

THE RISE OF THE END USER IN PATENT LITIGATION

Gaia Bernstein *

ABSTRACT

*The patent system focuses on the actions of two players: the patentee and its competitor. It assumes that the competitor will represent the interests of the end user. But increasingly, end users are becoming significant players in the patent system, their interests sometimes diverging from those of competitors. Attention has recently turned to Patent Assertion Entities (“PAEs”) – also known as patent trolls – who are suing vast numbers of customers using patented technologies in their everyday businesses. Yet, end users were also principal players in some of the main recent patent cases before the Supreme Court. In *Bowman v. Monsanto*, Monsanto sued farmers for re-using its patented self-replicating seeds. In *Association for Molecular Pathology v. Myriad Genetics*, patients and physicians sued to invalidate breast cancer gene patents. And, patients and drug stores repeatedly challenge pay-for-delay agreements between patentees and competitors, claiming they undermine patients’ interests in access to generic drugs.*

The drafters of the America Invents Act (the “AIA”) intended the legislation to catch up with the changing patent landscape. Yet, the AIA did not predict and is largely ill-equipped to address the growing role of end users. The AIA addresses the needs of small entities, mainly, by adding procedures to challenge patents in the United States Patent and Trademark Office (“PTO”), providing a cheaper and faster forum for challenging validity. However, end users are different from small technological competitors. End users lack technological sophistication, they are often one-time players and tend to become involved in the patent dispute

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relatively late in the life of the patent. The AIA's novel PTO procedures are largely unsuitable for end users because they permit expansive challenges mostly early in the life of the patent before end users are likely to be implicated.

*Paradoxically, as end users play an increasingly larger role in patent law disputes, they have few legal tools to assert their interests. This Article argues for the need to equip end users with tools to defend their interests in this new litigation landscape. Specifically, since end users, who lack internal resources of technological sophistication, are especially ill suited to fund the expense of patent litigation, fee shifting is particularly warranted when the prevailing party is an end user. In 2014, the Supreme Court decided two fee shifting cases: *Highmark v. Allcare* and *Octane Health v. Octane Fitness*, in which it lowered the standard courts need apply to award fee shifting in patent cases. And, at the same time, a flurry of Congressional bills proposes different versions of fee shifting. Yet, while these bills and cases address the general fee shifting standard and the issue of PAE lawsuits, they do not consider the unique status of the end user. This Article argues for the need to consider the special status of end users in any fee shifting reform.*

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INTRODUCTION

The landscape of patent litigation is changing. While two players traditionally dominated patent litigation: the patent owner and the competitor, end users are increasingly occupying a growing role in patent litigation. The media, legislators and commentators have recently started paying attention to PAEs', also known as patent trolls, lawsuits against customers.¹ PAEs, who own mainly software patents, are threatening to sue and suing thousands of customers, who use the allegedly patented technology they purchase from manufacturers and suppliers.² For example, in January 2013, Personal Audio, LLC, a PAE, began sending demand letter for licensing fees and suing podcasters, including comedian Adam Carolla, claiming it owns a patent over podcasting technology, and that these individual podcasters are infringing its patent.³ Another PAE, Project Paperless LLC, sent multiple demand letters for licensing fees and even sued small businesses, claiming that anyone using an office scanner to scan documents and email them infringes its patent.⁴

While lawsuits against customer end users have garnered some attention, end users are occupying a growing role beyond lawsuits filed by PAEs. End users were litigants in some of the main recent patent cases before the Supreme Court decided in 2013. In *Association for Molecular Pathology v. Myriad Genetics*, patients and physicians sued Myriad Genetics ("Myriad") to invalidate Myriad's breast cancer gene patents.⁵

¹ See generally Shield Act, H.R. 845, 113th Congress § 2(d) (a bill providing for fee shifting to the prevailing party if the losing party is a PAE); Colleen V. Chien & Edward Reines, *Why Technology Customers Are Being Sued en Masse for Patent Infringement and What Can be Done* (Santa Clara University School of Law Legal Studies Research Papers Series, Working Paper No. 20-13, 2013) available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2318666 (analyzing the reasons for PAEs' lawsuits against customers); Brian J. Love & James C. Yoon, *Expanding Patent Law's Customer Suit Exception*, 93 BOSTON UNIV. L. REV. 1506 (2013) (proposing expanding the customer suit exception as a solution to PAEs' lawsuits against customers); Ashby Jones, *Cisco Calls Patent Trolls Racketeers*, WALL ST. J. (Nov. 11, 2012, 8:39), <http://online.wsj.com/news/articles/SB10001424127887324073504578113082258844080> (describing PAEs lawsuits and threats against Cisco's customers).

² James Bessen, Jennifer Ford et al., *The Private and Social Costs of Patent Trolls*, REGULATION, Winter 2011-12, at 26, 28 (stating that PAEs are particularly common in the software industry); Chien & Reines, *supra* note 1, at 8-10 (discussing PAE lawsuits of multiple customers).

³ *EFF Files Challenge with Patent Office Against Troll's Podcasting Patent*, ELECTRONIC FRONTIER FOUNDATION (Oct. 16, 2103), <https://www.eff.org/press/releases/eff-files-challenge-patent-office-against-trolls-podcasting-patent>.

⁴ Steven Salzberg, *Did You Scan and Email That Document? You Might Owe \$1,000 to a Patent Troll*, FORBES, (Aug. 5, 2013 8:00am), <http://www.forbes.com/sites/stevensalzberg/2013/08/05/did-you-scan-and-email-that-document-you-might-owe-1000-to-a-patent-troll/>; Joe Mullin, *Patent Trolls Want \$1,000 – for Using Scanners*, ARS TECHNICA (Jan. 2, 2013), <http://arstechnica.com/tech-policy/2013/01/patent-trolls-want-1000-for-using-scanners/>.

⁵ *Ass'n for Molecular Pathology v. Myriad Genetics, Inc.*, 133 S. Ct. 2107 (2013); Complaint at ¶ 1-26, *Ass'n for Molecular Pathology v. United States Patent & Trademark*

Their goal was to enhance patients' access to Myriad's breast cancer genetic testing, which Myriad priced at \$3,000.⁶ And in *Bowman v. Monsanto*, Monsanto, which owns patents on genetically engineered seeds, sued farmers who re-used its seeds by saving some of the crops for re-planting the next season.⁷

End user involvement is not limited to PAE lawsuits and major patent cases. In the pharmaceutical industry, patients increasingly find that competitors of patented drug owners fail to protect their interests. Patients, drug stores and the Federal Trade Commission are challenging numerous agreements (known as pay-for-delay agreements) between patented drug owners and generic manufacturers. Through these agreements, patent owners compensate generic manufacturers not to enter the market, and plaintiffs are suing to invalidate these agreements in order to obtain access to cheaper generic drugs.⁸ The Supreme Court decided one of these cases – *FTC v. Actavis* – in 2013.⁹

Finally, end users are likely to become even more prevalent in patent litigation, as an emerging new technology – the 3D printer – becomes more popular.¹⁰ 3D printers can replicate three-dimensional products. And, although 3D printers so far do not have the capabilities of Star Wars replicators, they are no longer an expensive curiosity.¹¹ UPS has started deploying these printers at its stores for people to come and use and Staples sells them for around \$1300.¹² 3D printers transform the access to the means of production.¹³ They allow consumers the opportunity to make

Office, 669 F. Supp. 2d 365 (S.D.N.Y. 2009) (No. 09 Civ. 4515), *available at* www.aclu.org/images/asset_upload_file939_39568.pdf [hereinafter Complaint, Ass'n for Molecular Pathology v. USPTO].

⁶ See Complaint, Ass'n for Molecular Pathology v. USPTO, *supra* note 5, at ¶ 7-26; Jonathan Stempel, *Myriad Wins Gene Patent Ruling from US Appeals Court*, REUTERS (Aug. 6, 2012), <http://www.reuters.com/article/2012/08/16/us-myrriad-patent-idUSBRE87F12K20120816> (reporting on the cost of genetic testing for BRCA1/BRCA2).

⁷ *Bowman v. Monsanto Co.*, 133 S. Ct. 1761, 1764–65 (2013). See also *Organic Seed Growers & Trade Ass'n v. Monsanto Co.*, 2013 U.S. App. LEXIS 11601 at *5 (Fed. Cir. 2013) (stating that “[b]etween 1997 and 2010, Monsanto brought some 144 infringement suits for unauthorized use of its seed. Approximately 700 other cases were settled without litigation.”)

⁸ See *infra* Part I(B).

⁹ See generally *Federal Trade Comm'n v. Actavis*, 133 S. Ct. 2223 (2013).

¹⁰ A similar trend occurred in copyright law when digitization of copyrighted materials on the Internet exposed users to increased copyright liability. See generally Justin Hughes, *On the Logic of Suing One's Customers and the Dilemma of Infringement-Based Business Models*, 22 CARDOZO ARTS & ENT L.J. 725 (2005) (discussing the music industry's lawsuits against individuals who downloaded music on the Internet).

¹¹ Davis Doherty, *Downloading Infringement: Patent Law as a Roadblock to the 3D Printing Revolution*, 26 HARV. J. L. & TECH. 353, 353–54 (2012).

¹² Deven Desai & Gerard N. Magliocca, *Patents, Meet Napster: 3D Printing and the Digitization of Things*, GEORGETOWN L.J. (forthcoming 2014) (manuscript at 10) *available at* http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2338067. See also Doherty, *supra* note 11, at 357 (describing the market adoption of 3D printers).

¹³ Desai & Magliocca, *supra* note 12, at 7.

items at home,¹⁴ thus, making it more likely that an individual or a small business will make an infringing item that will expose them to patent liability.¹⁵

End users may be individuals or businesses, they are often small but may not necessarily be so, and they occupy different roles in the patent litigation landscape. This Article defines end users broadly to include those using a patented technology for personal consumption and those using it in business. Yet, they are strictly users. Even if they incorporate the patented technology within a product or service they offer their customers they do not make or sell the technology itself. They are usually not knowledgeable about it. And, at times, they may be even unaware of its existence.¹⁶

End users differ from small technological competitors in three respects. First, end users are usually individuals or businesses that are not technological companies (or do not produce and supply the allegedly infringing technology). This puts them at a significant disadvantage in patent disputes, where arguments for patent invalidity and infringement need to rely on intricate understanding of the patented technology, the prior art and the alleged infringing technology. Second, end users usually become embroiled in the patent conflict relatively late in the life of the patent, after the patented technology enters the market and achieves widespread adoption. Third, end users are typically one-time players. They are not in the business of producing and selling the technology. In most cases the technology is ancillary to their business and they do not have a long-term stake. End users would, therefore, prefer to settle or withdraw from use of the technology, than pursue litigation.¹⁷

As end users are taking a greater role at the center and in the shadows of patent litigation, they are faced with the absence of appropriate procedural litigation tools. The equities of end user cases differ and so does our sympathy toward them. Some end users may be willful infringers while others may be individuals or small businesses unaware they are using a technology, whether patented or not.¹⁸ Yet, irrespective of whether their substantive claims are justified, they are uniquely situated players. End users need procedural tools that will grant them equal footing to that of patent owners and competitors.

The promoters of the recent patent reform, the America Invents Act (the “AIA”), which came into effect primarily in 2013, intended patent

¹⁴ See *id.* at 12.

¹⁵ See *id.* at 4. Doherty, *supra* note 11, at 359–60.

¹⁶ See *infra* Part II(A).

¹⁷ See *infra* Part II(A).

¹⁸ See *infra* Part II(A). Some propose that end users should be give immunity from lawsuits. See e.g., The Electronic Frontier Foundation, *Legislative Solutions for Patent Reform*, at <https://www EFF.org/issues/legislative-solutions-patent-reform#enduser>. This Article does not weigh the equity of end users cases and does not presume that all end users are necessarily blameless. End users come in all shades and colors. Instead, the Article’s goal is more limited to placing end users in a more equal procedural standing with the traditional patent players.

legislation to catch up with the changing patent landscape. One of their goals was to protect the interests of small entities. Yet, the AIA failed to predict and is largely ill-equipped to address the growing role of end users. A major set of reforms focused on procedures in the PTO. The goal was to provide an efficient, timely and less costly alternative to the notoriously expensive patent litigation and assist the PTO by relying on the expertise of the public.¹⁹

The AIA amended the third party submission process to facilitate interested parties' submissions to challenge patent applications.²⁰ It also created the post-grant review procedure to provide a forum for challenging a patent application in the PTO.²¹ Yet, these procedures fail to address the needs of end users, mainly because they are available only very early in the life of the patent. A party can submit a third party submission no later than the issuance of the patent,²² while a petitioner can challenge a patent's validity in a post-grant review only up to nine months from the issuance of the patent.²³ End users are unlikely to be aware of the technology so early in the life of the patent because it usually has not yet entered the market, and even if it has, it is unlikely to have already gained widespread adoption.²⁴

Congress created two additional procedures – the inter partes review and the covered business methods patents review – in which a petitioner can challenge a patent's validity after the post-grant window closes.²⁵ Unfortunately, while end users could time-wise avail themselves of the inter partes review, the scope of permitted challenges is significantly narrower than in the post-grant review procedure, limiting the options for

¹⁹ See Bradley William Baumeister, *Critique of the New Rule 1.99: Third Party Information Disclosure Procedure for Published Pre-Grant Applications*, 83 J. PAT. & TRADEMARK OFF. SOC'Y 381, 383–84 (2001) (explaining that the public would provide the PTO with public documents that in an ideal world the examiner could find on his own); Philip De Corte & Anthony C. Tridico et al., *AIA Post Grant Review & European Oppositions: Will They Work in Tandem, or Rather Pass Like Ships in the Night?*, 14 N.C. J.L. & TECH. 93, 126 (2012) (explaining that the goal of creating the post-grant review was to create a cheaper, more effective way than litigation to challenge patent validity).

²⁰ See *infra* Part III(A)(i).

²¹ See *infra* Part III(A)(ii).

²² A party can submit a third party submission, as long as it is submitted before the earlier of (i) the date of notice of allowance, or (ii) the later of: six months from the publication of the application or the date of the first rejection by an examiner. 35 U.S.C. § 122(e) (2013).

²³ See *id.* § 321(c).

²⁴ Technologies have different adoption rates and some may be adopted earlier than others. But generally, it is less likely that money will be invested in commercialization before a patent is granted. See EVERETT M. ROGERS, *DIFFUSION OF INNOVATIONS* 219–66 (Free Press 5th ed. 2003) (discussing rates of adoption of new technologies and the factors affecting those rates). For discussions of the problem of patenting early in the technological cycle before the technology is ready for commercialization, see generally, Christopher A. Cortopia, *The Folly of Early Filing in Patent Law*, 61 HASTINGS L.J. 65 (2009); Ted Sichelman, *Commercializing Patents*, 62 STAN. L. REV. 341 (2010).

²⁵ See 35 U.S.C. § 311(c) (2013).

such a challenge.²⁶ The covered business method patents review is also a limited alternative for end users, particularly because it is available only to petitioners who are directly sued or threatened by the patentee.²⁷

Another AIA reform expanded the user rights defense. A party who successfully asserts user rights can continue using the patented invention without paying licensing fees within certain restrictions.²⁸ The defense now applies to all inventions not just business methods, and importantly, no longer requires that the party asserting the defense to be the inventor who reduced the invention to practice.²⁹ Eliminating the reduction to practice requirement provides end users with access to the defense. However, to take advantage of the defense the end user needs to have used the invention in commerce at least one year before the filing of the patent application or public disclosure.³⁰ This renders the prior user rights defense largely inapplicable to end users, who are less likely to have access to the technology that early in the life of the patent.

The AIA's failure to account for the rise of the end user leaves end users without tools that can put them on more equal footing with traditional patent litigation parties. This Article examines the role that fee shifting of litigation expenses to the prevailing party can play in end user cases. Fee shifting, by no means, will motivate all end users to litigate even meritorious cases and challenge potentially invalid patents. The advent of the end user is a complex phenomenon. A series of reforms is needed to address this transformation, including: changing the standards for standing to sue in patent litigation;³¹ expanding the customer suit exception;³² and changing contractual practices to incorporate more frequent use of indemnification procedures between manufacturers and customers. At the same time, fee shifting is applicable to the diverse array of end user cases and can contribute toward leveling the footing of end users in all type of end user-patentee disputes.

The general U.S. rule governing fee shifting ("The American Rule") does not allow the prevailing party to recover legal fees from the loser.³³

²⁶ Challenges under inter partes review are limited to narrower grounds, i.e., only prior art and obviousness, while challenges under post-grant review can extend to broader grounds, including subject matter, utility, definiteness, written description and enablement. *See id.* § 311(b) (providing the grounds permitted for challenges under inter-partes review); *Id.* § 321(b) (providing the grounds permitted for challenges under post-grant review).

²⁷ *See infra* Part II(A)(iv)

²⁸ *See* DAVID J. KAPPOS & TERESA STANEK REA, REPORT ON THE PRIOR USE RIGHTS DEFENSE, United States Patent and Trademark Office at 5 (January 2012).

²⁹ *See* 35 U.S.C. § 273(a) (2013). *See also* KAPPOS & REA, *supra* note 28, at 18 (stating that the AIA does not require the party asserting prior use rights to be the actual inventor).

³⁰ *See infra* Part III(B).

³¹ I address this issue of end users' standing to sue for declaratory judgment in a separate article, see, Gaia Bernstein, *End Users and Standing to Sue* (on file with author) [hereinafter Bernstein, *End Users and standing to sue*].

³² *See generally* Love & Yoon, *supra* note 1.

³³ *See* *Arcamabel v. Wiseman*, 3 U.S. (3 Dall.) 306 (1796) (stating that "[t]he general practice of the United States is in opposition to [the indemnity rule] and even if that

Yet, Congress carved many exceptions to the American Rule under which fee shifting to the prevailing party can occur.³⁴ The current standard under the Patent Act is that courts have the discretion to grant attorney fees to the prevailing party in exceptional circumstances.³⁵ Congress and the Supreme Court are intensively scrutinizing this standard this year. The Supreme Court decided two cases involving fee shifting in patent litigation: *HighMark v. Allcare*³⁶ and *Octane Fitness v. Icon Health & Fitness*.³⁷ In *Octane*, the Supreme Court lowered the standard for awarding fee shifting in patent litigation.³⁸ At the same time, Congress is considering multiple bills advocating different versions of fee shifting.³⁹ The impetus for this activity is concerns regarding the impact of PAE lawsuits on innovation.⁴⁰ The petitions before the Supreme Court and some of the bills presented to Congress focused on facilitating fee shifting generally, without targeting PAEs specifically, while other bills focused on PAEs, making it more likely that fee shifting to the prevailing party will occur if the loser is a PAE.⁴¹

This Article argues that the case for fee shifting is particularly strong where end users are implicated. First, there is significant inequality between

practice were not strictly correct in principle, it is entitled to the respect of the court, till it is changed or modified by statute.”).

³⁴ See Peter N. Cubita & Jeffrey S. Lichtman et al., *Awards of Attorney’s Fees in the Federal Courts*, 56 ST. JOHN’S L. REV. 277, 286–89 (1982) (describing federal statutes that authorize awards of attorneys’ fees to “prevailing parties”); Charles Silver, *Unloading the Lodestar: Toward a New Fee Award Procedure*, 70 TEX. L. REV. 865 (1992) (stating that “[f]ee shifting is common in federal cases” and that by enacting over 150 statutes entitling parties who prevail to claim fee awards, Congress greatly restricted the American Rule). See e.g., The Civil Rights Attorney’s Fees Awards Act of 1976, Pub. L. No. 94-559, 90 Stat. 2641 (codified at 42 U.S.C.A. § 1988 (2013)) (“... the court, in its discretion, may allow the prevailing party, other than the United States, a reasonable attorney’s fee as part of the costs . . .”).

³⁵ 35 U.S.C. § 285 (2013).

³⁶ *Highmark Inc. v. Allcare Health Mgmt.*, 687 F.3d 1300 (Fed. Cir. 2012), *cert. granted*, 134 S. Ct. 48 (Oct. 1, 2013).

³⁷ See generally *Octane Fitness, LLC v. Icon Health & Fitness, Inc.* No. 12-1184 (U.S. Apr. 29, 2014); *Highmark Inc. v. Allcare Health Management System, Inc.* No. 12-1163 (U.S. Apr. 29, 2014).

³⁸ See *Octane Fitness v. Icon Health*, No. 12-1184, slip op. at 7-9 (U.S. Apr. 29, 2014).

³⁹ See Shield Act, H.R. 845, 113th Cong. § 2 (2013); Patent Abuse Reduction Act, S. 1013, 113th Cong. § 5 (2013); Innovation Act, H.R. 3309, 113th Cong. § 3 (2013); Patent Litigation Integrity Act of 2013, S. 1612, 113th Cong. § 201 (2013).

⁴⁰ See e.g., Petition for Writ of Certiorari at 18–19, *Octane Fitness v. Icon Health & Fitness, Inc.*, 496 Fed. Appx. 57 (Fed. Cir. 2012) (No. 12-1184), 2013 WL 1309080, at *18–*19 (arguing for the need to lower the standard for an alleged infringer to prove exceptional circumstances under Section 285 of the Patent Act); Innovation Act, H.R. 3309, 113th Cong. § 3 (2013) (amending Section 285 to provide that attorney fees will be awarded to the prevailing party, unless the court finds that the conduct or position of the nonprevailing party were substantially justified, or that special circumstances make the award unjust).

⁴¹ See e.g., Shield Act, H.R. 845, 113th Cong. § 2(d) (2013).

the parties when an end user is part of litigation.⁴² Patent litigation is exorbitantly expensive compared to many other forms of civil litigation.⁴³ These costs are even higher for end users because patent litigation relies on technological expertise to invalidate a patent. End users, unlike technological competitors, cannot rely on in-house expertise and need to expend significant resources on external experts. In addition, unlike patent owners, they cannot avail themselves of contingent fee representation.⁴⁴ This puts end users at a grave disadvantage, making them much more likely to settle and avoid litigation even when their claims are meritorious. Secondly, end users may want to initiate patent litigation as a preemptive measure to seek declaratory judgment of patent invalidity.⁴⁵ Currently, there are significant disincentives for bringing a declaratory judgment action, including the expense of litigation, lack of financial rewards and the risks of triggering countersuits of infringement.⁴⁶ At the same time, a declaratory judgment of patent invalidity can be beneficial to many potential infringers not directly before the court.⁴⁷ Consequently, actions for declaratory judgment are relatively rare in patent litigation.⁴⁸ Fee shifting can help resolve this collective action problem and encourage more declaratory judgment lawsuits under a private attorney general theory.⁴⁹ Third, PAEs threaten and sue thousands of users, asserting, what many believe, are weak patent claims.⁵⁰ These users tend to settle even when

⁴² Jay P. Kesan, *Carrots and Sticks to Create a Better Patent System*, 17 BERKELEY TECH. L. J. 145, 175 (2002) (explaining that fee shifting is particularly important when there is inequality between the parties).

⁴³ See *infra* Part IV(B).

⁴⁴ See *infra* Part IV(B).

⁴⁵ Although standing for declaratory judgment patent lawsuits is currently under much debate, and can affect some end users' ability to sue for declaratory judgment. See *Organic Seed Growers & Trade Ass'n v. Monsanto*, 718 F.3d 1350 (Fed. Cir. 2013); *Bernstein, End Users and Standing to Sue*, *supra* note 31. See generally Michael J. Burstein, *Rethinking Standing in Intellectual Property Challenges*, (Cardozo Legal Studies Research Paper Series, No. 414, 2013), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2359873&download=yes (arguing for the need for broader grounds for standing in intellectual property cases).

⁴⁶ See Megan M. La Belle, *Patent Law as Public Law*, 20 GEO. MASON L. REV. 41, 44 (2012).

⁴⁷ See *Blonder-Tongue Lab. v. Univ. of Ill. Found.* 402 U.S. 313, 350 (1971) (holding that a patent infringer can use issue-preclusion to foreclose an infringement suit where the patent claim in question had already been declared invalid in an earlier suit).

⁴⁸ See Kimberly A. Moore, *Forum Shopping in Patent Cases: Does Geographic Choice Affect Innovation?*, 79 N.C. L. REV. 889, 921 (2001) (finding that only about 14 percent of the patent cases filed annually were declaratory judgment actions).

⁴⁹ See Thomas D. Rowe, *The Legal Theory of Attorney Fee Shifting: A Critical Overview*, 1982 DUKE L. J. 651, 662–63 (1982) (under the attorney general theory fee shifting can encourage plaintiffs to undertake litigation that serves a public or a broader private interest).

⁵⁰ Chien & Reines, *supra* note 1 (discussing PAEs suing multiple customers); John R. Allison et al., *Patent Quality and Settlement Among Repeat Patent Litigants*, 99 GEO. L.J. 677, 694 (2011) (finding PAE suits were much less likely than non-PAE suits to result in a ruling for patentee); Robert P. Merges, *The Trouble With Trolls: Innovation, Rent-Seeking*,

their cases are meritorious. Commentators believe that fee shifting is likely to at least reduce the number of meritless patent suits, even if it is unclear whether it will reduce the number of settlements.⁵¹ In addition, fee shifting can serve a punitive function to deter and punish such abusive litigation practices.⁵²

End users would benefit from any change that facilitates fee shifting, particularly pro-alleged infringer fee shifting. However, general changes to fee shifting standards are less effective because they do not carry a direct message to the end user.⁵³ Moreover, changes to fee shifting standards that focus on PAE status resolve only a sub-set of end user cases. This Article, therefore, proposes including the end user status as a factor that weighs in favor of fee shifting. While the Article defines end user broadly, including end user status as a factor in the fee shifting analysis enables a more granular investigation into the nature of the specific end user. Even prevailing end users who are not liable for infringement can differ significantly. For example, although most end users know little about the patented technology, some are technological innovators and for other users the patented technology is central to their business. In these cases, inequality between the parties may not be as significant and the justification for fee shifting weaker. In other cases, end users may represent a broader public interest in a declaratory judgment action. In these instances, the private attorney general theory will strengthen the case for fee shifting.

The Article proceeds as follows. Part I describes the growing role of end users in patent litigation. Part II discusses the reasons for the shift from a competitor model to a hybrid competitor-user model and distinguishes the characteristics of the end user from those of the traditional competitor. Part III shows that the AIA largely fails to protect the interests of the end user. Part IV discusses the contemporary fee shifting debate and argues that there is a strong case for including end user status as a factor in fee shifting analysis in patent cases.

and *Patent Law Reform*, 24 BERKELEY TECH. L.J. 1583, 1603–04 (2009) (discussing allegations that PAEs file suits based on weak patents).

⁵¹ See Marie Gryphon, *Assessing the Effects of a “Loser Pays” Rule on the American Legal System: An Economic Analysis Proposal for Reform*, 8 RUTGERS J.L. & PUB. POL’Y 567, 581–83 (2011); Walter Olson & David Bernstein, *Loser-Pays: Where Next?*, 55 MD. L. REV. 1161, 1162 (1996); Rowe, *supra* note 49, at 665–66; Frances Kahn Zemans, *Fee Shifting and the Implementation of Public Policy*, 47 L. & CONTEMP. PROBLEMS 187, 192–93 (1984).

⁵² For discussions of the punitive function of fee shifting, see, Peter N. Cubita & Jeffrey S. Lichtman et al., *Awards of Attorney’s Fees in the Federal Courts*, 56 ST. JOHN’S L. REV. 277, 288 (1982); Rowe, *supra* note 49, at 653.

⁵³ Gaia Bernstein, *The Paradoxes of Technological Diffusion: Genetic Discrimination and Internet Privacy*, 39 CONN. L. REV. 241 (2006) [hereinafter Bernstein, *The Paradoxes of Technological Diffusion*] (discussing the expressive power of the law as it applies to the reduction of risk). On the expressive power of the law, see, Elizabeth S. Anderson & Richard H. Pildes, *Expressive Theories of Law: A General Restatement*, 148 U. PA. L. REV. 1503, 1508 (2000); Richard H. McAdams, *The Origin, Development and Regulation of Norms*, 96 MICH. L. REV. 338, 398 (1997); Steven D. Smith, *Expressivist Jurisprudence and the Depletion of Meaning*, 60 MD. L. REV. 506, 510, 515 (2001).

I. THE GROWING ROLE OF THE END USER IN PATENT LITIGATION

Many believe that until recently end users have largely been absent from patent litigation.⁵⁴ At the same time, there are some reports indicating that end users have been part of patent litigation during certain historical periods.⁵⁵ Empirical research needs to be conducted to establish the exact scope of the transformation. But, few doubt that a change has indeed been taking place. This Part shows that end users are appearing in patent litigation not just as defendants in PAE lawsuits but in a variety of roles. They have appeared as parties in recent major patent cases before the Supreme Court and the Federal Circuit, both as defendants and as plaintiffs in declaratory judgment suits. They also take a central role in challenging pay-for-delay agreements between patent owners and generic manufacturers that undermine users' interests in access to cheaper drugs.

A. END USERS AS PARTIES IN MAJOR PATENT CASES

End users have played an important role in some of the major patent law cases litigated before the Supreme Court and Federal Circuit. They appeared as both plaintiffs in declaratory judgment actions and as defendants. In *Association for Molecular Pathology v. Myriad*, patients and physicians sued to invalidate Myriad's breast cancer gene patents.⁵⁶ Myriad owned the patents on BRCA1/BRCA2 – the genetic mutations responsible for a high risk of breast and ovarian cancer. Myriad charged \$3,000 for testing for the breast cancer genetic mutations, a rate significantly higher than rates charged for other genetic tests.⁵⁷ In

⁵⁴ *Abusive Patent Litigation: The Impact on American Innovation and Jobs, and Potential Solutions: Hearing Before the Subcomm. on Courts, Intellectual Prop. of the Comm. on the Judiciary*, 103rd Cong. 9–11 (2013) (statement of Mark Chandler, Senior Vice President and General Counsel, Cisco Systems) (testifying that the problem of PAE lawsuits has now spread to customers); *Id.* at 35 (statement of Janet L. Dhillon, Executive Vice President, General Counsel and Corporate Secretary, JCPenney Company, Inc.) (testifying that four years ago JCPenney, a department store, never had to defend against a patent lawsuit, while in 2012 over 3600 patent lawsuits were filed against it); Chien & Reines, *supra* note 1 (stating that “customer suits have been, until recently, relatively uncommon”); Scott Shane, *How to Neuter Patent Trolls*, BUSINESSWEEK (March 26, 2013), <http://www.businessweek.com/articles/2013-03-26/how-to-neuter-patent-trolls>.

⁵⁵ See Gerard N. Magliocca, *Blackberries and Barnyards: Patent Trolls and the Perils of Innovation*, 82 NOTRE DAME L. REV. 1809, 1819–27 (2007) (describing the existence of patent trolls in the Nineteenth Century who enforced agricultural patents).

⁵⁶ Complaint, Ass’n for Molecular Pathology v. USPTO, *supra* note 5, at ¶ 1-26.

⁵⁷ Jonathan Stempel, *Myriad Wins Gene Patent Ruling from US Appeals Court*, REUTERS (Aug. 6, 2012), <http://www.reuters.com/article/2012/08/16/us-myriad-patent-idUSBRE87F12K20120816> (reporting on the cost of genetic testing for BRCA1/BRCA2); *What is the Cost of Genetic Testing*, GENETICS HOME REFERENCE (July 15, 2013),

addition, Myriad sent cease and desist letters to physicians and laboratories that offered or planned to offer testing.⁵⁸ As a result, patients' only option was to test through Myriad. Some patients were unable to test due to the high fees and lack of insurance coverage for genetic testing.⁵⁹ In addition, patients could not undergo repeat testing with another entity to confirm accuracy or undergo more extensive testing.⁶⁰ A group of patients joined forces with physicians, laboratories, medical centers and non-profit organizations seeking a declaratory judgment of patent invalidity.⁶¹ The case garnered significant media and academic attention⁶² and was eventually decided by the Supreme Court in June 2013.⁶³

In *Bowman v. Monsanto*, Monsanto, which owns patents on genetically engineered seeds that are resistant to herbicide, sued farmers who re-used the seeds.⁶⁴ Monsanto's genetically engineered seed, which is resistant to the herbicide, enables farmers to spray herbicide on crops in order to destroy weeds without destroying the crops.⁶⁵ Yet, Monsanto's genetically engineered seed has an additional quality: it self-replicates. Thus, farmers can purchase the seeds once and save some crops to re-plant in subsequent seasons.⁶⁶ To prevent this, Monsanto required farmers who bought the patented seed to sign a contract agreeing not to use the seed for an additional season. According to the agreement, none of the crops grown could be re-planted.⁶⁷ Monsanto sued or threatened to sue over 800 farmers who re-planted the self-replicating seeds.⁶⁸ The Supreme Court decided the case on May 2013.⁶⁹

<http://ghr.nlm.nih.gov/handbook/testing/costresults> (stating that genetic testing costs between \$100 to more than \$2,000).

⁵⁸ See *Ass'n for Molecular Pathology v. United States Patent & Trademark Office*, 669 F.3d 1303, 1314-1315 (Fed. Cir. 2012), *aff'd in part & rev'd in part*, *Ass'n Molecular Pathology v. Myriad Genetics, Inc.*, 133 S. Ct. 2107 (2013) (describing the cease and desist letters sent by Myriad).

⁵⁹ See *id.* at 1315; Complaint, *Ass'n for Molecular Pathology v. USPTO*, *supra* note 5, at ¶ 1-26.

⁶⁰ See *Ass'n for Molecular Pathology*, 689 F.3d at 1315; Complaint, *Ass'n for Molecular Pathology v. USPTO*, *supra* note 5, at ¶ 21-26.

⁶¹ See Complaint, *Ass'n for Molecular Pathology v. USPTO*, *supra* note 5, at ¶ 7-26.

⁶² See e.g., Dan L. Burk, *Edifying Thoughts of a Patent Watcher: The Nature of DNA*, 60 UCLA L. REV. DISCOURSE 92 (2013) (criticizing the focus on the products of nature doctrine); Adam Liptak, *Justices, 9-0, Bar Patenting Human Genes*, N.Y. TIMES, June 14, 2013, at A1, available at <http://www.nytimes.com/2013/06/14/us/supreme-court-rules-human-genes-may-not-be-patented.html> (discussing the Supreme Court's decision); Robert Barnes & Brady Dennis, *Supreme Court Rules Human Genes May Not be Patented*, WASH. POST (June 13, 2013), http://www.washingtonpost.com/politics/supreme-court-rules-human-genes-may-not-be-patented/2013/06/13/9e5c55d2-d43d-11e2-a73e-826d299ff459_story.html (discussing the Supreme Court's decision).

⁶³ *Ass'n Molecular Pathology v. Myriad Genetics*, 133 S. Ct. 2107 (2013).

⁶⁴ *Bowman v. Monsanto Co.*, 133 S. Ct. 1761, 1764-65 (2013).

⁶⁵ *Id.* at 1765.

⁶⁶ *Id.*

⁶⁷ *Id.* at 1764.

⁶⁸ *Organic Seed Growers & Trade Ass'n v. Monsanto Co.*, 718 F.3d 1350, 1353 (Fed. Cir. 2013) (stating that "[b]etween 1997 and 2010, Monsanto brought some 144 infringement

Finally, in *Organic Seed Growers v. Monsanto*, organic farmers, who did not use Monsanto's genetically engineered seed, filed suit for declaratory judgment that Monsanto's patents are invalid.⁷⁰ The organic farmers sued because the wind may blow seeds from one field to another, causing Monsanto's seeds to grow in their fields. Given Monsanto's extensive history of lawsuits against farmers, they were concerned that Monsanto would sue them for inadvertently growing the patented seeds.⁷¹ To prevent this, the organic farmers decided to act proactively and file suit for a judgment declaring that Monsanto's patents are invalid.⁷² The Federal Circuit decided the case on June 2013.⁷³

B. PAEs' LITIGATION AGAINST CUSTOMERS

PAEs are a relatively recent phenomenon in patent litigation.⁷⁴ Yet, currently, PAEs file the majority of patent lawsuits in the United States.⁷⁵ PAEs are particularly common in the software industry.⁷⁶ They do not manufacture or sell the patented technology. Instead, these companies purchase patents in order to enforce them.⁷⁷ PAEs have a number of business strategies. A prominent group defined as the "bottom feeder trolls" threatens and sues large numbers of alleged infringers.⁷⁸

suits for unauthorized use of its seed. Approximately 700 other cases were settled without litigation.").

⁶⁹ *Bowman*, 133 S. Ct. 1761. See also Jeremy N. Sheff, *Self-Replicating Technologies*, STAN. TECH. L. REV. 235–38 (2012) (discussing Monsanto's suits against the farmers).

⁷⁰ *Organic Seed Growers & Trade Ass'n*, 718 F.3d at 1353–54.

⁷¹ *Id.* at 1353.

⁷² *Id.* at 1353–54; First Amended Complaint at ¶ 2, *Organic Seed Growers & Trade Ass'n v. Monsanto*, 851 F. Supp. 2d 544 (S.D.N.Y. 2011) (No. 11-cv-2163) available at www.pubpat.org/assets/files/seed/OSGATA-v-Monsanto-Complaint.pdf.

⁷³ *Organic Seed Growers & Trade Ass'n*, 718 F.3d 1350.

⁷⁴ *Litigation Over Time*, PATENT FREEDOM (Feb. 7, 2014), <https://www.patentfreedom.com/about-npes/litigations> (showing the dramatic increase in PAE lawsuits from 2004 onward).

⁷⁵ See Colleen Chien, Presentation to DOJ/FTC Hearings on PAEs: Patent Assertion Entities, at Slide 23 (Dec 10, 2012), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2187314.

⁷⁶ Bessen & Ford et al., *supra* note 2, at 28; Mark Lemley & A. Douglas Melamed, *Missing the Forest for the Trolls* 113 COLUM. L. REV. 2117, 2123 (2013).

⁷⁷ Lemley & Melamed, *supra* note 76 at 2126–2129; Mark A. Lemley, *Are Universities Patent Trolls?*, 18 FORDHAM INTELL. PROP. MEDIA & ENT. L.J. 611 (2007-2008) (discussing whether universities are patent trolls).

⁷⁸ See Lemley & Melamed, *supra* note 76 at 2126. See also Tracie L. Bryant, *The America Invents Act: Slaying Trolls, Limiting Joinder*, 25 HARV. J. LAW & TEC 687, 691–92 (2012) (describing PAEs' strategy of joining multiple unrelated defendants); Chien & Reines, *supra* note 1, at 8–10 (discussing PAE lawsuits of multiple customers); Stijepko Tokic, *The Role of Consumers in Deterring Settlement Agreements Based on Invalid Patents: The Case of Non-Practicing Entities*, 2012 STAN. TECH. L. REV. 2, 9, n. 26 (2012) (stating that there have been cases in which PAEs sued over 20 defendants in one lawsuit). See also

Unlike patent owners who are in the business of marketing their invention, PAEs do not have a business relationship they need cultivate with customers. Therefore, increasingly, these PAEs have been suing end users who are customers of a manufacturer or supplier of the alleged infringing technology. These PAEs target these customers for their use or adoption of existing technology.⁷⁹

PAE suits against customers have become increasingly common.⁸⁰ PAEs find customer lawsuits attractive, first, because of the large numbers of potential targets.⁸¹ Secondly, customers, who are not technological companies with know-how regarding the patent, are easy targets who prefer to settle instead of entering expensive litigation.⁸² Examples are plentiful. The following are a few illustrative reports of PAEs' enforcement actions against end users.

One PAE, Innovatio, acquired patent rights to wireless Internet technology, which it claims is necessary to implement the standards for wireless local area networking technology (Wi-Fi).⁸³ Wi-Fi technology is ubiquitously used. To enforce its patent rights, Innovatio has sent more than 8,000 infringement letters to businesses that use Wi-Fi technology.⁸⁴ In addition, Innovatio has initiated 23 lawsuits in 4 states.⁸⁵ Innovatio's enforcement measures targeted many end users, which are not technological companies. Some like bakeries, restaurants and cafes, offer wireless technology to their customers, while other businesses use it for their internal business operations.⁸⁶

Another PAE, ArrivalStar, owns patent rights that allegedly cover systems and methods that enable users to receive vehicle or shipment status and arrival information through cell phones, telephones and computers.⁸⁷ It has filed hundreds of lawsuits, most of which ended in

generally Bryant, *supra* note 78, at 691–92 (discussing the impact of the AIA joinder provision on the number of defendants in PAE lawsuits).

⁷⁹ Colleen V. Chien, *Startups and Patent Trolls* 16 (Santa Clara Univ. School of Law Legal Studies Research Paper Series, Accepted Paper No. 09-12, 2012) *available at* http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2146251. [hereinafter Chien, *Startups and Patent Trolls*]

⁸⁰ Chien & Reines, *supra* note 1.

⁸¹ See Chien, *Startups and Patent Trolls*, *supra* note 79, at 16.

⁸² See Magliocca, *supra* note 55, at 1813 (discussing the preference of those threatened by PAEs to settle); Randall R. Rader, Colleen V. Chien et al., *Make Patent Trolls Pay in Court*, N.Y. TIMES (June 4, 2013), http://www.nytimes.com/2013/06/05/opinion/make-patent-trolls-pay-in-court.html?_r=0 (describing the PAE business model, which is based on extracting financial settlements).

⁸³ In re Innovatio IP Ventures, LLC Patent Litig., No. 1:11-cv-09038, 2013 U.S. Dist. LEXIS 10554, at *3 (N.D. Ill. 2013). Cisco Systems Inc. et al. v. Innovation IP Ventures LLC, Case 1:11-cv-09308 3 (N.D. Ill. 2013).

⁸⁴ Motorola Solutions, Inc. v. Innovatio IP Ventures, 921 F. Supp. 2d 903, 907 (N.D. Ill. 2013) (Cisco Sys., Inc. case).

⁸⁵ *Id.* at 908–09.

⁸⁶ *Id.* at 907.

⁸⁷ In re ArrivalStar S.A. Fleet Mgmt. Sys. Patent Litig., 802 F. Supp. 2d 1378, 1379 (J.P.M.L. 2011).

settlements, and has sent many more infringement letters.⁸⁸ ArrivalStar has sued private sector transportation companies and large retailers such as Best Buy and Home Depot.⁸⁹ But, in addition, one of ArrivalStar's main targets has been public transit systems. They have sued public transit systems in many major cities, including, the Metropolitan Transportation Authority and New York City Transit Authority, the Massachusetts Bay Transportation Authority, the Maryland Transit Administration, the Greater Cleveland Regional Transit Authority and the Port Authority of New York and New Jersey.⁹⁰ ArrivalStar alleged that its patents cover systems monitoring travel data. Specifically, they pointed to systems allowing users to contact the transit authority by SMS text message to request arrival times for vehicles monitored by the system; the system then texts back the arrival time of the train or bus to the user.⁹¹ Nearly all public transit systems preferred to avoid expensive litigation and have settled for \$50,000-\$75,000.⁹² In June 2013, the American Public Transportation Association, took a proactive step and filed suit for declaratory judgment of patent invalidity against ArrivalStar to protect its members from ArrivalStar's enforcement measures.⁹³

Finally, Lodsys, LLC ("Lodsys") has sent infringement letters and sued to enforce its software patents against non-technology companies, asserting that these companies infringe Lodsys' patents by incorporating its patented technology into their company websites.⁹⁴ Specifically, Lodsys

⁸⁸ Joe Mullin, *Patent Troll that Sues Public Transit Systems Gets Hauled into Court*, ARS TECHNICA (June 27, 2013, 1:30AM), <http://www.arstechnica.com/tech-policy/2013/06/patent-troll-that-sues-public-transit-system-gets-hauled-into-court/> [hereinafter Mullin, *Patent Troll that Sues*]. See e.g., *ArrivalStar S.A. Fleet Mgmt. Sys. Patent Litig.*, 802 F. Supp. 2d 1378, 1379 (J.P.M.L. 2011).

⁸⁹ Mullin, *Patent Troll that Sues*, *supra* note 88.

⁹⁰ *Am. Pub. Transp. Ass'n v. ArrivalStar S.A.*, No. 1:13-cv-04375-ALC, at *3 (S.D.N.Y. filed June 25, 2013).

⁹¹ See e.g., Letter from ArrivalStar S.A. et al, to Toledo Area Regional Transit Authority (TARTA), (Feb. 22, 2012).

⁹² *Am. Pub. Transp. Ass'n v. ArrivalStar S.A.*, No. 1:13-cv-04375, at *2 (S.D.N.Y. filed June 25, 2013) (where the Port Authority of New York and New Jersey elected not to settle but to proceed with litigation); Joe Mullin, *A New Target for Tech Patent Trolls: Cash Strapped-American Cities*, ARS TECHNICA (Mar. 15, 2012), <http://www.arstechnica.com/tech-policy/2012/03/a-new-low-for-patent-trolls-targeting-cash-strapped-cities> (reporting that public transportation authorities preferred to quickly settle). But see *ArrivalStar S.A. et al., v. Port Authority of New York and New Jersey*, No. 11 civ. 1808, 2012 U.S. Dist. Lexis 44248 (S.D.N.Y. 2012).

⁹³ *Am. Public Trans. Ass'n v. ArrivalStar S.A.*, No. 13-Civ-04375, at *2 (S.D.N.Y. filed June 25, 2013).

⁹⁴ Complaint for Declaratory Judgment at 4, *Oracle Am., Inc. v. Lodsys, LLC*, No. 2:12-cv-00550 (E. Dis. Wis. filed June 1, 2012) (claiming that Lodsys did not invent the patents it is enforcing); Complaint for Declaratory Judgment at 3-6, *Foresee Results, Inc., v. Lodsys, LLC*, No. 11-cv-3886 (N.D. Ill. filed June 6, 2011) *available at* <http://thepriorart.typepad.com/files/foresee-results-complaint.pdf> (describing cease and desist letters); Josh Lowensohn, *Lodsys Files Suit Against New York Times, Five Others*, CNET NEWS (July 5, 2011, 2:27PM), http://news.cnet.com/8301-13578_3-20076975-

claimed that these companies infringed its patents through use of live interactive chat with consumers and consumer survey functions on their company websites.⁹⁵ Lodsys sued many non-technology companies including Adidas America (“Adidas”), Best Buy Solutions, Inc., Best Western International, CVS Caremark Corporation and Vitamin Shoppe.⁹⁶ The defendant companies purchased the alleged patented technology from technology companies that produced the alleged infringing technology. Oracle, for example, reported that within a year-and-a-half period, Lodsys sent infringement letters to dozens of its customers, some of its customers, such as Walgreens, were eventually sued.⁹⁷

C. END USERS AND PAY-FOR-DELAY AGREEMENTS IN THE PHARMACEUTICAL INDUSTRY

In the pharmaceutical industry competitors’ and users’ interests increasingly diverge. This occurs when generic manufacturers and patent owners reach settlements that are not in the best interests of patients who seek access to cheaper drugs. And importantly, although the FTC (representing consumer interests) has played an important role regarding these settlements,⁹⁸ patients⁹⁹ and drugstores¹⁰⁰ have also sued independently to challenge these agreements.¹⁰¹

38/lodsys-files-suit-against-new-york-times-five-others/ (describing Lodsys’ patent enforcement actions against technology companies and retailers).

⁹⁵ Complaint for Patent Infringement at 3–6, *Lodsys, LLC v. Adidas Am., Inc.*, No. 2:11-cv-283 (E.D. Tex. filed June 10, 2011), available at http://news.cnet.com/8301-30685_3-20070645-264/lodsys-patent-attack-now-targets-best-buy-adidas; see also Joe Mullin, *Patent Troll Lodsys Sues Mobile Game Makers, Despite Apple’s Intervention*, ARS TECHNICA, (Apr. 7, 2013, 9:30PM), <http://arstechnica.com/tech-policy/2013/04/patent-troll-lodsys-sues-10-mobile-game-makers-despite-apples-intervention/> (reporting on additional lawsuits by Lodsys filed in 2013). Some of these companies, such as Adidas America, Inc., proceeded to litigate these claims. See *Lodsys, LLC v. Brother Int’l Corp.*, 2-11-cv-00090 2013 U.S. Dist. LEXIS 85614, at *6–*9 (E.D. Tex. 2013).

⁹⁶ Complaint, *Lodsys, LLC v. Adidas Am. Inc.*, *supra* note 95, at 1-2.

⁹⁷ See Complaint, *Oracle Am., Inc. v. Lodsys, LLC*, *supra* note 94, at 4–5.

⁹⁸ See e.g., *Federal Trade Comm’n. v. Actavis*, 133 S. Ct. 2223, 2237 (2013).

⁹⁹ For examples of lawsuits by patients, see, *Ark. Carpenters Health & Welfare Fund v. Bayer AG*, 544 F.3d 1323, 1327 (Fed. Cir. 2008) (individual drug purchasers and several advocacy groups challenging an agreement between patentee and generic drug manufacturer regarding the drug Cipro); *Louisiana Wholesale Drug Co. v. Hoechst Marion Roussel, Inc.* 332 F.3d 896, 899 (6th Cir. 2003) (individual drug purchasers of Cardizem CD challenging an agreement between a patentee and generic drug manufacturer); *In re Tamixofen Citrate Antitrust Litig.*, 277 F. Supp. 2d 121 (E.D.N.Y. 2003), *aff’d*, *Joblove v. Barr Labs. Inc.*, 429 F.3d 370 (2d. Cir. 2005) (individual drug purchasers, medical benefits organizations and consumer advocacy groups challenging an agreement between a patentee and generic drug manufacturer regarding the drug tamixofen citrate); *In re Buspirone Patent & Antitrust Litig.*, 210 F.R.D. 43, 46 (S.D.N.Y. 2002) (individual drug purchasers suing with others to challenge an agreement between a patentee and generic drug manufacturer regarding the drug buspirone).

¹⁰⁰ For examples of lawsuits by drugstores, *Valley Drug Co. v. Geneva Pharms., Inc.*, 350 F.3d 1181, 1183–84 (11th Cir. 2003) (wholesalers selling the drug terazosin hydrochloride

A pharmaceutical company seeking to market a new drug to the public needs to obtain approval from the Food and Drug Administration (“FDA”), by submitting a New Drug Application (“NDA”).¹⁰² The submission of an NDA is extremely expensive and time-consuming.¹⁰³ The Hatch-Waxman Act allows generic drug manufacturers to file an Abbreviated New Drug Application (“ANDA”), which relies on the information in an NDA previously filed for a patented drug.¹⁰⁴ A generic manufacturer filing an ANDA needs to certify that the drug does not infringe a patent.¹⁰⁵ One way to certify non-infringement is through a process known as “Paragraph IV Certification.”¹⁰⁶ Under the Paragraph IV Certification process, the generic manufacturer certifies that the patent either is invalid or will not be infringed by the proposed generic product.¹⁰⁷ The patent owner then has forty-five days to file an infringement suit in court, and if such a suit is filed, the FDA may not approve the generic for thirty months or until the suit is resolved, whichever occurs first.¹⁰⁸ The result is often a lengthy and expensive litigation that patent owners prefer to settle.¹⁰⁹ One type of settlement that has received significant attention is called a “reverse payment agreement” or “pay-for-delay agreement.”¹¹⁰

While a primary goal of the Hatch-Waxman Act was to increase the availability of low cost drugs to patients, “pay-for delay” agreements undermine this objective.¹¹¹ Under the Hatch-Waxman scheme the first

challenging an agreement between a patentee and generic drug manufacturer); In re Sexlaxin, 2013 U.S. Dist. LEXIS 70968 *8–*9 (E.D. Tenn. 2013) (drugstores suing with others to challenge an agreement between a patentee and generic drug manufacturer regarding the drug Metaxalone); In re Neurontin Antitrust Litig. 2009 U.S. Dist. LEXIS 77475 at *1 (D.N.J. 2009) (Rite-Aid, CVS and other direct purchasers of the drug Neurontin challenging an agreement between a patentee and generic drug manufacturer).

¹⁰¹ On the divergence between the public interest and competitors’ interests, see also, Rochelle Cooper Dreyfuss & Lawrence S. Pope, *Dethroning Lear? Incentives to Innovate After MedImmune*, 24 BERKELEY TECH. L. J. 969, 972 (2009).

¹⁰² 21 U.S.C. § 355(a) (2013).

¹⁰³ C. Scott Hemphill, *Paying for Delay: Pharmaceutical Patent Settlement as a Regulatory Designer Problem*, 81 N.Y.U. L. REV. 1553, 1564 (2006).

¹⁰⁴ 21 U.S.C. § 355 (j) (2013).

¹⁰⁵ *Id.* § 355 (j)(2)(A)(vii).

¹⁰⁶ *Id.* § 355 (j)(2)(A)(vii)(IV).

¹⁰⁷ *Id.* § 355 (j)(2)(A)(vii)(IV).

¹⁰⁸ *Id.* § 355 (j)(5)(B)(iii).

¹⁰⁹ Carl W. Hittinger & Lesli C. Esposito, *In re K-Dur Litigation: The Third Circuit’s Controversial Pay-For Delay Antitrust Decision Split with Other Circuit Courts*, 58 VILL. L. REV. 103, 104 (2013).

¹¹⁰ *Id.*

¹¹¹ See H.R. REP. NO. 98-857, pt. 1, at 14 (1984), reprinted in 1984 U.S.C.C.A.N. 2647, 2647 (stating that the purpose of the Hatch Waxman Act was to provide low cost generic drugs); Federal Trade Commission’s Brief as Amicus Curiae, *Actelion Pharm. v. Apotex, Inc.*, (D.N.J. filed Sep. 14, 2012) (No. 1:12-cv-05743), available at http://www.ftc.gov/sites/default/files/documents/amicus_briefs/actelion-pharmaceuticals-ltd-et-al.v.apotex-inc./130311actelionamicusbrief.pdf (voicing concerns regarding the impact of pay-for-delay agreements on consumers’ access to generic drugs); Hemphill,

generic company that files Paragraph IV certification receives 180 days exclusivity,¹¹² but, once this period is over and multiple generic companies enter the market, the drug price typically drops significantly.¹¹³ Pay-for-delay agreements prevent the public from enjoying the benefits of competition. In such agreements, the generic manufacturer typically agrees to delay entering the market in return for monetary compensation.¹¹⁴ Yet, while these agreements serve the interests of both the patentee and the competitors, consumer interests in obtaining cheaper access to essential drugs are trampled.

Pay-for-delay agreements are becoming increasingly common. The FTC assessed that in 2012, 40 settlements between patent owners and generic manufacturers involved pay-for-delay agreements.¹¹⁵ In 2013, the Supreme Court granted certiorari in two cases involving such agreements. In *Federal Trade Commission v. Actavis*, the FTC represented end-users' interests to challenge pay-for-delay agreements involving a drug called AndroGel, which increases testosterone levels for men.¹¹⁶ And, *in re K-Dur Antitrust Litigation*, end-users: wholesalers, such as Walgreens and CVS Pharmacy that sell the drug K-Dur, which treats low blood levels of Potassium, challenged the settlement agreement.¹¹⁷ The Supreme Court decided the cases on June 2013, and did not find that such agreements are presumptively invalid, thus, the conflict between end user and competitor interests remains.¹¹⁸

supra note 103 at 1568–73 (explaining that pay-for-delay agreements prevent early competition and deny consumers the benefit of low drug prices).

¹¹² 21 U.S.C. § 355(j)(5)(B)(iv) (2014).

¹¹³ C. Scott Hemphill & Mark A. Lemley, *Earning Exclusivity: Generic Drug Incentives and the Hatch- Waxman Act*, 77 ANTITRUST L.J. 947, 953 (2011) (stating that profits fall significantly when generic drugs enter the market). *See generally* Cong. Budget Office, *Pricing and Competition in the Pharmaceutical Market in HOW INCREASED COMPETITION FROM GENERIC DRUGS HAS AFFECTED PRICES AND RETURNS IN THE PHARMACEUTICAL INDUSTRY*, 13, 28 (describing the drop in the cost of drugs once generic drugs enter the market).

¹¹⁴ *See* Scott Hemphill, *Drug Patent Settlements Between Rivals: A Survey*, 4, (2007), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=969492; David Opderbeck, *Rational Antitrust Policy and Reverse Payment Settlements on Hatch-Waxman Litigation*, 98 GEO. L.J. 1303, 1307–1308 (2010).

¹¹⁵ This is compared to 28 in 2011, 31 in 2010, 19 in 2009, 16 in 2008, 14 in 2007, 14 in 2006, 2 in 2005 and none in 2004. *See* Bureau of Competition Report, *Agreements Filed with the Federal Trade Commission under the Medicare Prescription Drug, Improvement and Modernization Act of 2003, Overview of Agreements Filed in FY 2012*, FED. TRADE COMM'N, (2013), available at <http://www.ftc.gov/os/2013/01/130117mmareport.pdf>.

¹¹⁶ *Federal Trade Comm'n v. Actavis*, 133 S. Ct. 2223, 2229–30 (2013) (describing the FTC's lawsuit); *see* ANDROGEL, <http://www.androgel.com> (describing the function of Androgel).

¹¹⁷ *In re K-Dur Antitrust Litigation*, 686 F.3d 197, 205–208 (Fed Cir. 2012) (describing the parties to the lawsuit); *K-Dur*, DRUGS.COM, <http://www.drugs.com/k-dur.html> (describing the function of K-Dur).

¹¹⁸ *Actavis*, 133 S. Ct. at 2237 (declining to find that pay-for-delay agreements are presumptively invalid); *Merck & Co. v. La. Wholesale Drug Co.*, 133 S. Ct. 2849 (2013) (vacating and remanding in light of the decision in *Actavis*).

End users' roles in challenging pay-for-delay agreements differ in two respects from end users' roles in other forms of patent litigation. First, in other cases, end users' interests are usually aligned with those of competitors. For example, in PAE litigation the manufacturer and its end user customers seek to defeat the patentee's infringement claims. Conversely, in pay-for-delay cases, the generic manufacturer competitor and the patent owner brand name together resist the end user's challenge of the settlement agreement.¹¹⁹ Yet it is the different alignment of the parties' interests that underscores the importance of assessing the new role of the end user. This realignment of parties' interests highlights that the end user cannot rely on the protection of the competitor. The needs of end users are particularly evident when they cannot rely on their traditional protectors.

Secondly, the litigation concerning pay-for-delay agreements is, in a sense, a hybrid creature of patent and antitrust litigation. Pay-for-delay agreements are an inadvertent result of the Hatch Waxman Act's Paragraph IV Certification process. The Hatch Waxman Act is a patent legislation designed to encourage early entry of generic versions of patented drugs into the market. At the same time, petitioners challenging these agreements, including end users, challenge them utilizing antitrust claims.¹²⁰ Unlike patent law, antitrust law is more flexible regarding consumers' standing to sue.¹²¹ The relaxed standing standards explain the prevalence of end users, such as patients and drugstores, as plaintiffs in these lawsuits. At the same time, it underscores that when end users can avail themselves of procedural tools that enable them to participate in patent disputes, they will take advantage of them and become players.

II. FROM A COMPETITOR MODEL TO A HYBRID COMPETITOR-USER MODEL

End users may be businesses or individuals and may take different roles in patent litigation. This Article defines end users broadly to encompass users who use the patented technology for personal consumption or in business. But, end users are not in the business of making or directly selling the technology. This Part differentiates end users from small technological competitors, by highlighting three characteristics: (i) end users are not technologically sophisticated; (ii) they tend to enter the patent conflict later in the life of the patent; and (iii) they are often one-time players. It then turns to describe the shift from the traditional model that

¹¹⁹ For a discussion of the shared incentives of patentees and large settling generic manufacturers, see, Michael A. Carrier, *Unsettling Drug Patent Settlements: A Framework for Presumptive Illegality* 108 MICH. L. REV. 37, 73 (2009).

¹²⁰ See generally Herbert Hovenkamp, *Anticompetitive Patent Settlements and the Supreme Court's Actavis Decision*, 15 MINN. J. L. SCI. & TECH. 3 (2014) (discussing the Supreme Court's Actavis decision and its application of antitrust principles to the pay for delay agreements resulting from the Hatch-Waxman Act).

¹²¹ See JEFF MILES, HEALTHCARE & ANTITRUST LAW: PRINCIPLES AND PRACTICE, Vol. 1, § 9.7.

focuses on the patentee and the competitor to a model that includes end users as players in patent litigation. Finally, this Part analyzes the reasons for the rise of the end user in patent litigation, pointing to a combination of technological change and a transformation in litigation practices. It highlights the integration of technology into daily life and into businesses that were not previously highly technology-reliant, the development of new technologies that change the means of production and the advent of PAEs who do not have a customer relationship and whose business model depends on suing thousands of users.

A. IDENTIFYING THE END USER

End users may be plaintiffs taking proactive measures to invalidate a patent by seeking declaratory judgment,¹²² or by challenging pay-for-delay agreements to obtain access to drugs.¹²³ End users may be defendants sued for infringing a patent,¹²⁴ or they may be threatened by litigation through cease and desist letters and choose to settle out of court.¹²⁵ In some of these cases, end users may, in fact, be infringers.¹²⁶ And in other cases, end users may be alleged infringers of patents that are, in fact, invalid.¹²⁷ End users may use a technology for personal consumption or in business. Yet, despite these variations, they all differ from the traditional competitor in that they are not in the business of making or directly selling the technology at stake. They are strictly users. Even if they incorporate the patented technology within a product or service they offer their customers they do not make or

¹²² *Ass'n Molecular Pathology v. Myriad Genetics, Inc.*, 133 S. Ct. 2107 (2013); Complaint, *Ass'n for Molecular Pathology v. USPTO*, *supra* note 5, at ¶ 1-26; *Organic Seed Growers & Trade Ass'n v. Monsanto Co.*, 718 F.3d 1350, 1353–54 (Fed. Cir. 2013); First Amended Complaint at ¶ 2, *Organic Seed Growers & Trade Ass'n*, 851 F. Supp. 2d 544 (S.D.N.Y. 2012) (No. 11 Civ. 2163), *available at* www.pubpat.org/assets/files/seed/OSGATA-v-Monsanto-Complaint.pdf.

¹²³ *See e.g.*, *Ark. Carpenters Health & Welfare Fund v. Bayer AG*, 544 F.3d 1323, 1327 (Fed. Cir. 2008) (patients challenging an agreement between a patentee and generic drug manufacturer regarding the drug Cipro); *In re Neurontin Antitrust Litig.* 1009 U.S. Dist. LEXIS 77475 *1 (D.N.J. 2009) (drug stores, such as Rite-Aid and CVS, challenging an agreement between a patentee and generic drug manufacturer regarding the drug Neurontin).

¹²⁴ *See e.g.*, *Bowman v. Monsanto Co.*, 133 S. Ct. 1761, 1764–65 (2013); Complaint, *Lodsys, LLC v. Adidas Am. Inc.*, *supra* note 95, at 1–2.

¹²⁵ Joe Mullin, *A New Target for Tech Patent Trolls: Cash Strapped-American Cities*, ARS TECHNICA (Mar. 15, 2012), <http://www.arstechnica.com/tech-policy/2012/03/a-new-low-for-patent-trolls-targeting-cash-strapped-cities> (reporting that public transportation authorities sued by PAEs preferred to settle quickly).

¹²⁶ *See e.g.*, *Bowman*, 133 S. Ct. at 1769 (holding that the farmers infringed Monsanto's patent because the patent exhaustion doctrine does not apply to their actions).

¹²⁷ *See e.g.*, *Myriad Genetics, Inc.*, 133 S. Ct. at 2111 (where the court invalidated certain breast cancer gene patent claims that were enforced against end users). In addition, many suits against end users are filed by PAEs who tend to enforce weaker patents. *See Merges, supra* note 50, at 1603–04 (discussing allegations that PAEs file suits based on weak patents).

sell the technology itself, and therefore are usually not knowledgeable about it. At times, they may be even unaware of its existence.

End users also differ in the equities of their cases. Some end users may advertently risk infringing a patent. For example, the farmers in *Bowman v. Monsanto* knew that re-planting Monsanto's patented seeds violated the contracts they signed with Monsanto and that Monsanto claimed that re-planting the seeds amounts to patent infringement.¹²⁸ At the same time, podcasters who purchased podcasting technology from those they believed were the legitimate owners of the technology were extremely surprised to find themselves sued by a PAE for patent infringement.¹²⁹ Our sympathies are more likely to lie with the innocent podcasters than with the savvy farmers. Yet, regardless of the equities of the cases and where our sympathies lie, all end users share certain characteristics that place them at a procedural disadvantage in the patent litigation arena.

End users are often, although not always, small companies or individuals.¹³⁰ Small entities are not new to the patent conflict zone. However, traditionally these small entities were small technological companies that usually had a sophisticated understanding of the patented technology and the relevant prior art. Often such a company has, in fact, developed a technology that another company seeks to patent. In these cases the small technological entity may challenge the patent application in the PTO or may later contest the validity of the patent in court. In other cases, a patentee may sue a small technological company that is selling the technology it developed.¹³¹ Regardless of these differences, small technological entities are in the business of making and selling, not just

¹²⁸ *Bowman*, 133 S. Ct. at 1766–65.

¹²⁹ See *EFF Files Challenge with Patent Office Against Troll's Podcasting Patent*, ELECTRIC FRONTIER FOUNDATION (Oct. 16, 2013), <https://www.eff.org/press/releases/eff-files-challenge-patent-office-against-trolls-podcasting-patent>.

¹³⁰ Examples of individuals as end users include, patients suing in pay-for-delay cases or podcasters threatened for use of podcasting technology. *Louisiana Wholesale Drug Co. v. Hoechst Marion Roussel, Inc.*, 332 F.3d 896, 899 (6th Cir. 2003) (patients challenging a pay-for-delay agreement); *EFF Files Challenge with Patent Office Against Troll's Podcasting Patent*, ELECTRIC FRONTIER FOUNDATION (Oct. 16, 2013), <https://www.eff.org/press/releases/eff-files-challenge-patent-office-against-trolls-podcasting-patent> (a PAE enforcing a podcasting patent against podcasters). Examples of small businesses as end users are businesses sued or threatened for using scanning technology. Steven Salzberg, *Did You Scan and Email That Document? You Might Owe \$1,000 to a Patent Troll*, FORBES (Aug. 5, 2013), <http://www.forbes.com/sites/stevensalzberg/2013/08/05/did-you-scan-and-email-that-document-you-might-owe-1000-to-a-patent-troll/>. Sometimes large businesses, such as Adidas are the end users swept into a patent conflict. *Lodsys, LLC v. Adidas Am. Inc.*, No. 2:11-cv-283 (E.D. Tex. filed June 10, 2011), available at http://news.cnet.com/8301-30685_3-20070645-264/lodsys-patent-attack-now-targets-best-buy-adidas.

¹³¹ In a famous recent example Richard Ditzik lost his claim that Apple's iPhone infringes his patent for a handheld device that combines computer and wireless-communication functions over both a Wi-Fi and cellular network. See Edvard Pettersson & Valerie Reitman, *Apple Defeats Patent Claim over Invention of Smartphone*, BLOOMBERG (Nov. 26, 2013, 12:01AM), <http://www.bloomberg.com/news/2013-11-25/apple-wins-patent-trial-brought-by-purported-smartphone-inventor.html>.

using the technology.¹³² They, therefore, share a technological sophistication that facilitates challenging a patent application or the validity of a patent. In addition, in many instances, they become involved in the patent conflict early in the life of a patent when they realize a potential competitor has filed a patent application or has received a patent and is entering the market.

End users differ from the traditional small technological companies in three respects. First, end users lack technological sophistication. Their lack of technological sophistication puts them at a significant disadvantage in patent conflicts. While small companies that develop a technology have in-house engineers who are acquainted with the technology and any related innovations, end users rarely have this know-how.¹³³ End users are often individuals, such as patients, who lack any knowledge regarding the drug or test they seek to use.¹³⁴ And even when individual end users, like farmers, use the patented technology in business, they are usually not technologically-savvy about the composition of the technology itself.¹³⁵ The same applies to larger companies, such as Starbucks, which use allegedly patented wireless technology in their business.¹³⁶

Technological sophistication is crucial in patent conflicts. Patent cases are decided based on the resolution of two main issues: patent validity and infringement. Parties can challenge patent applications and issued patents' validity on grounds of subject matter, novelty, non-obviousness, utility and disclosure.¹³⁷ All challenges to patent validity require intricate understanding of the technology at issue.¹³⁸ But, particularly, challenges based on novelty, statutory bar and non-obviousness, require an understanding not only of the technology at issue, but also of the prior art –

¹³² Although at times, small technological companies may use technologies they did not develop as a component in their own technology, in these cases they would be using the technology as end users. I am focusing here on technological companies that are involved in a patent conflict involving a technology they have developed.

¹³³ See Love & Yoon, *supra* note 1, at 1629 (discussing the in-house knowledge that technological competitors can rely on).

¹³⁴ See e.g., *Ark. Carpenters Health & Welfare Fund v. Bayer AG*, 544 F.3d 1323, 1327 (Fed. Cir. 2008) (where patients challenged an agreement between patentee and generic drug manufacturer regarding the drug Cipro); Complaint, *Ass'n for Molecular Pathology v. USPTO*, *supra* note 5, at ¶ 1-26 (where patients challenged the validity of Myriad's BRCA1/BRCA2 patents).

¹³⁵ See *Bowman v. Monsanto Co.*, 133 S. Ct. 1761, 1764–65 (2013) (where farmers re-used Monsanto's patented genetically engineered seeds).

¹³⁶ See e.g., Complaint, *Innovatio IP Ventures, LLC. v. Starbucks Corp.* (N.D. Ill. 2012) (No. 12-cv-3872), available at <http://news.priorsmart.com/innovatio-ip-ventures-v-starbucks-l68H/> (alleging that Starbucks infringed Innovatio's patent in wireless technology).

¹³⁷ See 35 U.S.C. §§ 101, 102, 103, 112 (2013) (providing grounds for invalidity).

¹³⁸ For example, to challenge a patent under the disclosure requirement the challenger needs to comprehend the way in which the technology operates and compare it to the description in the patent. See *id.* §112 (providing the disclosure requirement).

other related technologies in use, patents, patent applications and publications.¹³⁹ In-house engineers and developers usually have the knowledge and understanding of both the technology they developed and the universe of relevant technologies and publications.¹⁴⁰ Infringement arguments also depend on technological expertise, and competitors' in-house employees tend to have in-depth understanding of the technology that facilitates making non-infringement arguments.¹⁴¹ Patent litigation is notoriously expensive even for technological companies who can rely on in-house experts.¹⁴² Although all parties to the litigation often rely on outside experts – patent owners and competitors can do so to a lesser extent.¹⁴³ The absence of in-house technological knowledge, requiring the reliance on outside experts, makes patent litigation costs particularly prohibitive for end users, making settlement without resolving the merits of the claims all the more lucrative.¹⁴⁴

Secondly, end users are unique in the stage in which they enter the patent conflict. End users do not manufacture the technology – they utilize it. They usually become embroiled in the patent conflict relatively late in the life of the patent. While competitors who manufacture and sell the technology and are well acquainted with the market may already challenge the patent during the application process or as it enters the market, end users enter the picture later. As users, their first contact with the patented

¹³⁹ See §§ 102–103 (2013).

¹⁴⁰ See Love & Yoon, *supra* note 1, at 1629 (discussing the in-house knowledge that technological competitors can rely on).

¹⁴¹ See *id.* (discussing manufacturers in PAEs lawsuits).

¹⁴² See *infra* Part IV(B).

¹⁴³ Technical experts may be testifying or non-testifying experts. Non-testifying experts often play an important role. They are instrumental in educating attorneys regarding the technology and assist in preparing validity or infringement arguments. In house experts may serve as either testifying or non-testifying experts. See Bindu Donovan, *Effective Selection and Retention of Testifying Experts for Patent Infringement Litigation*, 19(4) IP LITIGATOR (2013) at http://www.sidley.com/files/Publication/40030074-fe05-4901-8e2a-ebd22a2f95de/Presentation/PublicationAttachment/52b81ea8-4cc3-453a-82e9-ec657f5cbd1/IPLIT_070813_Donovan.pdf. Law firm publications often recommend resorting to in house counsels as experts. See, for example, Mark L. Levine & Alan Littman, *Managing Patent Litigation Results at Reasonable Cost*, at <http://www.bartlitbeck.com/about-news-118.html> (recommending evaluating the patent and accused product as early as possible by relying on employees within the company). See also Edward G. Poplawski, *Selection and Use of Experts in Patent Cases*, 9 FED. CIR. B.J. 145, 151-52 (1999-2000) (discussing the strengths of weaknesses of the inventor and employees or independent contractors of the parties as experts); Alex Reese, *Employee and Inventor Witnesses in Patent Trials: The Blurry Line Between Expert and Law Testimony*, 16 STAN. TECH. L. REV. 423, 424-25 (2013) (explaining that parties often choose in-house witnesses such as employees or company founders rather than outside experts because of the added expense of relying on paid experts and the possibility that a paid expert may not completely agree with the litigant's position).

¹⁴⁴ See James C. Yoon, Presentation at the Stanford Law School Intellectual Prop. Scholar Conference: Expanding the Customer Suit Exception in Patent Law (August 9-10, 2012), available at <http://www.jdsupra.com/legalnews/expanding-the-customer-suit-exception-in-28989/>.

technology is when it enters the market, and often only when it achieves widespread adoption. Patented technologies frequently attain widespread adoption late in the life of the patent.¹⁴⁵ The stage in which end users enter the conflict affects their opportunities to challenge the patent. Specifically, they are precluded from challenging the patent in the PTO during the application stage or soon thereafter.

Finally, end users are typically one-time players. Manufacturers have high stakes in the resolution of the conflict since the patented technology is often central to their business.¹⁴⁶ End users, however, are not in the business of manufacturing or selling the alleged infringing technology. Instead, they are surprised to find themselves involved in a patent dispute. In most cases, the patented technology is ancillary to their business or may be substituted by other technologies on the market.¹⁴⁷ As one-time players, they not have an incentive for a long-term resolution. Therefore, independent of the merits of the case, most end users will take the least costly option – settlement or withdrawal from use of the technology.¹⁴⁸

B. THE TRADITIONAL COMPETITOR MODEL

Patent law pays little attention to the end user. The utilitarian model driving patent law seeks to find a balance between incentivizing the inventor to promote innovation and preserving access for the public to enhance public welfare.¹⁴⁹ Yet, patent law, in effect, places the competitor as the guard of the public interest, assuming that in all cases the interests of the public and the competitor converge. The patent owner gets a twenty-year monopoly and typically a technologically-savvy competitor can challenge a patent application in the PTO or argue that the patent is invalid in court. Patent law presumes that the competitor's business interest will

¹⁴⁵ See ROGERS, *supra* note 24, at 219–66 (discussing rates of adoption of new technologies and the factors affecting these rates). For discussions of the problem of patenting early in the technological cycle before the technology is ready for commercialization, see generally, Cortopia, *supra* note 24; Sichelman *supra* note 24.

¹⁴⁶ This was illustrated recently by the patent litigation called the “Smartphone Wars.” See Agustino Fontevecchia, *Smartphone Wars: Who Wins and Who Loses from the Apple-Samsung Ruling*, FORBES (Aug. 27, 2012, 4:05PM), <http://www.forbes.com/sites/afontevecchia/2012/08/27/smartphone-wars-who-wins-and-who-loses-from-the-apple-samsung-patent-ruling>.

¹⁴⁷ Though in some cases where the technology cannot be substituted and its expense is high, end users may be players with a long-term interest. For example, a group of Fabry disease (a genetic disease) patients asked the National Institute of Health (“NIH”) to use its march-in power to address a patented drug shortage. In this case, the patients had no replacement and had a long-term interest in the production of the drug. See William O’Brien, *March-in Rights Under the Bayh-Dole Act: The NIH’s Paper Tiger?*, 43 SETON HALL L. REV. 1403, 1405–06 (2013).

¹⁴⁸ See Yoon, *supra* note 144.

¹⁴⁹ David S. Olson, *Taking the Utilitarian Basis for Patent Law Seriously: The Case for Restricting Patentable Subject Matter*, 82 TEMP. L. REV. 181, 182 (2009) (describing the utilitarian theory).

motivate him to challenge invalid patents, thereby increasing public access to technology.

Patent law doctrines, such as patent misuse and compulsory licensing, which regulate the patented innovation post market-entry and are particularly relevant to user access, highlight patent law's neglect of the end user. In both these doctrines, patent law focuses on the actions of the patent owner and competitors to facilitate access through competition and price reduction.¹⁵⁰ In the case of compulsory licenses, the behavior of the patentee instigates the issuance of compulsory licenses. A compulsory license may be issued where the patentee engages in anti-competitive behavior, does not use the patent, refuses to license to a dependent patent or acts in a way that harms the public interest.¹⁵¹ The law then turns to the patentee's competitor to resolve the dissemination and access problem. By compelling the patentee to license to competitors, the law seeks to accomplish increased production of the invention, which will lower price and result in increased dissemination and access.¹⁵² Although the goal is promoting user access, patent law provides the user no active role.

Similarly, the patent misuse doctrine is triggered when the patentee takes unfair advantage of his patent rights.¹⁵³ For example, when the patentee engages in discriminatory licensing (in which the patentee charges some licensees more than others).¹⁵⁴ Patent misuse can be raised as a defense in patent infringement cases. In these cases, the law focuses on the acts of the patent owner who has taken unfair advantage of the patent, and resolves the problem by turning to the competitors, absolving them from liability for patent infringement.¹⁵⁵ By defining the patentee's behavior as patent misuse and preventing the patentee from enforcing the patent, courts strengthen the market power of competitors, assuming that competition will lower prices and increase public access. Again, although their interests are clearly at stake, patent law does not provide users an active role.¹⁵⁶

¹⁵⁰ See Gaia Bernstein, *Incentivizing the Ordinary User*, FLORIDA L. REV. at 9 (forthcoming 2014) [Bernstein, *Incentivizing the Ordinary User*].

¹⁵¹ *Id.* at 11. While compulsory licenses are quite rare in the United States, the United States, through its treaty obligations and a combination of statutory obligations, may, and at times does, issue some version of a compulsory license in all categories, excluding the purpose of the exploitation of a dependent patent. *Id.*

¹⁵² See F.M. SCHERER, *THE ECONOMIC EFFECTS OF COMPULSORY PATENT LICENSING* 13–14, 66, 78 (1977); Bernstein, *Incentivizing the Ordinary User*, *supra* note 150, at 10–11.

¹⁵³ Bernstein, *Incentivizing the Ordinary User*, *supra* note 150, at 13. See also CARL MOY, *MOY'S WALKER ON PATENT*, §18.1 (4th ed. 2011). Although courts and the legislature have greatly constricted the patent misuse defense through the years, certain actions by the patent owners are still considered misuse. See HOVENKAMP, JANIS, LEMLEY & LESLIE, *IP AND ANTITRUST: AN ANALYSIS OF ANTITRUST PRINCIPLES APPLIED TO INTELLECTUAL PROPERTY LAW* § 3.2 (2nd ed. 2010) (describing the historical demise of patent misuse).

¹⁵⁴ See, e.g., *Laitram Corp. v. King Crab, Inc.*, 244 F. Supp. 9, 16–17 (D. Alaska 1965) (finding discriminatory licensing rates of shrimp peeling machinery to constitute patent misuse).

¹⁵⁵ Bernstein, *Incentivizing the Ordinary User*, *supra* note 150, at 13.

¹⁵⁶ *Id.*

C. REASONS FOR THE CHANGE TOWARD A HYBRID COMPETITOR-USER MODEL

A third player – the end user, now joins the patentee and its competitors in the patent litigation landscape. The proliferation of some, although not all cases involving end users, can be explained as a result of changes in technology and patent litigation practices. Two technological trends contributed toward making the user a player in patent litigation: the integration of technology into previously non-technological functions of daily life and changes in the means of production that transformed users into producers. These technological trends took place at the same time as the exponential growth in PAE lawsuits that popularized threats and legal action against users who are customers.

i. Technological Changes

First, in the last decade technology has further integrated into everyday lives, becoming part of businesses and daily functions that previously did not require use of technology.¹⁵⁷ For example, we traditionally did not view cafes as businesses that rely much on technology. Yet, many cafes now offer wireless services to their customers. Innovatio, a PAE, sued Starbucks Cafés for offering their customers wireless communications allegedly containing Innovatio’s patented technology.¹⁵⁸ Similarly, Adidas America, which manufactures sportswear, can no longer rely solely on its physical stores for sales. Like many other non-technology companies, it relies on sales through its website. Lodsys, another PAE, sued Adidas for alleged use of its patented technology in its website’s customer surveys and chat rooms.¹⁵⁹

Second, new genres of technologies are changing the means of production, making users into producers of technologies. Consequently, patentees are increasingly targeting users as defendants in patent litigation. This transformation is similar to the changes in the means of production of creative works that took place over a decade ago. As content became digitized on the Internet, users could easily make copies of copyrighted works and create their own versions.¹⁶⁰ As the means of production of

¹⁵⁷ See e.g., GERARD GOGGIN, CELL PHONE CULTURE 107–204 (2006) (describing how cell phone technology is integrated into many aspects of life).

¹⁵⁸ See e.g., Complaint, Innovatio IP Ventures, LLC. v. Starbucks Corp. (N.D. Ill. 2012) (No. 12-cv-3872), *available at* <http://news.priorsmart.com/innovatio-ip-ventures-v-starbucks-l68H/> (alleging that Starbucks infringed Innovatio’s patented wireless technology).

¹⁵⁹ See Lodsys, LLC v. Brother Int’l Corp., No. 2:11-cv-00090, 2013 U.S. Dist. LEXIS 85614, at *6–*9 (E.D. Tex. 2013); Complaint, Lodsys, LLC v. Adidas Am., Inc., *supra* note 95, at 3–6.

¹⁶⁰ See e.g., Neil Weinstock Netanel, *Copyright and a Democratic Civil Society*, 106 YALE L.J. 283, 299–300 (1996) (describing the digitization of materials on the Internet as a transformation in the means of production).

copyrighted works changed, copyright owners began targeting users as defendants in copyright litigation.¹⁶¹

One way in which the modes of production are changing is the advent of self-replicating technologies.¹⁶² Certain technologies can replicate themselves thereby making users into inadvertent producers of technology.¹⁶³ In *Bowman v. Monsanto*, Monsanto's genetically engineered seed could self-replicate. Farmers could purchase seeds once and save some of the crops to re-plant in subsequent seasons.¹⁶⁴ The patent exhaustion doctrine grants users of a patented article the right to use or sell the article. However, it does not extend to users who make the invention.¹⁶⁵ Therefore, users of self-replicating technologies are exposed to litigation threats and hauled into court.

Another transformation in the means of production that is likely to enlarge the role of the user is the introduction of the 3D printer. 3D printers can replicate three-dimensional products and have gone beyond being merely an expensive curiosity.¹⁶⁶ UPS has started providing these printers in its stores for people to come and use and Staples sells them for around \$1300.¹⁶⁷ 3D printers transform the access to the means of production by allowing consumers the opportunity to make items at home.¹⁶⁸ This new capability makes it more likely that an individual or a small business will make an infringing item that will expose them to patent liability.¹⁶⁹

ii. Changes in Patent Litigation Practices

PAEs have become an integral part of the patent litigation scene.¹⁷⁰ In 2012, PAEs brought the majority of all patent lawsuits in the country.¹⁷¹

¹⁶¹ Hughes, *supra* note 10 (discussing the music industry's lawsuits against individuals who downloaded music on the Internet).

¹⁶² See generally *Self-Replicating Technologies*, *supra* note 69 at 230 (2013) (discussing Monsanto's self-replicating seeds in the context of other self-replicating technologies, such as nanorobots or organic computers).

¹⁶³ See *id.* at 242 (stating that self replicating technologies: ". . . don't merely teach competitors how to practice a new invention, they supply such competitors with a factory as well").

¹⁶⁴ *Bowman v. Monsanto Co.*, 133 S. Ct. 1761, 1764–65 (2013).

¹⁶⁵ *Id.* at 1766.

¹⁶⁶ Doherty, *supra* note 11, at 353–54. On the advent of the 3D printers, see generally, Lucas S. Osborn, *Regulating Three-Dimensional Printing: the Converging Worlds of Bits and Atoms*, *forthcoming* SAN DIEGO L. REV. (2014) available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2348894&download=yes; Lucas S. Osborn, *of PhDs, Pirates, and the Public: Three-Dimensional Printing Technology and the Arts*, *forthcoming* 1 TEX. A & M L. REV. (2014) available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2378869.

¹⁶⁷ Desai & Magliocca, *supra* note 12, at 10. See also Doherty, *supra* note 11, at 357 (describing the market adoption of 3D printers).

¹⁶⁸ See Desai & Magliocca, *supra* note 12, at 7, 12.

¹⁶⁹ *Id.* at 4. Doherty, *supra* note 11, at 359–60.

¹⁷⁰ See *Litigation Over Time*, PATENT FREEDOM (Feb. 7, 2014), <https://www.patentfreedom.com/about-npes/litigations> (showing the dramatic increase in PAE lawsuits from 2004 onward).

Unlike the traditional patentee plaintiff, the PAE, is a non-practicing entity. It accrues revenues by purchasing patents and demanding licensing fees from those making and using technology allegedly covered under its patent.¹⁷² The PAE model differs from the traditional patent litigation model and this distinction accounts for vast numbers of users being hauled into the heart of the patent conflict zone.

One important difference between the traditional model and the PAE model is that many PAEs base their business model on casting a broad net to demand licensing fees from thousands of alleged infringers.¹⁷³ They demand licensing fees through sending infringement letters to hundreds or thousands of users. Often PAEs make money by accumulating low settlement fees from many users.¹⁷⁴ And although most cases end in settlements, some proceed to litigation. In court, PAEs tend to pursue a large number of alleged infringers instead of focusing on one manufacturer or supplier.¹⁷⁵

The second important characteristic of this PAE model is that it does not discriminate between potential defendants, targeting major manufacturers/suppliers and users alike. Importantly, PAEs do not commercialize the invention. They do not compete in the marketplace and do not have customers.¹⁷⁶ While the traditional patentee plaintiff may often refrain from suing competitors' customers because they may one day

¹⁷¹ Mark Lemley and Douglas Melamed explain that because PAEs tend to sue multiple defendants in a single suit it is important to focus on the number of assertions, i.e., number of defendants sued. Lemley & Melamed, *supra* note 76 at n. 13. Colleen Chien reported that in 2012 PAEs were responsible for 57% of suits and 53% of assertions. Colleen Chien & Aashish R. Karkanis, *Functional Claiming and Software Patents*, (Santa Clara Univ. Legal Studies Research Paper No. 6-13, 2013), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2215867. See also Sara Jeruss et al., *The AIA 500 Expanded: The Effects of Patent Monetization Entities*, (UC Hastings Research Paper No. 45, 2013), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2247195 (reporting that PAEs filed 58.7% of the patent lawsuits in 2012 compared to 24.6% in 2007).

¹⁷² See Michael Risch, *Patent Troll Myths*, 42 SETON HALL L. REV. 457, 458 (2012) (pointing to the general belief that PAEs are patent plaintiffs who do not produce a product or sell a service); Colleen V. Chien, *Of Trolls, Davids, Goliaths, and Kings: Narrative and Evidence in the Litigation of High-Tech Patents*, 87 N. CAROLINA L. REV. 1572, 1578 (2008-2009) (defining PAEs as a "corporate patent enforcement entity that neither practices nor seeks to practice its inventions.").

¹⁷³ See Chien & Reines, *supra* note 1, at 8–9 (explaining that the economics of these suits favors large pools of potential targets).

¹⁷⁴ See Lemley & Douglas, *supra* note 76, at 2126 (describing this as one PAE business model).

¹⁷⁵ PAEs join as many alleged infringers as possible in one lawsuit and file multiple lawsuits. After the AIA limited the number of defendants that can be joined, the number of lawsuits filed by PAEs' has grown. Bryant, *supra* note 78, at 691–92 (2012) (describing PAE's strategy of joining multiple unrelated defendants and the impact of the AIA joinder provision on the number of defendants in PAE lawsuits).

¹⁷⁶ See Lemley & Melamed, *supra* note 76 at 2126–2129 (describing three troll business models).

become its own customers, the PAE is not similarly restrained. Thus, PAEs are suing users who are customers on a large scale.¹⁷⁷

III. THE AIA AND THE END USER

Advocates of the AIA, hailed the patent statutory reform arguing it promotes the interests of small businesses. They claimed that the America Invents Act will “protect small business patent holders from harassment by infringers,”¹⁷⁸ “reduce fees for small business patent applicants,”¹⁷⁹ and “eliminate interference proceedings, which are often costly to small businesses.”¹⁸⁰ The media frequently echoed these sentiments.¹⁸¹

Yet, the promoters envisioned a small entity, which differs significantly from the end user. This Part shows that the AIA envisaged a technologically-savvy business competitor of the patentee or the patent applicant, who is well acquainted with the technology at issue and the relevant prior art, and often becomes involved in the patent conflict early in the life of the patent. As we have seen, the end user is a different creature.

As part of the AIA’s overhaul of the Patent Act, the AIA created three new PTO procedures to replace the inter partes reexamination procedure: post-grant review, inter partes review and the covered business method patents review. It also overhauled a third procedure: the third party submission procedure. In addition, the AIA broadened the prior user rights defense. While advocates of the AIA argue that these changes benefit small

¹⁷⁷ Chien & Reines, *supra* note 1, at 8–10 (discussing PAE lawsuits against multiple customers).

¹⁷⁸ Press Release, Senator Patrick Leahy, The America Invents Act: Promoting American Innovation, Creating American Jobs, Growing America’s Economy: Why the America Invents Act is Good for Small Businesses, *available at* <http://www.leahy.senate.gov/imo/media/doc/PRESS-GoodForSmallBusiness-OnePager-FINAL.pdf> (Senator Patrick Leahy’s press statement).

¹⁷⁹ *Id.*; Joe Matal, *A Guide to the Legislative History of the America Invents Act: Part I*, 21 FED. CIR. B.J. 435, 454–455 (2011–12) (describing Senators Coons and Klobuchar’s statements regarding the expense of interference proceedings for small inventors).

¹⁸⁰ Press Release, Senator Patrick Leahy, *supra* note 178.

¹⁸¹ See e.g., John Koenig, *The America Invents Act is Better for Small Business*, REUTERS (Sep. 21, 2011), <http://johnkoenig.com/the-america-invents-act-is-better-for-small-business/> (mentioning reduced fees for small entities and the potential of challenging patent applications without legal representation). Academics and commentators also debated the impact of the AIA on small businesses. See generally Kesan, *supra* note 42, at 235–37 (discussing the potential advantages of the AIA for small inventors); David Abrams & R. Polk Wagner, *Poisoning the Next Apple? The America Invents Act and Individual Inventors*, 65 STAN. L. REV. 517 (2013) (arguing based on the Canadian experience that a first-to-file system will harm small inventors); Steve Moore & Kelley Drye, *The AIA: A Boon for David of Goliath? (Part 1)*, IPWATCHDOG (Aug. 15, 2013, 7:45AM), <http://www.ipwatchdog.com/2013/08/15/the-aia-a-boon-for-david-of-goliath/id=44651/> (assessing the impact of the AIA and arguing that despite its promises it has not benefitted small entities); Steve Moore & Kelley Drye, *The AIA: A Boon for David of Goliath? (Part 2)*, IPWATCHDOG (Aug. 16, 2013, 10:39AM), <http://www.ipwatchdog.com/2013/08/16/aia-david-goliath-2/id=44661/> (assessing the impact of the AIA and arguing that despite its promises it has not benefitted small entities).

entities, this Part shows that regardless of whether the AIA, in fact, benefits small competitors, its amendments largely do not aid the end user. The end user is far less likely to be able to take advantage of the PTO procedures or of the prior user rights defense than the patentee's competitors who can do so relying on their technological expertise and early acquaintance with the technology.

A. THE AIA'S OVERHAUL OF PTO PROCEDURES

Supporters of the AIA argued that small entities would benefit from the creation of new PTO procedures that will serve as an efficient and less-costly alternative to litigation. Patent litigation is exorbitantly expensive.¹⁸² These costs dissuade many, especially small companies, from pursuing litigation.¹⁸³ The pre-AIA PTO alternative to litigation – the inter partes reexamination proceeding – failed to serve as an effective option.¹⁸⁴ The process was lengthy, at least three years.¹⁸⁵ Challengers could challenge the patent only on Section 102 (novelty and statutory bar) and Section 103 (non-obviousness) grounds.¹⁸⁶ They could not fully participate in the process because they were allowed only a single response to a patentee's filings.¹⁸⁷ And, while challengers were limited in their ability to participate, they were bound by strong estoppel provisions. First, challengers were estopped from challenging the validity of any fact determined during reexamination. Second, challengers were estopped from later asserting the invalidity of the patent on any ground that was raised or could have been raised during reexamination.¹⁸⁸ Consequently, challengers rarely used inter partes reexamination.¹⁸⁹

¹⁸² See *infra* Part IV (B). See also Joseph Farrell & Robert P. Merges, *Incentives to Challenge and Defend Patents: Why Litigation Won't Reliably Fix Patent Office Errors and Why Administrative Patent Review Might Help*, 19 BERKELEY TECH. L. J. 943, 948–49 (2004) (reporting the average costs of patent litigation and the discovery process). Additional costs of litigation may include higher royalties imposed on alleged infringers by the patentee as a penalty for refusing to settle early. Those challenging patent validity may also be enjoined from selling their products or be required to pay substantial damages. See Michael A. Carrier, *Post-Grant Opposition: A Proposal and a Comparison to the America Invents Act*, 45 U.C. DAVIS L. REV. 103, 110–111 (2011); Farrell & Merges, *supra*, at 954–55.

¹⁸³ See Carrier, *supra* note 182, at 110.

¹⁸⁴ See *USPTO Report to Congress on Inter Partes Reexamination*, UNITED STATES PATENT & TRADEMARK OFFICE (Dec. 30, 2004, 5:07AM), http://www.uspto.gov/web/offices/dcom/olia/reports/reexam_report.htm#_ftnl; Carrier, *supra* note 182, at 114.

¹⁸⁵ Lawrence A. Stahl & Donald H. Heckeberg, *The Scope and Ramifications of the New Post-Grant and Inter Partes Review Proceedings at the USPTO*, FITZPATRICK, CELLA, HARPER, & CINTO, at 1–2, available at http://www.fitzpatrickcella.com/DB6EDC/assets/files/News/Fitz_PTO_1_4_8.pdf.

¹⁸⁶ Carrier, *supra* note 182, at 113–14.

¹⁸⁷ *Id.* at 114.

¹⁸⁸ *Id.*

¹⁸⁹ *Id.*

The AIA replaced inter partes reexamination with three new proceedings: post-grant review, inter partes review and covered business method patents review. In addition, it amended the third party submission process to facilitate interested parties' ability to challenge patent applications. Promoters of these new procedures argued that small companies, for whom the cost of litigation and the long discovery process often renders litigation infeasible, would particularly benefit from these options.¹⁹⁰ Others argued that these changes would not benefit small entities.¹⁹¹ Regardless, the small entities envisioned by both promoters and opponents are competitors who, unlike the end users are technologically-savvy. The goal of these procedures was to bring more information to the system, by taking advantage of the knowledge of competitors who are best acquainted with the prior art and can best challenge the patent applicant's affidavits and declarations.¹⁹² This Section shows that while competitors are likely to be aware of the patent application and become involved during the application stage, end users are less likely to benefit from these procedures because they lack the technological know-how, and are unlikely to be implicated in the patent conflict at the time periods during which the patent can be most effectively challenged.

i. Third party submission

Critics of the patent system often point to the PTO's inability to properly examine the growing number of patent applications as a main cause for the outpouring of low quality patents. Over-burdened PTO examiners who may not be very familiar with the technology at issue are often unable to locate all the relevant prior art.¹⁹³ To address this, Congress

¹⁹⁰ See *Patent Quality Improvement: Post-Grant Opposition: Hearing Before the Subcomm. on Courts, the Internet, & Intellectual Prop. of the H. Comm. on the Judiciary*, 108th Cong. 9 (2004) [hereinafter *Patent Quality Improvement Hearing*] (statement of Michael Kirk, Executive Director, American Intellectual Property Law Association) ("I think that the fact that we can provide an attractive procedure that would determine the validity of claims of issued patents more efficiently, more effectively, quicker, than District Court litigation, which, as I noted, runs into the millions of dollars, is going to help large and small companies but especially the small company and the independent inventor."). See also Changes to Implement the Preissuance Submissions by Third Parties Provision of the Leahy-Smith America Invents Act, Federal Register, 77 Fed. Reg. 42150, 42164 (July 17, 2012) (to be codified at 37 C.F.R. pts. 1, 41) (stating that the anonymity added to the third party submission procedure will encourage small entities to submit without fear of retaliation from a large competitor); Carrier, *supra* note 182, at 118 (focusing on the post-grant proceeding).

¹⁹¹ See e.g., Jason Rantanen & Lee Petherbridge, *America Invents More or Less*, 160 U. PA. L. REV. 229, 241–45 (2012) (arguing that the post-grant-review procedure would be harmful for small entities).

¹⁹² See Carrier, *supra* note 182, at 116 (discussing the advantages of the post-grant proceeding).

¹⁹³ See Joseph Scott Miller, *Building a Better Bounty: Litigation-Stage Rewards for Defeating Patents*, 19 BERKELEY TECH. L. J. 667, 733 (2004) (describing the constraints under which patent examiners operate).

created the procedure of third party submission. The goal was to assist the PTO in obtaining the relevant prior art to assess whether a patent meets the requirements of Sections 102 and 103 of the Patent Act. Through the third party submission procedure, the PTO could rely on the expertise of the public to provide the examiner with relevant prior art documents.¹⁹⁴

The AIA's goal in reforming the third party submission procedure was to enhance the public's access to the procedure.¹⁹⁵ Congress made changes to facilitate the procedure generally and, specifically, to facilitate the access of small entities. First, the period of time during which a third party could submit prior art was extended. Under the AIA, a third party can submit a patent, patent application or other printed application, as long as it is submitted before the earlier of 1) the date of notice of allowance, or 2) the later of: six months from the publication of the application or the date of the first rejection by an examiner.¹⁹⁶ Second, prior to the AIA, third parties could submit prior art documents, but could not explain their relevance. Under the AIA, the third party submission should be accompanied by a description of relevance.¹⁹⁷

Congress incorporated two additional changes targeted specifically to improve access for small entities. First, under the AIA, parties can participate anonymously in the third party submission procedure. Anonymity was not available under the previous law. The promoters of the law hoped that this will encourage small entities to submit without fear of retaliation if they have a valuable relationship with a larger applicant.¹⁹⁸ Secondly, the AIA instituted lower fees for small entities.¹⁹⁹

¹⁹⁴ See Baumeister, *supra* note 19, at 383–84 (the public would provide the PTO with public documents that in an ideal world the examiner could find on his own). See also David J. Kappos, *Investing in America's Future Through Innovation: How the Debate Over the Smart Phone Patent Wars (Re)Raises Issues at the Foundation of Long-Term Incentive Systems*, 16 STAN. TECH. L. REV. 485, 493–94 (2013) (discussing this purpose in the context of software patents).

¹⁹⁵ The procedure was infrequently used. In 2007, for every 500 patent applications published, the PTO received only one third party submission. William Alsup, *Memo to Congress: A District Judge's Proposal for Patent Reform: Revisiting the Clear and Convincing Standard and Calibrating Deference to the Strength of the Examination*, 24 BERKELEY TECH. L.J. 1647, 1653 (2009).

¹⁹⁶ 35 U.S.C. § 122(e) (2013). This amends the previous law, which limited the time period to two months after publication or mailing of notice of allowance, whichever was earlier. Changes to Implement the Preissuance Submissions by Third Parties Provision of the Leahy-Smith America Invents Act, Federal Register, 77 Fed. Reg. 42150, 42150 (July 17, 2012) (to be codified at 37 C.F.R. pts. 1, 41).

¹⁹⁷ 35 U.S.C. § 122(e) (2013); Changes to Implement the Preissuance Submissions by Third Parties Provision of the Leahy-Smith America Invents Act, Federal Register, 77 Fed. Reg. at 42150, 42150.

¹⁹⁸ Changes to Implement the Preissuance Submissions by Third Parties Provision of the Leahy-Smith America Invents Act, Federal Register, 77 Fed. Reg. at 42150, 42164.

¹⁹⁹ Currently, a small entity pays \$90 and a micro entity pays no fees for third party submission. *United States Patent and Trademark Office Fee Schedule*, UNITED STATES PATENT & TRADEMARK OFFICE (Jan. 16, 2014), <http://uspto.gov/web/offices/ac/qs/ope/fee010114.htm>.

Changes facilitating small entities' access to third party submission may be helpful for small entities who are business competitors. They are knowledgeable about the technology at issue and can locate relevant documents of prior art to submit. End users, however, are unlikely to possess this knowledge without relying on expensive outside sources. But most importantly, third party submission occurs very early in the life of the patent, even before the notice of allowance. At that point, business competitors may realize that a patent application has been submitted and want to prevent the issuance of a patent. Users, however, are unlikely to be aware of the patent application and the relevance of the technology because in most cases the invention has not yet reached the market.²⁰⁰ Therefore, end users are unlikely to avail themselves of the third party submission procedure, despite the AIA induced changes.

ii. Post-Grant Review

The AIA instituted the post-grant review to replace the ineffective inter partes examination as a cheap and more efficient forum than litigation to challenge a patent after its issuance.²⁰¹ To reduce costs and increase efficiency, the AIA charged the newly formed Patent Trial and Appeal Board (PTAB), to perform post-grant reviews and issue a final determination within a year, with a possibility of a six-month extension.²⁰² In addition, the AIA imposed restrictions on post-grant review discovery to limit its scope and its cost as compared to patent litigation.²⁰³

A petitioner can file a post-grant review petition only within a narrow time window – from the time a patent is granted or a reissue patent is issued to nine months after that date.²⁰⁴ The nine-month window requires petitioners to act fast to take advantage of the broad grounds available to

²⁰⁰ For discussions of the problem of patenting early in the technological cycle before the technology is ready for commercialization, see generally, Sichleman, *supra* note 24; Cortopia, *supra* note 24.

²⁰¹ See De Corte & Tridico et al., *supra* note 19, at 126. See also Susan J. Marsnik, *Will the America Invents Act Post-Grant Review Improve the Quality of Patents? A Comparison with the European Patent Office Opposition*, in *THE CHANGING FACE OF AMERICAN PATENT LAW AND ITS IMPACT ON BUSINESS* 183, 186 (Daniel R. Cahoy & Lynda J. Oswald, eds. 2013) (stating that “[f]or years, scholars, practitioners, and government bodies have advocated instituting post issuance administrative trial proceedings at the PTO to determine validity more efficiently than litigation.”).

²⁰² 35 U.S.C. § 326(a)(11) (2013). See also Paul M. Janicke, *Overview of the New Patent Law of the United States*, 21 *TEX. INTELL. PROP. L.J.* 63, 71 (2013) (describing the time limitations of the post-grant review procedure).

²⁰³ See 35 U.S.C. § 326(a)(5) (limiting discovery to evidence directly related to factual assertions advanced by either party); 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.* 48, 673 (Feb. 9, 2012) (prescribing that certain initial disclosures are mandatory without need for authorization from the PTAB); De Corte & Tridico et al., *supra* note 19, at 127–29 (explaining that discovery in post-grant proceedings is much more limited than in U.S. patent litigation).

²⁰⁴ 35 U.S.C. § 321(c) (2013).

challenge a patent under the post-grant review.²⁰⁵ A post-grant review petitioner can request cancellation of patent claims on any ground under sections 101, 102, 103 and 112. These include prior art anticipation (novelty and statutory bar), obviousness, lack of utility, lack of patent subject matter and failure to meet the requirements of definiteness, written description and enablement.²⁰⁶

Although, many commentators and legislators believed that the post-grant review would benefit small entities,²⁰⁷ the small entities that may, in fact, benefit from the post-grant review procedure are again, business competitors and not end users. First, as explored, end users are likely to become involved in a patent conflict only later in the life of the patent, long after the narrow post-grant window closes. Second although post-grant review is designed to be less costly than litigation, estimates show that filing fees combined with attorneys fees are likely to bring the cost to around half a million dollars.²⁰⁸ This cost is likely to be even higher for end users who cannot rely on in-house expertise. Finally, end users who are often one time players, are likely to prefer not to pursue conflict at the cost of half a million dollars or more in legal fees.

iii. Inter Partes Review

The AIA designed the inter partes review procedure as an additional cheaper and more effective alternative to litigation.²⁰⁹ As with the post-grant review, the AIA limited the duration of the proceeding. Inter partes review should be completed within one year though it can be extended by an additional six months.²¹⁰ The scope of discovery is also more limited than discovery in federal court patent litigation.²¹¹

²⁰⁵ De Corte & Tridico et al., *supra* note 19, at 122.

²⁰⁶ See 35 U.S.C. § 321(b); *Id.* at 121.

²⁰⁷ See e.g., *Patent Quality Improvement Hearing*, *supra* note 190 (statement of Michael Kirk, Executive Director, American Intellectual Property Law Association). See also Carrier, *supra* note 182, at 118.

²⁰⁸ Patent office fees are currently, a filing fee of \$12,000, plus a fee of \$250 for each claim over 20, and a post-institution fee of \$18,000 plus a fee of \$500 for each claim over 15. *United States Patent and Trademark Office Fee Schedule*, UNITED STATES PATENT & TRADEMARK OFFICE (January 16, 2014), <http://www.uspto.gov/web/offices/ac/qs/ope/fee010114>. The PTO estimated the costs of attorney fees for the procedure based on the number of potential motions, oppositions and replies and the AIPLA mean private firm attorney fee of \$371. See Marsnik, *supra* note 201 at 22-24.

²⁰⁹ See generally Melissa F. Wasserman, *The Changing Guard of Patent Law: Chevron Deference for the PTO*, 54 WM. & MARY L. REV. 1959 (2013) (arguing that the creation of post-grant review and inter partes review appoints the PTO instead of the courts as the interpreter of the core patentability standards).

²¹⁰ 35 U.S.C. § 316(a)(11)(2013).

²¹¹ *Id.* § 316(a)(5). See also *Garmin Int'l, Inc. et al. v. Cuozzo Speed Techs.*, IPR2012-00001 (P.T.A.B. Mar. 5, 2013) (clarifying the scope of routine and additional discovery in inter partes review proceeding); Andrei Lancu & Ben Haber et al., *Challenging Validity of Issued Patents Before the PTO: Inter Partes Reexam Now or Inter Partes Review Later?*,

Inter partes review, in essence, continues where the post-grant review leaves off. Parties may challenge patent claims under inter partes review once the window to challenge them under the post-grant review closes.²¹² However, under inter partes review, unlike post-grant review, parties may challenge the validity of the patent only under sections 102 and 103 (prior art and obviousness) and only on the basis of patents and prior patent applications.²¹³ Thus, nine months after the grant of the patent, a party can no longer challenge it in the PTO based on many of the grounds available during post-grant review. These include challenges based on lack of utility, lack of patent subject matter and failure to meet the requirements of definiteness, written description and enablement. Additionally, parties can no longer challenge the novelty and non-obviousness of the patent based on use and publications.

Inter partes review, on the one hand, appears more suitable for end users because parties may challenge the patent at a later point in time after its issuance. Parties can challenge the patent in an inter partes review from nine months after its issuance potentially to the time it expires. During this period, end users are more likely to be utilizing the patented technology, and therefore, find themselves implicated in a patent dispute. At the same time, the scope of inter partes review is extremely narrow. Thus, by the time the end user can actually avail himself of a PTO proceeding his options are quite limited. Furthermore, the end user remains, in many cases, a one-time player who would prefer to settle or switch technologies than incur even the costs of a PTO proceeding, which as discussed, are particularly onerous for the end user.

iv. Covered Business Methods Patents Review

The AIA also designed a new eight-year transitory covered business review process that went into effect on September 16, 2012 and is to be applicable only to petitions filed on or by September 16, 2020.²¹⁴ Congress intended this proceeding, like the other PTO proceedings, to provide a less

94 J. PAT & TRADEMARK OFF. SOC'Y 148, 153 (2012) (describing the scope of discovery in inter partes review and arguing that it mainly favors the patentee).

²¹² See § 311(c) (allowing a petition for post-grant review to be filed after the later of (1) the date that is 9 months after the grant of a patent or issuance of a reissue patent; or (2) if a post-grant review was instituted, the date of the termination of that review); Jeffrey P. Kushan, *The Fruits of the Convoluted Road to Patent Reform: The New Invalidity Proceedings of the Patent and Trademark Office*, 30 YALE L. & POL'Y REV. 385, 405 (2012) (describing the timing relationship between post-grant review and inter partes review).

²¹³ See § 311(b) (limiting the grounds for challenging a patent's validity in inter partes review); Corte & Tridico et al., *supra* note 19, at 121 (explaining that the grounds for challenging a patent are much narrower under inter partes review than under post-grant review).

²¹⁴ See Leahy-Smith America Invents Act, Pub. L. No. 112-29 §18 (a)(2)(3), 125 Stat. 284, 331 (2011) (codified in scattered provisions of 35 U.S.C.).

costly alternative to litigation.²¹⁵ The AIA and PTO final rules reflect that the procedure is to apply to a broad definition of business methods for financial products, including “a method or corresponding apparatus for performing data processing or other operations used in the practice administration, or management of a financial product or service.”²¹⁶ The legislative history indicates that this procedure is not intended to be limited to patents covering specific financial products or services but also ancillary activities related to financial services or products.²¹⁷ Some interpretations of the scope of the covered business method review assert that it applies also to patents that involve “every day-business-applications.”²¹⁸ And multiple bills are seeking to expand its scope further.²¹⁹ Finally, preliminary evidence from the first 100 covered business method patents petitions shows that the PTO has broadly interpreted the scope of patents that can be reviewed under the procedure.²²⁰

Petitioner may request a covered business method review from the time the post grant review window closes until the patent expires.²²¹ Generally, a petitioner can raise most grounds for challenging a patent under this proceeding. Specifically, petitioner challenging a patent filed under the first to file regime can challenge the patented business method under any ground, while those filing a petition to challenge a patent filed under the first to invent regime are more limited in the scope of their challenges to certain challenges under section 102 and 103.²²²

Unlike the other AIA PTO proceedings, only a person who is sued or charged with infringement may petition for a covered business method review of the patent.²²³ The PTO explains that charged with infringement

²¹⁵ Jeff Kettle, *Congress Giveth and Taketh Away: A look at Section 18 of the America Invents Act and the Review of Business Method Patents*, 94 J. PAT. & TRADEMARK OFF. SOC’Y 201, 214 (2012).

²¹⁶ See Leahy-Smith America Invents Act, Pub. L. No. 112-29 §18 (d)(1), 125 Stat. 284, 331 (2011) (codified in scattered provisions of 35 U.S.C.). See also Covered Business Method and Technological Invention Definitions Final Rules, 77 Fed. Reg. at 48,735. However, it was not to apply to “technological inventions” defined as patents that claim a novel and unobvious technological feature that solves a technical problem using a technical solution.” Leahy-Smith America Invents Act, Pub. L. No. 112-29 §18 (d)(1), 125 Stat. 284, 331 (2011) (codified in scattered provisions of 35 U.S.C.).

²¹⁷ See Joe Matal, *A Guide to The Legislative History of the America Invents Act: Part II of II*, 21 FED. CIR. B.J. 539, 636-38 (2012).

²¹⁸ See Kettle, *supra* note 215 at 209.

²¹⁹ P. Andrew Riley & Jonathan R.K. Stroud et al., *The Surprising Breadth of Post-Grant Review for Covered Business-Method Patents: A New Way to Challenge Patent Claims*, XV COLUM. SCI. & TECH. L. REV. 235, 262 (2014) (describing various bills attempting to broaden the scope of the procedure).

²²⁰ *Id.* at 275-79.

²²¹ See PTO, *Final Rules for Transitional Program for Covered Business Method Patents* §42.303 at <http://www.aiarulemaking.com/rulemaking-topics/group-2/documents/FinalRulesforTransitionalProgramforCoveredBusinessMethodPatents.pdf>.

²²² See Kettle, *supra* note 215 at 212-13 (2012); Joe Matal, *supra* note 217 at 626-27.

²²³ See Leahy-Smith America Invents Act, Pub. L. No. 112-29 §18 (a)(1)(B), 125 Stat. 284, 331 (2011) (codified in scattered provisions of 35 U.S.C.). See also Kettle, *supra* note

means that a petitioner would have standing to bring a declaratory judgment action in federal court.²²⁴

Since covered business method review lasts until the patent expires, end users can take advantage of this process because the procedure will still be available at the time that they find themselves involved in the patent dispute. However, the covered business method review is limited in significant ways, making it only a partial solution for the end user. First, an end user who has not been sued or sent a cease or desist letter cannot file a petition. Unlike competitors, there are usually large numbers of end users who are similarly situated. Once a patentee starts suing end users, others may fear they will be sued next or may want to take action to gain access to a patented technology that is crucial for them. Yet, they would be precluded from taking preemptive action by filing for a covered business method review. Second, the procedure is temporary in nature and will sunset in six years. Therefore, it does not provide a long-term solution. Third, although broadly defined this procedure does not apply to all categories of patents. At its broadest interpretation it may apply to patents on business method applications or to ancillary activities related to financial services or products. Even at its broadest construction, it does not apply to many of the lawsuits involving end users particularly those involving drugs and medical tests.

B. THE AIA'S EXPANSION OF THE PRIOR USER RIGHTS DEFENSE

The prior user rights defense to patent infringement is afforded to a party that was commercially using an invention later patented by another. A party who successfully asserts a prior user rights defense may continue to use the patented invention without paying licensing fees within certain restrictions.²²⁵ Prior to the adoption of the AIA, the Patent Act provided a limited defense that applied only to business method patents.²²⁶ In addition, a party could raise the prior user rights defense only if that party was the inventor who reduced the invention to practice.²²⁷

The AIA's expanded prior use defense now applies to all inventions and is not limited solely to business method patents.²²⁸ The AIA protects third parties that can demonstrate that they were using the invention for at least one year prior to the filing date of a patent application or disclosure to

215 at 213-14 (comparing this standing standard to the standing standard for post grant review).

²²⁴ See Leahy-Smith America Invents Act, Pub. L. No. 112-29 §18 (a)(1)(B), 125 Stat. 284, 331 (2011) (codified in scattered provisions of 35 U.S.C.); 37 C.F.R. § 42.302(a)(2012).

²²⁵ See KAPPOS & REA, *supra* note 28, at 5.

²²⁶ American Inventor Protection Act of 1999, 35 U.S.C. § 273 (a)(3), (b)(1) (2013) (repealed and replaced by the Leahy-Smith America Invents Act, Pub. L. No. 112-29, § 5, 125 Stat. 284, 297-99 (2011)).

²²⁷ *Id.* § 273 (b)(1).

²²⁸ 35 U.S.C. § 273(a) (2013).

the public.²²⁹ And importantly, the AIA does not contain a requirement that a party claiming the prior use defense needs to be the inventor who reduced the invention to practice. Instead, it applies to any person who commercially used the subject matter of the invention.²³⁰

Some argued that prior user rights would benefit small businesses while others disagreed. Yet, the parties to the debate only envisioned the small inventor or technology competitor. End users were not at the core of that debate.²³¹ And, while the AIA's expansion of the prior user rights defense opens the door to some end users to avail themselves of the defense, it is unlikely to be frequently used by end users.

The elimination of the reduction to practice requirement would facilitate end users ability to take advantage of the prior user rights defense. To take advantage of the prior user rights defense the end user needs to use the invention in commerce at least one year prior to the filing of the application or disclosure to the public. Some end users, in fact, use technologies in commerce, such as cafes offering wireless technology to their customers or mass transit systems offering train-tracking information to their passengers. And, end users may license or purchase a technology that is later patented by another. However, in most cases, end users do not have access to a technology early in its life cycle. Thus, while the AIA does facilitate the ability of end user to claim prior user rights, it is unlikely that end users would utilize this defense extensively.²³²

IV. LEGAL FEES SHIFTING AS A TOOL IN END USER LITIGATION

Recent patent reform under the AIA failed to consider the growing role of the end user. Irrespective of whether end users claims are substantively justified, they currently lack the procedural tools to pursue their claims in patent litigation. This Part argues that a fee shifting regime

²²⁹ *Id.* § 273(a)(2).

²³⁰ *See id.* § 273(a)(1) (providing that: “[a] person shall be entitled to the defense . . . if (1) such person, acting in good faith, commercially used the subject matter in the United States, either in connection with an internal commercial use or an actual arm’s length sale or other arm’s length commercial transfer of a useful end result of such commercial use.”). *See also* KAPPOS & REA, *supra* note 28, at 18 (stating that the AIA does not require the party asserting prior use rights to be the actual inventor).

²³¹ *See* Keith Kupferschmid, *Prior User Rights: The Inventor’s Lottery Ticket*, 21 AIPLA Q.J. 213, 234 (1993) (noting benefits for small entities whose licensees could take advantage of prior user rights); KAPPOS & REA, *supra* note 28, at 39 (noting that the prior user rights defense could be important for small inventors who do not have the resources to get to the PTO first in a first-to-file system). *But see* Edward L. MacCordy, *The Threat of Proposed Patent Law Changes to the Research University*, 20 J.C. & U.L. 295, 303 (1994) (arguing that it would be impossible to tell whether a potential infringer has prior user rights without expensive litigation that small businesses and independent inventors cannot afford).

²³² Beyond the unsuitability of the defense to the circumstances of the end user, it appears that even in countries where the defense was extensively available, neither competitors nor end users tended to use it. *See* KAPPOS & REA, *supra* note 28, at 38.

that considers the end user status, and increases the likelihood that a court would compensate prevailing end users for their expenses, could be an important tool in leveling the playfield for end users in a broad array of cases. Fee shifting is by no means the only procedural tool important for leveling the playfield. Granting end users standing to sue in declaratory judgment cases would be an important tool.²³³ In addition, some end users who are customers of manufacturers of the allegedly patented technology could resolve the problem through contractual indemnification obligations by the manufacturers. And another option for customer end users is a stay of the lawsuit against them, while the manufacturer and patentee are litigating the case, through the expansion of the customer suit exception.²³⁴ Yet, this Article focuses on fee shifting because it is the one procedural tool that is applicable to all end user cases. And while the availability of fee shifting will motivate only some end users to litigate their meritorious claims, all categories of end users can potentially benefit from this remedy.

This Part begins by presenting an overview of the American Rule regarding fee shifting, the different variations of exceptions to the Rule, the current fee shifting regime under patent law, the costs of patent litigation and the rationales for and against fee shifting in litigation. It then turns to examine current legislative and Supreme Court activity regarding fee shifting in patent litigation. It argues that the case for fee shifting is particularly strong where end users are implicated for several reasons. First, there is significant inequality between the parties that make end users more likely to settle and avoid litigation even when their defenses are meritorious. Second, lawsuits for declaratory judgment of patent invalidity benefit many parties not before the court, creating a collective action problem that makes these suits rare. Third, PAEs threatened and sued thousands of users, in many cases, enforcing weak or invalid patents. Fee shifting is likely to reduce the number of meritless lawsuits against end users and serve as a punitive measure against abusive litigation practices. This Part argues that, although end users would benefit from any change that facilitates fee shifting, particularly pro-alleged infringer fee shifting, general changes to fee shifting standards that do not directly consider the end user status are less effective because they do not carry a direct message. A direct message is more likely to reduce the end user's concerns regarding high litigation costs.

A. THE AMERICAN RULE AND THE PATENT SYSTEM

The American Rule governing legal fees differs from the rules prevalent in most other jurisdictions. The traditional American Rule does not allow successful litigants to recover legal fees from the defeated

²³³ I address the issue of end users' standing to sue for declaratory judgment of patent invalidity in a separate article. See Bernstein, *End Users and Standing to Sue*, *supra* note 31.

²³⁴ See generally Love & Yoon, *supra* note 1.

party,²³⁵ while the rule prevailing in England and many other countries permits the prevailing party to collect reasonable attorney fees from the losing party.²³⁶ Yet, Congress has circumvented the default rule by allowing fee shifting under selected statutes in certain cases, such as civil right cases,²³⁷ fair housing cases,²³⁸ and consumer protection cases.²³⁹ In addition, certain states created exceptions to the American Rule. For instance, state courts in Alaska follow a loser pays rule.²⁴⁰

The deviations from the American Rule follow different forms. Many federal statutes allow attorney fees to prevailing parties.²⁴¹ Some authorize both plaintiffs and defendants to recover fees,²⁴² while others allow only plaintiffs to recover fees.²⁴³ In addition, some statutes allow

²³⁵ See *Arcamabel v. Wiseman*, 3 U.S. (3 Dall.) 306, 1 L. Ed. 613 (1796) (stating that “[t]he general practice of the United States is in opposition to [the indemnity rule] and even if that practice were not strictly correct in principle, it is entitled to the respect of the court, till it is changed or modified by statute”); *Flesichman Distilling Corp. v. Maier Brewing Co.*, 386 U.S. 714, 717 (1967) (describing the differences between the English Rule and the American Rule).

²³⁶ See *Cubita & Lichtman et al.*, *supra* note 34, at 188 (stating that the United States is the only common law jurisdiction in which each party must bear the total expense of compensating his attorney).

²³⁷ The Civil Rights Attorney’s Fees Awards Act of 1976, Pub. L. No. 94-559, 90 Stat. 2641 (codified at 42 U.S.C.A. § 1988).

²³⁸ The Fair Housing Act of 1968, 42 U.S.C.A. § 3612(c) (2013).

²³⁹ See *e.g.*, The Truth in Lending Act, 15 U.S.C.A. § 1640(a)(3) (2013).

²⁴⁰ Alaska R. Civ. P. 82. See also *Olson & Bernstein*, *supra* note 51, at 1180–86 (describing the evolution of the Alaskan fee shifting rule).

²⁴¹ See *Cubita & Lichtman et al.*, *supra* note 34, at 286–89 (describing federal statutes that authorize awards of attorney’s fees to “prevailing parties”); *Silver*, *supra* note 34 (stating that “[f]ee shifting is common in federal cases” and that by enacting over 150 statutes entitling parties who prevail to claim fee awards, Congress greatly restricted the American Rule). See *e.g.*, The Civil Rights Attorney’s Fees Awards Act of 1976 § Pub. L. No. 94-559, 90 Stat. 2641 (codified at 42 U.S.C.A. § 1988 (2013)) (“ . . . the court, in its discretion, may allow the prevailing party, other than the United States, a reasonable attorney’s fee as part of the costs”); The Fair Housing Act of 1968 § 3612 (“ . . . the administrative law judge or the court, as the case may be, in its discretion, may allow the prevailing party, other than the United States, a reasonable attorney’s fee and costs”); The Freedom of Information Act, Pub. L. No. 104-231, 110 Stat. 3048 (codified as amended at 5 U.S.C. § 552(a)(4)(E) (2013)) (“The court may assess against the United States reasonable attorney fees and other litigation costs reasonably incurred in any case under this section in which the complainant has substantially prevailed.”).

²⁴² *Silver*, *supra* note 34, at 872–73. See *e.g.*, The Civil Rights Attorney’s Fees Awards Act of 1976 § 1988 (“ . . . the court, in its discretion, may allow the prevailing party, other than the United States, a reasonable attorney’s fee as part of the costs...”); *Christiansburg Garment Co. v. EEOC*, 434 U.S. 412, 421 (1978) (holding that a court may award attorney fees to a prevailing defendant (employer) in an employment discrimination suit under Title VII if it finds that plaintiff’s action was frivolous, unreasonable or without foundation even though not brought in bad faith).

²⁴³ *Silver*, *supra* note 34, at 873. See *e.g.*, The Truth in Lending Act § 1640(a)(3) (providing that creditors could be liable to successful plaintiffs for the costs of the action, together with a reasonable attorney’s fee); The Fair Credit Reporting Act, § 616(3), 15 U.S.C. § 1681(n)(C) (2013) (liability to the prevailing consumer could include attorney fees in case of any filing in bad faith or harassment).

judges to grant fee awards,²⁴⁴ while other statutes require judges to give fee awards.²⁴⁵

Under the Patent Act, courts have the discretion to grant attorney fees to the prevailing party, whether plaintiff or defendant, in exceptional circumstances.²⁴⁶ The Federal Circuit standard for granting attorney fees to prevailing defendants was quite high. However, the Supreme Court in its 2014 decision, in *Octane Fitness*, lowered the standard. It held that the Patent Act’s “exceptional” case standard requires that the case stand out from others with respect to the substantive strength of a party’s litigating position or the unreasonable manner in which the case was litigated.²⁴⁷ It explained that the district court should decide whether a case is “exceptional” based on the totality of circumstances.²⁴⁸ The Supreme Court rejected the federal circuit standard as too rigid.²⁴⁹ Specifically, it held that fee shifting is not limited to cases involving misconduct that usually extends to independently sanctionable conduct.²⁵⁰ It also held that the prevailing party no longer has to prove both that the litigation is objectively baseless and that the plaintiff brought it in subjective bad faith. Instead, it could be sufficient to show subjective bad faith.²⁵¹ Under this new standard articulated by the Supreme Court in *Octane Fitness*, courts are likely to award fee shifting more frequently in patent cases

B. THE COSTS OF PATENT LITIGATION

Patent litigation is notoriously expensive. In 2013, the American Intellectual Property Law Association (the “AIPLA”) reported that when less than one million dollars was at stake the mean for the total cost of the litigation was \$968,000 (median cost was \$700,000).²⁵² The AIPLA also reported that when one to ten million dollars were at stake, the mean for the total cost of litigation was \$2,100,000 (median was \$2,000,000).²⁵³ In addition, when ten million to twenty-five million dollars were at stake the mean for the total cost of litigation was \$3,354,000 (median was

²⁴⁴ Silver, *supra* note 34, at 872. See e.g., 15 U.S.C. §§ 77k(e), 77o(e), 77w(a), 78i(e) (giving judges discretion to award reasonable attorney’s fees to prevailing parties in certain securities cases).

²⁴⁵ Silver, *supra* note 34, at 872. See e.g., Clayton Act, 15 U.S.C. § 15 (mandating fee awards in certain antitrust cases).

²⁴⁶ 35 U.S.C. § 285 (2013).

²⁴⁷ See *Octane Fitness v. Icon Health*, No 12-1184, slip op. at 7-8 (U.S. Apr. 29, 2014).

²⁴⁸ *Id.* at 8.

²⁴⁹ *Id.*

²⁵⁰ *Id.* at 9.

²⁵¹ *Id.*

²⁵² AIPLA, REPORT OF THE ECONOMIC SURVEY I-129 (2013). The mean cost by the end of discovery was \$530,000 (median cost was \$350,000). AIPLA, REPORT OF THE ECONOMIC SURVEY I-129 (2013).

²⁵³ *Id.* at I-130. The mean cost by the end of discovery was \$1,229,000 (median cost was \$1,000,000). *Id.* at I-129.

\$3,325,000).²⁵⁴ Finally, the AIPLA reported that when more than twenty-five million was at stake the mean for the total cost of litigation, was \$5,911,000 (median was \$5,500,000).²⁵⁵ Furthermore, in addition to direct litigation costs, studies show that there are indirect costs to defendant's business such as diversion of resources, delays in new products and loss of market share.²⁵⁶ These figures are particularly striking considering that only about 80% of patent cases settle. While 5 percent go to trial, 8 percent of cases are terminated on the merits through a motion for summary judgment, and the rest are disposed of through some form of non-merit disposition.²⁵⁷

Fees to litigate a patent dispute are many times higher than those for other civil actions.²⁵⁸ To compare, civil litigation costs are generally much lower with median litigation costs of \$15,000 for plaintiffs and \$20,000 for defendants.²⁵⁹ And although some reports show somewhat higher fees for certain categories of civil litigation, such as \$43,000 median overall costs for automobile cases, \$54,000 for premises liability, \$66,000 for real property cases, \$88,000 for employment cases, \$91,000 for contract cases and \$122,000 for malpractice cases, these figures are still well below the costs of patent litigation.²⁶⁰

Certain characteristics that are unique to patent litigation contribute to its escalated costs. In general, the number of patent cases that go to trial is still relatively high compared to civil cases.²⁶¹ Patent cases also take a longer period of time to resolve. The average time in high volume patent venues is longer than two years.²⁶² But of particular importance, unlike some other forms of litigation, patent infringement actions are rarely

²⁵⁴ *Id.* at I-130. The mean cost by the end of discovery was \$2,192,000 (median cost was \$2,000,000). *Id.*

²⁵⁵ *Id.* at I-132. The mean cost by the end of discovery was \$3,571,000 (median cost was \$3,000,000). *Id.* at I-131.

²⁵⁶ James Bessen & Michael J. Meurer, *The Direct Costs from NPE Disputes*, 99 CORNELL L. REV. 41 (forthcoming 2014) (focusing on NPE litigation). *But cf.* David L. Schwartz & Jay P. Kesan, *Analyzing the Role of Non-Practicing Entities in the Patent System*, 99 CORNELL L. REV. 101 (forthcoming 2014) (criticizing Bessen & Meurer's study).

²⁵⁷ Jay P. Kesan & Gwendolyn G. Ball, *How Are Patent Cases Resolved? An Empirical Examination of the Adjudication and Settlement of Patent Disputes*, 84 WASH. U. L. REV. 237, 258–59, 271–72, 311 (2006).

²⁵⁸ David K. Schwartz, *The Rise of Contingent Fee Representation in Patent Litigation*, 64 ALA. L. REV. 335, 348 (2012) [hereinafter Schwartz, *The Rise of Contingent Fee Representation*].

²⁵⁹ See Emery G. Lee & Thomas E. Willging, *Defining the Problem of Cost in Federal Civil Litigation*, 60 DUKE L.J. 765, 770 (2010). Older data also shows that other forms of civil litigation costs are much lower than patent litigation costs, see, David M. Trubej & Austin Sarat et al., *The Cost of Ordinary Litigation*, 31 UCLA L. REV. 72, 80 (1983) (showing that the cost to litigate an average civil suit rarely exceeds \$10,000).

²⁶⁰ Paula Hannaford-Agor & Nicole L. Waters, *Estimating the Cost of Civil Litigation*, 20 COURTS STATISTICS PROJECT 1 (January 2013), available at http://www.courtstatistics.org/~media/microsites/files/csp/data%20pdf/csph_online2.ashx.

²⁶¹ See Bessen & Meurer, *supra* note 256, at 3 (mentioning that the trial rate is double the average of federal civil litigation).

²⁶² Schwartz, *The Rise of Contingent Fee Representation*, *supra* note 258, at 348.

dismissed at the pleading stage. Courts hearing patent disputes conduct a special hearing, called a Markman hearing, to interpret claims. Claims define the scope of the patent and are critical for the resolution of the case. Once the court determines the scope of the patent, the likely outcome of the case becomes much clearer.²⁶³ Courts experienced with patent litigation often schedule Markman hearings before trial but after significant discovery. This resolves the issue of claim construction in the context of the litigated products or processes.²⁶⁴ At the same time, this means that the parties incur significant expenses even if the suit is resolved before trial. Costs of patent litigation include attorney fees, expert witness fees, travel costs and document management and production costs.²⁶⁵ And, another important reason that litigation is particularly expensive is that it often requires different experts to cover the industry, the particular technologies at issue, as well as experts to cover the damages issue.²⁶⁶

For reasons we have seen, while patent litigation is a particularly expensive form of litigation, it is all the more onerous for end users.²⁶⁷ And, although not all end users are necessarily small entities, many are, and studies show that litigation costs, whether direct or indirect, are particularly burdensome for small companies.²⁶⁸ Furthermore, unlike technological competitors, end users do not usually have patent litigation

²⁶³ See *Markman v. Westview Instruments*, 517 U.S. 370, 390 (1996) (deciding that judges must perform claim construction, which involves determining the proper scope and boundaries of the patent instrument); Vincent P. Kovalick, *Hearings and Their Critical Role in U.S. Patent Litigation*, FINNEGAN (October 2009), <http://www.finnegan.com/resources/articles/articlesdetail.aspx?news=9a8bf39b-c419-4329-9f6a-08ac0a647c7c> (discussing the significance of resolving claim construction).

²⁶⁴ Kovalick, *supra* note 263 (discussing the significance of resolving claim construction).

²⁶⁵ Catherine Rajwani, *Controlling Costs in Patent Litigation*, HARBOR LAW GROUP (2008), <http://www.harborlaw.com/newsletters/november.pdf>.

²⁶⁶ Mark L. Levine, *Managing Patent Litigation: Successful Results at Reasonable Costs*, BARTLIT BECK HERMAN PALENCHAR & SCOTT LLP (July 2009), <http://www.bartlit-beck.com/about-news-118.html>.

²⁶⁷ Love & Yoon, argue that the costs of defense are relatively similar for both parties. See Love & Yoon, *supra* note 1, at 1627–28. They rely on a study by Emery G. Lee & Thomas E. Willging, which finds that the monetary stakes in civil suits are highly correlated with the amount at stake, and on the AIPLA report, which reports mean litigation costs for the amount at stake. See generally Lee & Willging, *supra* note 259; AIPLA, REPORT OF THE ECONOMIC SURVEY I-555–56 (2011). Yet, while Love & Young’s findings indicate that monetary stakes in litigation represent the primary cost driver, they show that litigation stakes account for only 60% of the variation in attorney costs, the remaining 40% are not affected by litigation stakes but by other factors. Lee & Willging, *supra* note 259, at 772. Furthermore, their study focused on all civil litigation, patent cases were just a small sample of the cases included. The exorbitant cost of patent litigation including its special characteristics of Markman hearings and the need for technical expertise could provide a somewhat different set of results. See *id.* at 769–70 (discussing categories of cases included in the study); Lee & Willging, *supra* note 259, at 8 (mentioning intellectual property cases). Finally, even though the AIPLA statistics focus on the amount at stake the report contains no discussion regarding whether other factors, such as the identity of the parties, were considered. See generally AIPLA, REPORT OF THE ECONOMIC SURVEY (2013).

²⁶⁸ See Bessen & Meurer, *supra* note 256, at 15 (focusing on PAE litigation).

insurance that can reduce their litigation costs.²⁶⁹ End users are unlikely to seek patent insurance coverage in the first place because most are not technological companies and do not anticipate being swept into patent litigation.

C. THE FEE SHIFTING DEBATE GENERALLY

The prevalence of fee shifting as exceptions to the American Rule has inspired a rich debate regarding the rationales for and against it. The main argument in support of the American Rule is that universal fee shifting could deter parties with novel and uncertain claims from litigation because they will fear that they will end up paying for their opponent's attorney fees as well as their own.²⁷⁰ In addition, commentators raised several concerns in support of the American Rule. First, they pointed out that lawyers' fees may become exorbitant if they could be shifted to the opponent.²⁷¹ Second, they argued that the extra time needed for hearings on attorney fees would constitute a serious burden on the already congested judicial system.²⁷² Finally, they highlighted that lawyers may be unable to engage in effective independent advocacy when the judge before whom they argue determines their fees.²⁷³

At the same time, commentators and legislators have put forth six main rationales for fee shifting. All are relevant to fee shifting in patent litigation, while four of these rationales, are particularly relevant for end user patent litigation, namely: inequality in party strength, attorney general litigation, economic incentives and the punitive function.

First, commentators raise a fairness argument to justify fee shifting. The loser who is in the wrong should pay for the winner's costs. Whether the winner is a defendant who was dragged into litigation or a plaintiff who had a valid claim, their litigation expenses were a result of the loser's wrongful actions and they should be compensated.²⁷⁴ Second, commentators noted that unless fee shifting occurs, the winning litigant will not be made financially whole. The winning litigant will be compensated only for his injuries, but may have incurred significant expenses during the trial that he has not recouped.²⁷⁵ Third, some noted that fee shifting can serve a punitive function—it can deter and punish

²⁶⁹ See Rajwani, *supra* note 265 (mentioning patent litigation insurance as one of the top ten ways to reduce patent litigation costs).

²⁷⁰ Fleischmann Distilling Corp. Maier Brewing Co. 386 U.S. 714, 718 (1967); Jane P. Mallor, *Punitive Attorneys' Fees for Abuses of the Judicial System*, 61 N.C.L. REV. 613, 617 (1983).

²⁷¹ See Mallor *supra* note 270.

²⁷² See *id.*

²⁷³ See *id.*

²⁷⁴ Rowe, *supra* note 49, at 653; Olson & Bernstein, *supra* note 51, at 1162 (stating that a "defendant who has been dragged into litigation . . . deserves compensation for having had to repulse an invalid claim . . . a plaintiff with a valid claim deserves [damages recognizing the legal fees] paid in defeating a recalcitrant defendant").

²⁷⁵ See *e.g.*, Rowe, *supra* note 49, at 653.

misconduct, which is motivated by the knowledge that high litigation expenses often deters people from suing or coerces them into settling.²⁷⁶

Fourth, the private attorney general theory justifies a fee award on the basis of public usefulness.²⁷⁷ Litigation sometimes produces benefits beyond those reaped by the successful party. This type of litigation advances the public interest or at least a private interest broader than that represented by the actual parties. Without fee shifting the cost to a private party may exceed any gains it may receive. Thus, potential plaintiffs may refrain from bringing socially beneficial lawsuits.²⁷⁸

Fifth, fee shifting can equalize the strength of the parties when there is a large disparity in strength.²⁷⁹ One side in litigation may have superior resources, which creates an inequality in power. This does not necessarily mean that a party does not have sufficient resources to hire a lawyer or that a party is poor. It means that the costs of hiring a lawyer may exceed the expected gain and, therefore, that party may find it uneconomical to proceed to litigation even if it has a meritorious argument.²⁸⁰ Legislatures have considered the relative strengths of the parties, incorporating fee shifting provisions in suits against the government or suits brought by small or individual private parties.²⁸¹ The Equal Access to Justice Act, for example, was enacted to correct the power imbalance when the federal government opposes an individual of moderate wealth or a small to moderate entity. It provides for fee shifting for certain private parties who prevail in non-tort civil actions and administrative proceedings against the federal government, if the government cannot show that its position was substantially justified or that there were other circumstances that make the award unjust.²⁸² The legislative history of the Civil Rights Attorney's Fees Awards Act of 1976 also indicates that the

²⁷⁶ See Cubita & Lichtman et al., *supra* note 34, at 288; Rowe, *supra* note 49, at 653.

²⁷⁷ Rowe, *supra* note 49, at 653. See also Zemans, *supra* note 51, at 196–97 (discussing plaintiffs suing under the Civil Rights Act as fee shifting under the private attorney general rationale). Although the Supreme Court in *Bush V. Gore* limited the allowed ratio between actual harm awards and punitive damages awards, courts do not treat attorney fee awards as punitive damages awards even when they are issued specifically where a party acted in bad faith. See *BMW of North America Inc. v. Gore*, 517 U.S. 559, 580–86 (1996) (discussing the appropriate ratio between actual harm and punitive damages awards); Mark A. Behrens & Cary Silverman et al., *Calculating Punitive Damages Ratios With Extracompensatory Attorney Fees and Judgment Interest: A Violation of the United States Supreme Court's Due Process Jurisprudence?* 48 WAKE FOREST L. REV. 1295, 1302-04 (2013) (discussing courts' exclusion of attorney fees in bad faith cases when calculating the ratio between actual harm damages awards and punitive damages awards).

²⁷⁸ Rowe, *supra* note 49, at 662–63.

²⁷⁹ Kesan, *supra* note 42, at 175.

²⁸⁰ See Rowe, *supra* note 49, at 663–64; Silver, *supra* note 34, at 875.

²⁸¹ See Cubita & Lichtman et al., *supra* note 34, at 287; Rowe, *supra* note 49, at 653. *But cf.* Zemans, *supra* note 51, at 202–03, 207 (discussing arguments that the access to justice rationale can support both the American rule and fee shifting, and noting that there is not enough empirical data).

²⁸² See Equal Access to Justice Act § 204(a), 28 U.S.C. § 2412(d) (2013); Rowe, *supra* note 49, at 663–64.

purpose of the Act was to enable private citizens with few resources to hire a lawyer knowing that they could recover the costs of their lawsuit.²⁸³ And a final example, employees who usually have fewer resources than employers can recover attorney fees in minimum wage, maximum hours and discrimination litigation.²⁸⁴

Finally, the most debated rationale concerns the economic incentives effect. Fee shifting can encourage plaintiffs to pursue meritorious small claims and discourage plaintiffs from pursuing weak claims. It can also expedite litigation and prevent abuse of discovery processes.²⁸⁵ A fee shifting system can prevent parties from settling when they have meritorious arguments just to avoid the costs of litigation.²⁸⁶ There appears to be a broader consensus that a fee shifting system would reduce the number of nuisance suits and enable plaintiffs to bring some highly meritorious small lawsuits.²⁸⁷ However, researchers disagree as to whether fee shifting would increase or decrease the rate of settlement.²⁸⁸

D. THE FEE SHIFTING DEBATE AND PATENT END USER LITIGATION

Overall, the fee shifting rationales strongly support fee shifting in patent litigation involving end users. Although the fairness argument may be weaker in patent litigation, the inequality of power, attorney general, economic incentives and punitive function rationales make a compelling case for fee shifting where end users are parties in patent litigation, whether as defendants or as plaintiffs in suits for declaratory judgment for patent invalidity.

The fairness rationale, under which the loser who is in the wrong should pay for the winner's costs, is weaker when the outcome of the litigation is unpredictable.²⁸⁹ It is harder to penalize the loser for dragging the winner into court when at the outset or even throughout litigation, that party appeared to have had a good chance of prevailing. Patent cases are considered particularly unpredictable compared to other forms of litigation. First, knowing the relevant facts before litigation begins is challenging in

²⁸³ S. REP. NO. 1011, 94th Cong, 2d Sess. at 2, *reprinted in* 1976 U.S.C.C.A.N. 5908, 5910.

²⁸⁴ *See* 29 U.S.C. §§ 206–207, 216(b) (2013); Rowe, *supra* note 49, at 664.

²⁸⁵ *See* Olson & Bernstein, *supra* note 51, at 1162; Rowe, *supra* note 49, at 653, 665–66; Zemans, *supra* note 51, at 192–93.

²⁸⁶ Rowe, *supra* note 49, at 665–66.

²⁸⁷ Gryphon, *supra* note 51, at 581–83. Although Gryphon notes that critics of fee shifting warn that even if fee shifting reduces the number of lawsuits filed, the cost of litigation may increase because each party no longer necessarily bears its own costs. *Id.* at 589. *But cf.* Mark S. Stein, *The English Rule with Client-to-Lawyer Risk Shifting: A Speculative Appraisal*, 71 CHI-KENT L. REV. 603, 611–18 (1995) (arguing that while a loser pays rule would reduce frivolous claims, it would also discourage valid claims).

²⁸⁸ Gryphon, *supra* note 51, at 587. *See generally* Eric Talley, *Liability-Based Fee shifting Rules and Settlement Mechanisms Under Incomplete Information*, 71 CHI-KENT L. REV. 461 (1995) (arguing that fee shifting does not decrease the likelihood of settlements).

²⁸⁹ Rowe, *supra* note 49, at 653 (describing the fairness rationale); Olson & Bernstein, *supra* note 51, at 1162 (describing the fairness rationale).

patent cases. To evaluate the validity of a patent one needs to know the entire universe of relevant prior art. Defendants are likely to work hard to locate any sources of prior art for trial. Therefore, it is hard to predict the likelihood that a patent will be found invalid before extensive discovery.²⁹⁰ Second, significant uncertainty surrounds the court's interpretation of the patent claims that define the scope of the patent.²⁹¹ Even after the district court construes the claim, the appellate court reverses the claim construction at a rate of 30-40 percent.²⁹² Thus, from a fairness perspective the argument for shifting is less compelling in patent cases.

At the same time, the other rationales point the other way. First, fee shifting is particularly important when there is an imbalance of power between the parties.²⁹³ This applies when one party is an individual or a small entity of limited resources. And, some end users, such as patients or small business are, in fact entities of limited resources. But, fee shifting to reduce the power imbalance between parties applies also anytime the costs of hiring a lawyer may exceed the expected gain and, therefore, that party may prefer to settle or not sue even if it has a strong case.²⁹⁴ End users, who are not in the business of manufacturing or selling a competing technology, tend to be one-time players. Thus, even if they have the resources they may find it uneconomical to invest in patent litigation. Instead they would rather refrain from using the technology altogether or settle to pay a royalty, even if they believe they have a meritorious claim. In addition, end users are in a weakened position due to their lack of in-house technological expertise. Finally, plaintiffs enforcing their patents can take advantage of the growing market for contingent fee patent litigation.²⁹⁵ Since end users cannot avail themselves of this option the disparity between the parties' financial prowess grows. The availability of fee shifting could help minimize the disparity between the strength of the parties and may also have an indirect effect of encouraging lawyers to

²⁹⁰ Schwartz, *The Rise of Contingent Fee Representation*, *supra* note 258, at 349.

²⁹¹ *Id.*

²⁹² See David L. Schwartz, *Practice Makes Perfect? An Empirical Study of Claim Construction Reversal Rates in Patent Cases*, 107 MICH. L. REV. 223, 240 tbl.1 (2008) (reporting that between 30-40 percent of appealed patent cases had to be reversed, vacated, or remanded due to an error by the trial court judge in interpreting the patent claims); David L. Schwartz, *Courting Specialization: An Empirical Study of Claim Construction Comparing Patent Litigation Before Federal District Courts and the International Trade Commission*, 50 WM & MARY L. REV. 1699, 1716 tbl.II (2009) (reporting similar reversal rates over 1996–2008 time period); David L. Schwartz, *Pre-Markman Reversal Rates*, 43 LOY L.A. L. REV. 1073, 1093 fig.A (2010) (reporting similar reversal rates over 1991–2008 period). This reversal rate appears to be much higher than for other causes of action and even for other issues within patent litigation. See Ted Sichelman, *Myths of (Un)Certainty at the Federal Circuit*, 43 LOY. L.A. L. REV. 1161, 1171–73 (2009) (showing that the reversal rate for non-claim construction issues in patent litigation is 18 percent).

²⁹³ Kesan, *supra* note 42, at 175.

²⁹⁴ See Rowe, *supra* note 49, at 663–64; Silver, *supra* note 34, at 875.

²⁹⁵ See generally Schwartz, *The Rise of Contingent Fee Representation*, *supra* note 258 (describing the rise of contingent fee representation for plaintiffs in patent litigation).

undertake contingent representation of defendants including end users, which would further balance the playfield.

Second, under the private attorney general theory, fee shifting can encourage plaintiffs to undertake litigation that advances a public interest or at least a private interest broader than that represented by the actual parties.²⁹⁶ End users can be parties to patent litigation either as defendants accused of patent infringement or as plaintiffs, usually alleged infringers or potentially alleged infringers, initiating litigation by seeking a declaratory judgment of patent invalidity. Currently, there are significant disincentives for bringing declaratory judgments. These include the expense of the litigation, lack of financial rewards for invalidating patents and the risk of triggering countersuits of infringement.²⁹⁷ In addition, suits for declaratory judgments can be beneficial to many parties who are not immediately before the court. In *Blonder-Tongue*, the Supreme Court held that a patentee is estopped from enforcing a patent that has been held invalid against other entities, who were not parties to the original litigation.²⁹⁸ Therefore, a declaratory judgment ruling benefits other accused infringers creating a collective action problem and resulting in fewer challenges than are socially optimal.²⁹⁹ For example, the lawsuit against Myriad for declaratory judgment to invalidate Myriad's breast cancer gene patents could potentially benefit patients who were not among plaintiffs, by reducing prices and increasing patients' access to breast cancer genetic testing.³⁰⁰ Similarly, a lawsuit to invalidate a patent held by a PAE, whether brought by a competitor or an end user, could potentially prevent subsequent lawsuits by that PAE against other competitors and users.³⁰¹

²⁹⁶ Rowe, *supra* note 49, at 662–63.

²⁹⁷ La Belle, *supra* note 46, at 44.

²⁹⁸ *Blonder-Tongue Lab. V. Univ. of Ill. Found.*, 402 U.S. 313, 350 (1971) (holding that a patent infringer can use issue-preclusion to foreclose an infringement suit where the patent claim in question had already been declared invalid in an earlier suit).

²⁹⁹ See John R. Thomas, *Intellectual Property Challenges in the Next Century: Collusion and Collective Action in the Patent System: A Proposal for Patent Bounties*, 2001 U. ILL. L. REV. 305, 334 (2001) (explaining that a collective action problem is created because a potential opponent cannot appropriate the benefits of a successful charge of patent validity).

³⁰⁰ *Ass'n Molecular Pathology v. Myriad Genetics, Inc.*, 133 S. Ct. 2107, 2111 (2013) (where the court invalidated certain breast cancer patent claims that were enforced against end users). But see, John Conley, *Undeterred by the Supreme Court, Myriad Starts Suing*, GENOMICS LAW REPORT (July 16, 2013), <http://www.genomicslawreport.com/index.php/2013/07/16/undeterred-by-the-supreme-court-myriad-starts-suing> (reporting on lawsuits filed by Myriad against companies offering cheaper breast cancer genetic testing following the Supreme Court's decision).

³⁰¹ See e.g., Complaint, *ForeSee Results Inc. v. Lodsys LLC*, *supra* note 94; Florian Meuller, *All Four Lodsys Patents Under Invalidation Attack in Federal Court*, FOSS PATENTS (June 8, 2011), <http://www.fosspatents.com/2011/06/all-four-lodsys-patents-under.html> (discussing a lawsuit for declaratory judgment against the PAE Lodsys).

These disincentives make suits for declaratory judgment relatively rare in patent litigation.³⁰²

Plaintiffs seeking declaratory judgments of patent invalidity are also unlikely to use another litigation vehicle that enables the representation of a broader public interest – the class action. Although, class actions can resolve the litigation cost problem and provide access to judicial relief for small claims, it has an important strategic drawback for alleged infringers.³⁰³ While under *Blonder-Tongue* a finding of patent invalidity prevents the patentee from enforcing the patent against other alleged infringers, a finding of patent validity does not prevent another alleged infringer from challenging the patent in another proceeding.³⁰⁴ Since absent class members are bound by a finding of validity, there is a disincentive for class action, due to the risk that the court will find the patent valid and all class members, whether in court or not will be bound by this holding.³⁰⁵

The disincentives for individual action for declaratory relief and the absence of class actions have prompted public interest organizations, such as the American Civil Liberties Union (ACLU) and the Public Patent Foundation to undertake these lawsuits.³⁰⁶ Yet, public interest organizations can take on only a limited number of lawsuits, while a move to a fee shifting regime will increase the likelihood that individual defendants take up declaratory judgment cases, which benefits go beyond the immediate case. End users may also be particularly suitable to bring declaratory judgment actions that benefit the public interest because unlike competitors, they are not injured by the public good nature of the patent invalidity result. The *Blonder-Tongue* rule, which estopps a patentee from enforcing a patent that has been held invalid against other entities,³⁰⁷ also creates a disincentive for competitors to invalidate a patent and encourages them to settle. Competitors prefer not to litigate and invalidate a patent because when a patent is invalidated a public good is created that benefits other competitors who are now also free to use the technology.³⁰⁸ End users, unlike competitors, are not affected by business competition considerations.

³⁰² See Moore, *supra* note 48, at 921 (finding that only about 14 percent of the patent cases filed annually were declaratory judgment actions).

³⁰³ ALBA CONTE & HERBERT B. NEWBERG, NEWBERG ON CLASS ACTIONS §1:6, 26–28 (4th ed. 2002) (describing the advantages of class action); *Id.* at §19:1, at 223 (stating that class actions in intellectual property usually involve defendant classes of alleged infringers).

³⁰⁴ See *id.* at § 19:4, at 229.

³⁰⁵ See *id.* at § 1:3, at 19 (stating that absent class members are bound by the court's decision).

³⁰⁶ La Belle, *supra* note 46, at 45 (reporting a surge in public interest group participation in patent litigation).

³⁰⁷ *Blonder-Tongue Lab. V. Univ. of Ill. Found.*, 402 U.S. 313, 350 (1971) (holding that a patent infringer can use issue-preclusion to foreclose an infringement suit where the patent claim in question had already been declared invalid in an earlier suit).

³⁰⁸ Megan M. La Belle, *Against Settlement of (Some) Patent Cases*, 67 VANDERBILT L. REV. 101, 124 (2014).

Third, commentators generally agree that fee shifting is likely to reduce the filing of low merit claims and prevent abuse of discovery processes. There is disagreement, however, as to whether fee shifting will increase or decrease the likelihood of settlements.³⁰⁹ PAEs initiate many of the lawsuits against end users. They often sue customers of technological companies that manufacture and sell the allegedly infringing technology.³¹⁰ A main concern regarding PAEs lawsuits against users is that users are likely to settle even when they have meritorious claims.³¹¹ Yet, commentators, as noted, disagree whether fee shifting is likely to reduce the likelihood that a party will settle when it has a meritorious argument. At the same time, many commentators and legislators believe that PAEs lawsuits enforce weak patents and needlessly harass users.³¹² Fee shifting could reduce the number of lawsuits brought by PAEs against end users because the risk would be higher for PAEs if they could end up paying the litigation expenses of thousands of defendants.³¹³ The economic incentives rationale then provides additional support for fee shifting in end user cases because of the prevalence of PAEs' lawsuits.

Finally, the pervasiveness of PAEs lawsuits against users also makes the punitive function of fee shifting relevant. Fee shifting can deter and punish misconduct in litigation that is motivated by the knowledge that high litigation costs deter people into settling. Critics of PAE litigation highlighted their abusive litigation practices and impact on innovation, underscoring the need to deter PAE conduct.³¹⁴ Fee shifting as a punitive

³⁰⁹ See Gryphon, *supra* note 51, at 581–83; Olson & Bernstein, *supra* note 51, at 1162; Rowe, *supra* note 49, at 653, 665–66; Zemans, *supra* note 51, at 192–93.

³¹⁰ See Chien & Reines, *supra* note 1, at 8–10 (discussing PAE lawsuits of multiple customers).

³¹¹ See Magliocca, *supra* note 55, at 1813 (discussing the preference of those threatened by PAEs to settle).

³¹² Allison et al., *supra* note 50, at 694 (finding PAE suits were much less likely than non-PAE suits to result in ruling for patentee); Merges, *supra* note 50, at 1603–04 (discussing allegations that PAEs file suits on weak patents); Susan Decker, *Google Wins \$1 Case from Patent Harassing Customers*, BLOOMBERG (Jan. 24, 2014), <http://www.bloomberg.com/news/2014-01-24/google-wins-1-case-from-patent-owner-harassing-customers.html>. But see Risch, *supra* note 172, at 478–84 (debating whether PAEs patents are in fact of weaker quality).

³¹³ See e.g., Emily Chen, *Making Abusers Pay: Deterring Patent Litigation by Shifting Attorneys' Fees*, 28 BERKELEY TECH. L.J. 351, 353 (2003) (pointing out that fee shifting would inhibit low merit patent lawsuits); Christian Helmers, Luke McDonagh & Brian Love, *Is There a Patent Troll Problem in the United Kingdom* 27–28 at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2331543 (providing evidence that the United Kingdom's fee shifting method deters PAEs from bringing lawsuits) Kesan, *supra* note 42, at 169 (arguing that fee shifting can increase the costs of opportunistic patenting and enforcement of invalid patents).

³¹⁴ See e.g., *Protecting Small Businesses and Promoting Innovation by Limiting Patent Troll Abuse*, Hearing Before the Comm. on the Judiciary, 103rd Cong. 3–10 [hereinafter *Protecting Small Businesses Hearing*] (statement of John Dwyer, President and Chief Executive Officer New England Federal Credit Union, Williston, Vermont) (describing abusive use of cease and desist letters by PAEs and suggesting several solutions); Randall R. Rader, Colleen V. Chien et al., *Make Patent Trolls Pay in Court*, N.Y. TIMES, June 4,

measure appears then to be relevant at least to the subset of end user cases involving PAEs.

E. DESIGNING FEE SHIFTING TO ADDRESS END USERS' INTERESTS IN PATENT LITIGATION

i. Current Legislative and Judicial Activity

Presently, fee shifting in patent litigation is receiving significant attention.³¹⁵ The Supreme Court decided two patent fee shifting cases in 2014,³¹⁶ while Congress is considering multiple bills espousing different versions of fee shifting in patent litigation.³¹⁷ The PAE crisis drives the attention given to fee shifting in patent litigation.³¹⁸ Yet, while some proposed solutions target PAEs directly others offer a broader fee shifting approach.

The Supreme Court's decisions in *Octane Fitness* and *Highmark* and some of the bills brought before Congress focus on facilitating fee shifting generally without targeting PAEs specifically. Section 285 of the Patent Act provides that: "[t]he Court in exceptional cases may award reasonable attorney fees to prevailing party."³¹⁹ In *Octane Fitness*, the court lowered the standard for awarding fee shifting under Section 285 for all alleged infringers.³²⁰ Similarly, the Innovation Act, which has emerged as the leading bill in Congress, amends Section 285 to provide for fee shifting without considering the identity of the parties. The Innovation Act

2013 http://www.nytimes.com/2013/06/05/opinion/make-patent-trolls-pay-in-court.html?_r=0 (last visited Feb. 16, 2014) (describing abusive patent litigation and proposing fee shifting as a solution).

³¹⁵ See Chen, *supra* note 313, at 359 (pointing to recent legislation activity and court decisions supporting fee shifting); Randall R. Rader, Colleen V. Chien et al., *Make Patent Trolls Pay in Court*, N.Y. TIMES (June 4, 2013), http://www.nytimes.com/2013/06/05/opinion/make-patent-trolls-pay-in-court.html?_r=0 (describing abusive patent litigation and proposing fee shifting as a solution).

³¹⁶ See generally *Octane Fitness, LLC v. Icon Health & Fitness, Inc.* No. 12-1184 (U.S. Apr. 29, 2014); *Highmark Inc. v. Allcare Health Management System, Inc.* No. 12-1163 (U.S. Apr. 29, 2014).

³¹⁷ See Shield Act, H.R. 845, 113th Cong. § 2; Patent Abuse Reduction Act, S. 1013, 113th Cong. § 5 (2013); Innovation Act, H.R. 3309, 113th Cong. § 3 (2013); Patent Litigation Integrity Act of 2013, S. 1612, 113th Cong. § 201 (2013).

³¹⁸ See e.g., *Protecting Small Businesses* Hearing, *supra* note 314, at 4–7 (statement of Dana Rao, Vice President and Associate General Counsel of Intellectual Property and Litigation Adobe Systems Incorporated) (proposing fee shifting as a solution to PAE abusive litigation).

³¹⁹ 35 U.S.C. § 285 (2013).

³²⁰ See *Octane Fitness v. Icon Health*, No. 12-1184, slip op. at 7-9 (U.S. Apr. 29, 2014). Similarly, in *Highmark v. Allcare*, although the case involved a PAE, the Court did not focus on the identity of the patentee but on the standard of review the Federal Circuit should apply to the grant of attorney fees by the district court. See *Highmark Inc. v. Allcare Health Management System, Inc.* No. 12-1163 slip op. at 4 (U.S. Apr. 29, 2014). (holding that an appellate court should review all respects of a district court's § 285 determination for abuse of discretion).

contains an assumption that attorney fees will be awarded to the prevailing party, unless the court finds that the position and conduct of the nonprevailing party are substantially justified or that special circumstances make the award unjust.³²¹

Other bills incorporate fee shifting measures that target PAEs, either directly or indirectly. Some bills focus directly on PAEs by allowing fee shifting to the prevailing party if the adverse party is a PAE.³²² Other bills may not consider the party's identity in the fee shifting analysis, but impose different requirements on PAEs. For example, another recent bill allows courts to impose bond posting only on the patentee and provides that whether the patentee is a PAE should be considered in the court's bond posting decision.³²³

The Supreme Court's decision in *Octane Fitness* and the Congressional bills aim to lower the standard for granting fee shifting in patent litigation."³²⁴ *Octane Fitness*, which focused on the standard for awarding fee shifting for alleged infringers would particularly benefit end users. Yet, while the adopted and proposed changes are beneficial for end users, end users are still uniquely situated. The following discussion will focus on designing a fee shifting regime that will specifically address the unique characteristics of the end user. This discussion has been largely absent from the current debate.

ii. Considerations in Designing a Fee Shifting Regime

Regardless of the fee shifting regime selected, fee shifting will not motivate all end users who have meritorious non-infringement claims to proceed to litigation. Neither will the availability of fee shifting ensure that end users will regularly seek the invalidation of patent through suits for declaratory judgment. End users stakes are often small and they may rationally prefer not to engage in litigation. At the same time, the availability of fee shifting will encourage some end users to defend their meritorious claims and is likely to increase the number of declaratory judgment suits for patent invalidity. For example, some end users have long-term interests. Patients of chronic or genetic diseases that are reliant long-term on a specific drug would have an incentive to congregate and file a declaratory judgment suit.³²⁵ Fee shifting cannot by itself place end

³²¹ See Innovation Act, H.R. 3309, 113th Congress § 3 (2013).

³²² The Shield Act defined a PAE as a party that failed to meet at least one of the following: 1) is the original inventor 2) has exploited the patent through production or sale; 3) is a university or technology transfer organization. See Shield Act, H.R. 845, 113th Cong. § 2(d) (2013).

³²³ See e.g., The Patent Integrity Act of 2013, S. 1612, 113th Cong. § 201 (2013).

³²⁴ See 35 U.S.C. § 285 (2013).

³²⁵ In a related example, Fabry patients who had a long-term interest in a drug that was under-produced congregated to petition the NIH to use its march-in power to address the patented drug shortage. See O'Brien, *supra* note 147.

users on equal footing with other players, but it can contribute to leveling the playfield.

Fee shifting comes in different forms. It can be mandatory, discretionary, awarded to any prevailing party or awarded only to a prevailing plaintiff or prevailing defendant. The type of fee shifting employed depends on the rationale, whether it is for fairness, equalizing power between the parties, a particular incentive or a combination of several reasons.³²⁶ The following discussion considers three factors affecting the design of fee shifting and their impact on the end user.

a. Prevailing Party or Defendant

Fee shifting to address the needs of end users could apply to any prevailing party or only to defendants (whether parties sued for alleged infringement or parties taking preemptive measures by suing for declaratory judgment to declare patent invalidity).³²⁷ Currently, Section 285 of the Patent Act provides for fee shifting to any prevailing party.³²⁸ Allowing fee shifting to any prevailing party significantly enhances the risk that end users undertake if they pursue litigation because the court could find the end user liable for the other side's expenses as well as his own. End users are already risk averse due to their unequal litigation position, and often prefer to settle or not pursue meritorious claims. A prevailing-party fee shifting regime further decreases the likelihood that end users will pursue litigation.

On the other hand, limiting fee shifting to defendants could prejudice small inventors trying to enforce their patent rights.³²⁹ Small inventors have lesser means. And although the availability of PTO proceedings and contingent representation gives small inventors additional tools that end users cannot avail themselves of, pro-defendant fee shifting may have a chilling effect on small inventors. These inventors may be less likely to enforce their patents if failure to win could make them liable for the opposing party's costs. Concerns regarding the economic incentives for small inventors weigh against a pro-defendant fee shifting regime. At the same time, a prevailing-party fee shifting regime, particularly one that makes it more likely that fee shifting will occur than under the current regime, requires additional guarantees for end users to incentivize them to pursue meritorious patent claims.

b. Mandatory or Discretionary

³²⁶ See Kesan, *supra* note 42, at 171.

³²⁷ *Id.* at 169–176 (proposing a pro-defendant fee shifting regime).

³²⁸ 35 U.S.C. § 285 (2013).

³²⁹ For a discussion of the state of the individual inventor in patent litigation, see generally, Christopher A. Cotropia, *The Individual Inventor Motif in the Age of the Patent Troll*, 12 YALE L.J. & TECH. 52 (2009-2010).

Fee shifting can be mandatory or discretionary. Currently, Section 285 of the Patent Act provides for a discretionary fee shifting regime.³³⁰ A mandatory fee shifting regime under which the court must order fees for the prevailing party can increase certainty for end users in a pro-defendant shifting regime. Under a mandatory pro-defendant fee shifting regime an end user has a guarantee that should she prevail, her expenses will be compensated. However, since a pro-defendant regime fails to protect small inventors, it is necessary to evaluate the effects of a mandatory regime in which any prevailing party can be compensated. A regime in which an end user will be held liable for any prevailing patentee's litigation fees holds great risk for an end user. The outcome of patent litigation is highly uncertain and is particularly unpredictable for the end user who lacks the technological expertise to evaluate the patent's validity and patentee's infringement arguments at the outset. A discretionary regime, on the other hand, enables a more granular investigation of the circumstances of the lawsuit and can consider the end user's status. Although the end user will not have the guarantee of a mandatory regime if she prevails, neither will she incur the risk of mandatory fee shifting to the patentee. Furthermore, a discretionary inquiry that accounts for end users' unique characteristics could encourage end users to pursue their claims in court.

c. General Application or Special Status

A fee shifting regime can expressly identify certain parties and accord them special status. Currently, Section 285 of the Patent Act does not grant any party a special status. At the same time, several bills identify PAEs for special treatment in fee shifting decisions.³³¹ Defining the identity of a party has proven tricky in the context of PAEs. There are competing interpretations of who are the PAEs who abuse the patent system, hinder innovation, and therefore warrant special legal treatment.³³² Yet, identifying the end user as a party who warrants preferential treatment in the context of fee shifting could carry several advantages. First, the express mention of the end user in the legal framework for fee shifting would carry a message that could reduce the end user's perception of risk in pursuing litigation.³³³ Many end users receive cease and desist letters

³³⁰ See § 285 (providing that the court in exceptional cases may award reasonable attorney fees to the prevailing party).

³³¹ See Shield Act, H.R. 845, 113th Congress § 2(d) (2013); The Patent Integrity Act of 2013, S. 1612, 113th Congress § 201 (2013).

³³² See Christopher Anthony Cotropia, Jay P. Kesan et al., *Unpacking Patent Assertion Entities (PAEs)* 8–9 (Illinois Program in Law, Behavior and Social Science Paper No. 14-20, 2013), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2346381 (discussing the different potential definitions of who should be considered a PAE).

³³³ Gaia Bernstein, *The Paradoxes of Technological Diffusion*, *supra* note 53, at 287 (discussing the expressive power of the law in reducing perceptions of risk). On the expressive power of the law, see, Anderson & Pildes, *supra* note 53, at 1508; McAdams, *supra* note 53, at 398; Smith, *supra* note 53, at 510, 515.

and select to settle because they do not want to incur litigation costs. The availability of fee shifting may affect the calculus of at least some of these end users. Second, a fee shifting regime that focuses only on exposing PAEs to an increased likelihood of paying for the opposing party's fees, fails to capture the full spectrum of end user cases. While some end user cases are indeed the result of PAEs action, others are not. Patentees, such as Myriad or Monsanto, who were involved in recent end user litigation, would not be considered a PAE under any definition.

This Article defined the end user as an entity who is not in the business of making or selling the accused technology. It is not a technology company that directly competes with the patentee. Instead, the end user utilizes the technology in its business or personal life. End user's use of the technology in business can include incorporating the accused technology as a component of a product. The end user is distinguished from the technological competitor in that he lacks the technological expertise regarding the technology, since he is not in the business of making and selling the technology itself.

There are two options for incorporating end user status in fee shifting analysis. End user status could mandate fee shifting if the end user prevails, or it could be a factor that weighs toward fee shifting. Incorporating end user status as a factor retains important flexibility especially in grayer cases. Defining who is an end user is likely to encounter some of the same challenges encountered in defining PAEs. Moreover, some end users may be particularly innovative and change the design of a patented product, making them look more like technological competitors.³³⁴ Thus, hinging fee shifting completely on the status of the end user may be hard to apply in certain cases. On the other hand, using the end user status as a factor in fee shifting analysis could retain the expressive advantages, while leaving courts more leeway in cases in which end user status is murky. Furthermore, using end user status as a factor, instead of the decisive element mandating fee shifting, enables maintaining the discretionary nature of fee shifting.

iii. Application: The Many Shades of End Users

³³⁴ See generally ERIC VON HIPPEL, *DEMOCRATIZING INNOVATION* 70–72 (2005) (describing the innovative user); Yochai Benkler, *Coase's Penguin, or Linux and the Nature of the Firm*, 112 YALE L.J. 369 (2002) (describing peer production projects through which many individuals cooperate together to create); Dan Hunter & F. Gregory Lastowka, *Amateur to Amateur*, 46 WM. & MARY L. REV. 951, 954 (2004) (showing that "copyright's former consumers are now the creators, producers and disseminators of content"); William W. Fisher, *The Implications for Law of User Innovation*, 94 MINN. L. REV. 1417 (2010) (discussing legal conflicts between user innovators and producers); Katherine Strandburg, *Users as Innovators: Implications for Patent Doctrine*, 79 U. COLO. L. REV. 467 (2008) (distinguishing the user innovator from the prevailing conception of the seller innovator in patent law and focusing on research tools inventions).

This proposal advocates retaining some of the current framework of the patent system's fee shifting regime.³³⁵ Specifically, it supports allowing any prevailing party, whether patentee or defendant, to be eligible for fee shifting. It also advocates retaining the discretionary nature of fee shifting. It does, however, propose to include end user status as a factor that weighs in favor of fee shifting when an end user is the prevailing party. The Supreme Court's decision in *Octane Fitness* to lower Section 285's "extraordinary circumstances standard," for alleged infringers benefits end users. Some of the legislative proposals would have a similar benefit for end users. Yet, the incorporation of end user status as a factor that weighs toward fee shifting, whether legislatively or judicially, would be particularly effective by sending a clear signal to end users that pursuing litigation would be less risky.

While this Article defines end users broadly and lumps many types of end users together in order to highlight the breadth of the transformation in patent law practice, it proposes a granular investigation of the specific end user party during the fee shifting determination. Courts deciding whether to order fee shifting for a prevailing party that qualifies as an end user can consider the characteristics of the specific user in deciding whether to grant fee shifting. Even prevailing end users can differ significantly from each other and a court can assess whether the specific user in question displays the classic characteristic of an end user. The following discussion highlights some prototypical end user examples and illustrates how they can affect the fee shifting result.

One example is the case of the user innovator. Although most end users are not technologically sophisticated, a minority may be. Some end users are, in fact, innovators. These end users have sophisticated understanding of the technology and often create improvements of patented devices or processes.³³⁶ These user innovators may look less like the typical end user in that they have a technologically sophisticated understanding of the patented device and may also be early adopters who are aware of the technology earlier in the life of the patent. In fact, some of these user innovators may want to sell their improved innovation in which case they will begin looking even more like competitors. Where a user innovator is a party in the litigation the power inequality between the user and the patentee can be significantly reduced and, therefore, the argument for fee shifting would be weaker.

Another example involves users who incorporate a patented technology as into a central function of their business. These users may not know as much about the technology as the manufacturer, but they may still have significant technological sophistication regarding the technology. For

³³⁵ 35 U.S.C. § 285 (2013).

³³⁶ For discussions of users who are innovators, see generally, VON HIPPEL, *supra* note 334; Hunter & Lastowka, *supra* note 334; Fisher, *supra* note 334; Strandburg, *supra* note 334.

example, imagine that a patentee sued Starbucks for using its patented coffee machine in all Starbucks' cafes. Unlike wireless technology that is not central to Starbucks business, a coffee machine is. And although Starbucks is not the manufacturer or seller, it may have significant technological knowledge regarding the operation of these patented coffee machines. The user who possesses technological sophistication because a patented device is central to its business may not resemble a competitor as much as the user innovator, but may still share fewer of the classical characteristics of the end user. In this case inequality between parties may also be reduced and the case for fee shifting would be weaker.

Finally, some end users represent a public interest or a broader private interest in a declaratory judgment action. For example, the patients and physicians suing Myriad sought broader access to breast cancer genetic testing. Invalidation of Myriad's patent benefitted not only those who were parties to the litigation but also many others seeking more affordable breast cancer genetic tests, the ability to receive a second opinion or to test for additional mutations. Where end users file for declaratory judgment to invalidate a patent that affects a broader interest, the private attorney general justification weighs strongly toward fee shifting.

CONCLUSION

This Article set out to reveal a new phenomenon in patent litigation. It highlighted the growing role played by end users both at the center and in the shadows of patent litigation. The Article showed that end users have become litigants in some of the major patent cases. They are also plaintiffs suing to challenge pay-for-delay agreements between manufacturers of patented drugs and generic drug manufacturers. And, at the same time, PAEs are suing or threatening to sue thousands of end users for use of their allegedly patented technologies.

The Article defined end users broadly to include those using a patented technology for personal consumption or in business. End users, however, do not make or sell the technology directly. It emphasized that while the equities of end user cases may differ, all end users suffer from the same procedural disadvantages because they are uniquely situated compared to other players in the patent arena. The Article showed that end users differ from small technological competitors because they lack intricate understanding of the patented technology; they tend to become involved in the patent conflict relatively late in the life of the patent and they are typically one-time players.

The Article demonstrated that the AIA, which aimed to catch up with the changing patent landscape, failed to predict and is largely ill-equipped to address the growing role of end users. One set of AIA reforms set up and refurbished PTO procedures to provide an efficient and less expensive forum than litigation to resolve patent disputes. However, the Article showed that end users are unlikely to benefit from these

procedures, mainly because they usually get involved in patent conflicts after most of these procedures are no longer available. The Article also showed that another AIA reform – the prior user rights defense – is unlikely to benefit end users because they are unlikely to use the technology a year before the filing of the patent application, as required to utilize of the defense.

The Article underscored that the AIA's failure to account for the rise of the end users puts them at a procedural disadvantage. It showed that although Congress and the Supreme Court are currently assessing fee shifting in patent litigation, the Court's decisions and Congressional debates ignore the special needs of end users. To account for the needs of the end users, the Article proposes maintaining patent law's current fee shifting framework, while including the status of the end user as a special factor that would weigh toward granting fee shifting where the end user is a prevailing party.