules for all litigation and notice rather than code pleading;\(^{172}\) when the Supreme Court has already moved in the direction of requiring more detail in complaints;\(^{173}\) and when local patent rules require infringement contentions within a short time of filing a complaint?\(^{174}\)

- Third, why change the law governing fee shifting when the Supreme Court has already made significant changes that make fee shifting more likely and defensible on appeal?\(^{175}\) Should we not see how courts apply this new interpretation of the governing statute?

- Fourth, why create a statute governing electronic discovery when there is a new model electronic discovery order that courts have adopted (with modifications) in the last few years;\(^{176}\) and when the Judicial Conference has

\(^{171}\) The one law review article addressing the customer suit exception that had been published prior to the House voting on the Innovation Act argues that “the current test for applying the customer suit exception fails to consider the full range of costs of customer litigation and benefits of manufacturer litigation.” Id. at 1635.


\(^{173}\) See generally Bell Atl. Corp. v. Twombly, 550 U.S. 544 (2007) (abrogating Conley v. Gibson, 355 U.S. 41 (1957) and its “no set of facts” test, holding instead that “[f]actual allegations must be enough to raise a right to relief above the speculative level on the assumption that all of the complaint’s allegations are true”); see also Ashcroft v. Iqbal, 556 U.S. 662, 679 (2009) (creating a “two-pronged approach” to evaluating sufficiency of the pleadings).

\(^{174}\) See, e.g., E.D. Tex. Patent P. R. 3-1 (requiring a party claiming infringement to disclose infringement contentions “[n]ot later than 10 days before the Initial Case Management Conference”).


created a new mandatory rule governing electronic discovery through the existing process of changing the Federal Rules of Civil Procedure? There are no doubt good arguments to be made on both sides of these questions. The point is that public debate regarding the Innovation Act should address the fundamental question of whether its reforms related to patent litigation are necessary in light of what the courts can and are doing, and whether its reforms are appropriate given separation of powers concerns.

In this regard, there seem to be unsettling parallels between the Innovation Act and the provision of the AIA that overturned the Federal Rules of Civil Procedure regarding joinder—a provision that was not debated in any detail by Congress, was not presented to the Judicial Conference, was not analyzed in advance by law professors, and which, perhaps as a result of all of these circumstances, ultimately proved unnecessary and even problematic given the Federal Circuit’s subsequent interpretation of Rule 20. Indeed, having studied the AIA’s creation of the new statutory section governing joinder, absent a vigorous debate concerning the necessity and appropriateness of legislative action, I am not encouraged by the President and Congress tinkering with issues courts understand better and already have the tools to address in meaningful ways.


I do not address here their proposed reforms related to transparency and non-litigation issues. See supra notes 89–90 and accompanying text.

To the extent the district courts do not have the incentive to correct some of the problems associated with patent litigation, it may be time for the President and Congress to address forum shopping at the district court level. The President and Congress addressed forum shopping at the appellate level in 1982 when it created the U.S. Court of Appeals for the Federal Circuit. But forum shopping has now shifted to district courts, and the attempt in the America Invents Act to eliminate joinder of accused infringers is all that Congress has done to eliminate the vast discretion provided to patent owners to pick their forum for patent infringement case management and trials. See generally Taylor, supra note 88. And there is reason to think that the discretion afforded to district courts regarding procedure has created perverse incentives for courts to favor plaintiff owners. See generally Daniel Kleman & Greg Reilly, Forum Selling, S. CAL. L. REV. (forthcoming) (discussing incentives for district courts to attract patent litigation and the potential effect of these
B. Agency Reform

While the judiciary has the power and opportunity to correct the problems with patent litigation, the other problems largely fall outside the judiciary's sphere of influence and beyond their expertise. But before Congress modifies or creates new substantive or procedural patent law to address other problems, it should likewise consider existing government agencies, the roles that they serve and can serve, and their ongoing and potential initiatives. What this consideration will indicate is that additional reforms addressing patent quality could focus on substantive patent law doctrines and their implementation by the PTO. In particular, additional reforms may seek to ensure the correct application of substantive patent law doctrines, but also to correct procedural impediments to the correct application of substantive patent law doctrines, such as the limited time and information available to patent examiners to conduct a thorough review of the patentability of claims in patent applications.

In other words, the PTO quite obviously has an important role in solving the problem of poor patent quality, and the uproar over the quality of issued patents may represent a rejection of the theory that the PTO should merely serve as a course filter of patent applications and reserve more complete analysis of the patentability of applications for later inter partes procedures. But other agencies also serve vital roles. The Federal Trade Commission, for example, has already taken steps to police enforcement activities of patent assertion entities, which holds the potential to impact the problem of ex post information asymmetry.

V. Conclusion

It is simply false to say that no legislation to date has addressed the so-called "patent troll problem." In the AIA and in state legislation regarding bad faith licensing, legislatures have made significant progress passing legislation aimed at correcting two of the three primary problems some patent assertion entities exploit: poor patent quality and various asymmetries in the patent system. There has been less progress on the other concern, problems with patent litigation. Legislative reform has had only indirect or minimal impact on the problems with patent litigation. Given the interest Congress showed last term in addressing these remaining problems, however, reform may be on the way. But there are significant institutional concerns, including but not limited to the separation of powers, suggesting that Congress may not be the right entity to address the problems with patent litigation. Moreover, given all of the recent changes made to the patent system by Congress and the Supreme Court, it may be time to pause and analyze the actual impact of

\[\text{incentives on procedural and substantive decision making); La Belle, supra note 48 (arguing in favor of national patent procedural rules given similar concerns).}\]

\[\text{See Lemley, supra note 32, at 1497.}\]

these changes on the three primary problems underlying the current debate over patent assertion entities.