STRIKING A BALANCE: THE PURSUIT OF TRANSPARENT PATENT OWNERSHIP

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Concealed and misleading patent ownership information imposes substantial costs on the patent system through both persistent litigation and increased transaction costs.¹ By providing incomplete information regarding patent scope and ownership, some patent holders obfuscate the extent of their rights and game the system.² While uncertain claim boundaries create much of this strain, efforts to conceal ownership information exacerbate the problems and help create a system where the patent value can be divorced from the value of the covered innovation.³

In January 2014, in response to White House calls to make disclosure of patent ownership "the default," the United States Patent and Trademark Office ("PTO") published a Proposed Rule titled "Changes to

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- 1. See generally Peter S. Menell & Michael J. Meurer, Notice Failure and Notice Externalities, 5 J. LEGAL ANALYSIS 1 (2013) (discussing costs associated with notice failures in several intellectual property fields, and noting that those who create the costs are not those who ultimately bear them); FED. TRADE COMM'N, THE EVOLVING IP MARKETPLACE: ALIGNING PATENT NOTICE AND REMEDIES WITH COMPETITION 127–30 (2011) [hereinafter FTC Report].
- 2. See Menell & Meurer, supra note 1, at 8–9 (noting that parties can benefit when the extent of their patent portfolio is not easily known and that parties may consequently prefer to obscure the "existence, scope, or ownership of their property rights"); see also Tom Ewing & Robin Feldman, The Giants Among Us, 2012 STAN. TECH. L. REV. 1, 26–29 (2012); FTC Report, supra note 1, at 130–31, 134–35 (discussing several instances in which hidden ownership information provided parties with favorable negotiation positions during and before litigation).
- 3. See FTC Report, supra note 1, at 130–31 (discussing the costs of notice problems in patent ownership); PRESIDENT'S COUNCIL OF ECON. ADVISERS, ET AL., EXEC. OFFICE OF THE PRESIDENT, PATENT ASSERTION AND U.S. INNOVATION 4 (2013), available at http://www.whitehouse.gov/sites/default/files/docs/patent_report.pdf (noting that patent assertion entities often use networks of shell companies to hide their identities as part of a strategy to extract settlement fees) [hereinafter Executive Report].
- 4. Press Release, The White House Office of the Press Sec'y, Fact Sheet: White House Task Force on High-Tech Patents (June 4, 2013), http://www.whitehouse.gov/the-press-office/2013/06/04/fact-sheet-white-house-task-force-high-tech-patent-issues.

Require Identification of Attributable Owner" ("Proposed Rule").⁵ The Proposed Rule would have required parties to disclose "attributable owners," including titleholders, enforcement entities, and ultimate parent entities, when the patent came before the PTO.⁶ Responses to the proposal were mixed, with many parties forcefully arguing that the rule would not bring substantial benefits to the patent system and that it would be unduly burdensome if implemented.⁷ In October 2014, the PTO abandoned its proposal, announcing that it would instead wait for Congress to act.⁸

This Note reviews the Proposed Rule to assess why it failed and to glean information about alternatives that would better serve the goal of increased transparency. It concludes that the reforms proposed by the PTO provide reason for optimism and a valuable starting point for future legislation, even if the Proposed Rule itself might have done more harm than good. Part I of this Note reviews the current landscape, paying particular attention to the burdens created by the lack of transparency in patent ownership. Part II then reviews the Proposed Rule and assesses its strengths and weaknesses. Part II concludes that while the Proposed Rule was a commendable attempt to increase patent ownership transparency, its

^{5.} Changes to Require Identification of Attributable Owner, 79 Fed. Reg. 4105, 4106 (Jan. 24, 2014) (considered for codification at 37 C.F.R. pt. 1; currently abandoned) (explaining that the proposed changes came in response to the President's executive actions). The Proposed Rule followed in the footsteps of the Leahy-Smith America Invents Act, which President Obama claimed brought the reform movement "about halfway" in terms of combating patent misuse. Executive Report, *supra* note 3, at 2 (citing President Obama's comments from February 14, 2013). The "impact of aggressive litigation tactics . . . was not widely known during the seven years the AIA was under negotiation." *Id.* at 3. This may account for the perceived need to build upon the AIA. *See id. But see* BRIAN T. YEH, CONG. RESEARCH SERV., R42668, AN OVERVIEW OF THE "PATENT TROLLS" DEBATE 1 (2013) (suggesting that the AIA did little to combat patent trolls because of "lively debate" about how to address them).

^{6.} Changes to Require Identification of Attributable Owner, 79 Fed. Reg. at 4106.

^{7.} See, e.g., Letter from Wayne P. Sobon, President, Am. Intellectual Property Ass'n, to Michelle K. Lee, Deputy Dir., USPTO 3–4 (Apr. 24, 2014), available at http://www.uspto.gov/patents/law/comments/ao-a_aipla_20140424.pdf [hereinafter AIPLA Comments]; Letter from Hunter R. Rawlings III, President, Ass'n of Am. Univs., et al., to James Engel, Senior Legal Advisor, Office of Patent Legal Admin. 3 (Apr. 24, 2014), available at http://www.uspto.gov/patents/law/comments/ao-c_sixassoc_20140424.pdf [hereinafter Association of Universities Comments]; see also Ryan Davis, Critics Blast USPTO Patent Transparency Plan at Hearing, LAW360 (Mar. 13, 2014, 6:09 PM), http://www.law360.com/articles/515513/critics-blast-uspto-patent-transparency-plan-at-hearing.

^{8.} Ryan Davis, *USPTO Backs Away from Patent Ownership Transparency Rules*, LAW360 (Oct. 24, 2014, 4:48 PM), http://www.law360.com/articles/590197/uspto-backs-away-from-patent-transparency-rules.

administration costs would likely have outweighed any potential benefits. Part II also identifies several salvageable strategies from the PTO's proposal to form the basis for future legislation. Part III transitions into a discussion of recent legislative proposals that require disclosure of patent ownership information. Part IV draws upon ideas from Parts I-III to provide recommendations regarding possible legislative reforms that would create meaningful disclosure requirements while addressing the concerns surrounding the Proposed Rule. It concludes that a bifurcated set of disclosure requirements would best align the costs and benefits of ownership transparency, with the most substantial requirements reserved for litigants in infringement or invalidity suits.

I. THE STORY SO FAR: INFORMATION FAILURES AND PARTIAL SOLUTIONS

In theory, patents drive innovation and permit patent holders to profit from their innovations. In practice, market inefficiencies and gaps in patent law incentivize abusive behavior that divorces the value of the innovation from a patent's strategic value. 10 Though many of these problems stem from unclear patent boundaries and low-quality patents, 11 lack of transparent patent ownership aggravates the situation and creates additional opportunities for parties to game the system.¹² This Part

^{9.} E.g., FTC Report, supra note 1, at 1. The ability to exclude others from practicing a patented invention allows patent holders to exert significant influence on the market and monetize their invention, for example through sales and licensing of the patented innovation or related technology. Id. at 2. Proponents of the right to exclude and related property rights assert that the benefits associated with such grants encourage investment in resource development. See, e.g., Menell & Meurer, supra note 1, at 1.

^{10.} See Menell and Meurer, supra note 1, at 7-15 (arguing that lack of information regarding both "deed" facts, including information about the identity of owners, and the scope of property rights creates inefficiencies that benefit resource holders, including patent owners, at the expense of competitors). A patent's strategic value includes its value as both a sword and a shield in patent litigation. See Colleen V. Chien, From Arms Race to Marketplace: The Complex Patent Ecosystem and Its Implications for the Patent System, 62 HASTINGS L.J. 297, 310 (2010) (describing the recent growth in the market for patents as many companies seek to acquire or access large patent portfolios for both offensive and defensive purposes).

^{11.} See Chien, supra note 10. These problems are beyond the scope of this Note and will be discussed only where they overlap with ownership transparency issues. While concealed ownership is problematic, even a perfectly transparent ownership system will not eliminate all of the abuses highlighted in Part I, infra. Consequently, this Note aims to propose a solution whose scope matches the scope of the problems it addresses.

^{12.} E.g., FTC Report, supra note 1, at 130 ("One strategy for navigating an environment with many potentially relevant parties is to concentrate clearance efforts on patents held by competitors or others who are likely to sue.").

provides an overview of several symptoms bogging down the system, focusing on problems associated with hidden ownership information.

A. Symptoms

Problems with hidden patent ownership arise largely in the shadow of litigation. Optimally, litigation permits patent holders to assert their rights and receive compensation for their inventive efforts. It also helps establish clear expectations for market participants by delineating existing patent rights and providing information about how a given patent has been asserted.¹³ Yet litigation, and the threat thereof, can also burden the patent system by permitting patent holders to impose substantial costs on even non-infringing competitors.¹⁴

Where abusive behavior is pervasive, costs created or increased by obfuscated patent ownership are substantial both before and after complaints are filed.¹⁵ Pre-litigation problems arise when parties cannot determine the contours of the patent landscape in which they intend to operate: a practitioner who cannot determine what patents cover her field or what other parties control those patents will struggle to assess her freedom to operate or obtain licenses to reinforce that freedom.¹⁶ Litigation and post-litigation problems grow out of the ability of some patent holders to capitalize on uncertain patent scope and ownership by asserting (sometimes valueless) patents against parties who have made a

^{13.} See Robin Feldman, Transparency, VA. J.L. & TECH. (forthcoming) (manuscript at 11–12), available at http://ssrn.com/abstract=2402389 (arguing that the definitions and relationships that limit patent scope become fixed over time in part through judicial interpretations of those definitions and comparison with other relevant art).

^{14.} See, e.g., Mark A. Lemley & A. Douglas Melamed, Missing the Forest for the Trolls, 113 COLUM. L. REV. 2117, 2124–25, 2145–46 (2013). "Patent trolls" are non-practicing entities ("NPEs") who troll, primarily through licensing and litigation, the patent system in order to monetize patents as patents rather than the innovation a patent produced. Id.; see also Yeh, supra note 5, at 6; Ewing & Feldman, supra note 2, at 1. Not all NPEs are patent trolls, and not all patent trolls are NPEs. Ewing & Feldman, supra note 2, at 1. "Trolls" are those parties who, like the trolls waiting under the bridge in children's stories, use their control of a resource (the patent, or bridge, in the stories) to demand payments from other users of the resource. Id.

^{15.} See Yeh, supra note 5, at 6–7, 20 n.159 (discussing the costs associated with litigation by patent assertion entities, many of whom use abusive litigation tactics and obscure their ownership of patent rights); see also FTC Report, supra note 1, at 46–48, 53 (drawing a similar distinction, during a discussion of costs associated with uncertain patent boundaries, between "ex ante" problems pertaining to licensing before possible infringement and "ex post" problems pertaining to licensing and litigation after possible infringement).

^{16.} See Menell & Meurer, supra note 1, at 7–9.

substantial investment in the intellectual space around those patents.¹⁷ Many defendants ultimately choose to settle early rather than risk a substantial damages award or injunction,¹⁸ which ultimately permits patent holders to monetize patents with questionable inventive value.¹⁹ Asymmetries in both bargaining power and information about the patent thereby allow some patent holders to exert an influence on the market that is entirely disproportionate to their patent's contribution to it.²⁰

These problems and their connection with obfuscated patent ownership are discussed in more detail below.

1. Pre-Litigation Headaches

Even before litigation begins, lack of transparent patent ownership increases the cost of innovation.²¹ First, opaque ownership creates substantial obstacles for preclearance that are particularly notable in the software/computer technology space.²² There, "patent thickets" make it nearly impossible to identify patent boundaries,²³ and innovation proceeds at a rapid pace that makes uncovering all the relevant patents before investing in product development infeasible.²⁴ Clear patent ownership can provide valuable information about the relevant parties and technologies in a given area and thereby accelerate freedom-to-operate analysis.²⁵ By

^{17.} See id.

^{18.} Ewing & Feldman, *supra* note 2, at 24 (noting that parties may settle lawsuits even when the claims brought against them are "quite weak"). Where risks are uncertain and the potential downside is substantial, parties may be more likely to settle than engage in costly litigation. *See* FTC Report, *supra* note 1, at 4. This problem is typically associated with uncertain patent boundaries, but where ownership information is also uncertain, burdens on accused infringers may increase further, as discussed in Section I.A.2, *infra*.

^{19.} FTC Report, *supra* note 1; *see also* Chien, *supra* note 10, at 301 (arguing that the "intrinsic" value of a patent is often distinct from the "exclusion" value of a patent, i.e., the value a patent holder is able to extract from the patent by asserting it against others).

^{20.} See Lemley & Melamed, supra note 14, at 2157–58 ("patent holders are often in a position . . . [to] command damages or royalties for their patents in excess of their value").

^{21.} See FTC Report, supra note 1, at 130.

^{22.} See id. at 130-31.

^{23.} See id. at 56 (citing Carl Shapiro, Navigating the Patent Thicket: Cross Licenses, Patent Pools, and Standard Setting, in INNOVATION POLICY AND THE ECONOMY 119 (Adam B. Jaffe et al. eds., 2001)). Patent thickets exist where "densely overlapping patent rights [are held] by multiple owners." Id.

^{24.} See Mark A. Lemley, Ignoring Patents, 2008 MICH. ST. L. REV. 19, 20-22 (2008).

^{25.} See Feldman, supra note 13, at 19–21 (arguing that ownership information provides important contextual information regarding patent scope and strength and noting that there is a substantial relationship between the number of times a patent is

making it more difficult to access to contextual information about the claimed invention, how it has been asserted, and what other patents its owner also holds, parties that obfuscate ownership deprive interested parties of information that could help them navigate these thickets.²⁶ As a result, many market entrants simply ignore patent rights; they do not seek preclearance, instead opting to suffer the cost of litigation when the time comes.²⁷ While this is less of a problem in the life sciences where patent boundaries are clearer, investment in research and development nonetheless suffers from the uncertainty that comes with hidden ownership rights and incomplete patent information.²⁸

In addition to discouraging preclearance, opaque ownership bogs down licensing transactions.²⁹ First, parties are often rewarded for hiding ownership information during licensing negotiations.³⁰ Hiding ownership information may allow parties to lure their counterparts into incomplete licenses, necessitating further future licensing in the future at additional

transferred and whether that patent will be involved in litigation). Knowing what patents are held by major players in a field is often an important step in preclearance analysis. *See* FTC Report, *supra* note 1, at 130–31; Letter from Colleen Chien, Assistant Professor, Santa Clara School of Law, to U.S. Patent & Trademark Office, at 1–2 (Jan. 25, 2013), *available at* http://www.uspto.gov/patents/law/comments/rpii-f_chien_130125.pdf.

- 26. See Feldman, supra note 13, at 21; see also Colleen V. Chien, Predicting Patent Litigation, 90 Tex. L. Rev. 283, 301–04 (2011) (noting, for example, that patents that have been transferred are more likely to be litigated than patents that have never been assigned); Attributable Ownership Public Hearing: Hearing before the U.S. Patent & Trademark Office 7, 8 (Mar. 13, 2014) (statement of Charles Duan, Public Knowledge), http://www.uspto.gov/patents/init_events/transcript_031314_uspto.pdf (noting that ownership information is helpful for parties hoping to understand the "competitive environments" in which they operate). Obfuscation of ownership is rational; there are valid reasons, such as protecting one's head start in an emerging market, to limit the contextual patent information available to competitors.
 - 27. Lemley, *supra* note 24, at 21–22.
- 28. See Executive Report, supra note 3, at 9–10. But see The Evolving IP Marketplace: Hearing Before the Fed. Trade Comm'n 12–13 (May 5, 2009) (statement of Vernon Norviel), http://www.ftc.gov/sites/default/files/documents/public_events/evolving-ip-marketplace/090505transcript.pdf (noting that in the healthcare sector, "things aren't too terribly broken" and that preclearance is possible and expected).
- 29. Feldman, supra note 13, at 17; Attributable Ownership Public Hearing: Hearing before the U.S. Patent & Trademark Office 20 (Mar. 13, 2014) (statement of Scott Pojunas, Hewlett-Packard Co.), http://www.uspto.gov/patents/init_events/transcript_031314_uspto.pdf.
- 30. See Feldman, supra note 13, at 17; see also Letter from Curtis G. Rose, et al., Hewlett-Packard Co., to James Engel, Senior Legal Advisor, Office of Patent Legal Admin. 2 (Apr. 24, 2014), available at http://www.uspto.gov/patents/law/comments/aoe_hp_20140424.pdf [hereinafter HP Comments] (describing a scenario in which a parent company is able to extract greater value from its licensing deals by hiding ownership of its entire portfolio among multiple related shell companies).

cost.³¹ The problem plagues both large companies and smaller, less sophisticated parties (e.g., startups) who struggle to differentiate between patents held by potential partners or non-litigious competitors and those held by potential litigation opponents.³² This difficulty makes it harder for market participants to adequately assess risks associated with practicing a particular technology and leads to significant costs that are particularly damaging for small businesses that lack the ability to pay for litigation when licensing fails.³³

These problems boil down to notice failures: where patents do not adequately inform parties of the rights held by other inventors, transaction costs multiply and parties spend resources navigating the patent system instead of developing new technologies.³⁴

2. Litigation Abuse

Incomplete or hidden ownership information also creates incentives for litigation abuse. Even patent holders with dubious patents are able to extract nuisance settlements by asserting weak patents against parties who are unwilling or unable to spend time and money litigating.³⁵ This scenario is particularly likely where parties lack the patent ownership

^{31.} HP Comments, *supra* note 30, at 2 (citing, in addition, Feldman, *supra* note 13). Parties that delay initiating infringement actions or issuing demand letters may be able to extract higher settlements (not just additional settlements) from potential licensees, who may have invested more money in developing the potentially infringing product over time. *See* Menell & Meurer, *supra* note 1, at 14 (noting that remedies for trespass or infringement create additional bargaining leverage after accused infringers have invested heavily in developing that resource). To the extent that accessible ownership information will help a party identify the relevant patents in a given space, hidden ownership information might also lead a party to overpay for a patent or portfolio that it erroneously believes will provide it with full freedom-to-operate.

^{32.} See Letter from John Thorne & Anna Mayergoyz Weinberg, Kellogg, Huber, Hansen, Todd, Evans & Figel, PLLC on behalf of Dell, Inc. and Cisco Systems, Inc., to the U.S. Patent & Trademark Office, at 2–4 (Apr. 24, 2014), available at http://www.uspto.gov/patents/law/comments/ao-e_dell_20140424.pdf [hereinafter Dell and Cisco Comments] (noting problems with covenants-not-to-sue, standard-setting, and licensing that apply to small and large companies).

^{33.} See Executive Report, supra note 3, at 9 (noting that patent litigation costs range from a median of \$650,000 for smaller cases to over \$5 million for larger cases); see also Ewing & Feldman, supra note 2, at 19–20.

^{34.} See Menell & Meurer, supra note 1, at 5-6.

^{35.} Lemley & Melamed, *supra* note 14, at 21–26. While nuisance suits exist even when ownership is clear, the cost of litigation rises where ownership is unclear, and alternative means to achieving patent peace (e.g., cross-licensing patent portfolios) are less available.

information necessary to adequately assess litigation risk.³⁶ Within the current system, three abusive practices are particularly concerning: the mass-mailing of demand letters,³⁷ the filing of repetitive suits by the same or related plaintiffs against the same defendants,³⁸ and "patent privateering."³⁹

The mass mailing of demand letters seeking licensing fees and/or threatening infringement litigation is one of the most problematic practices made economically attractive by obscure patent claims and opaque ownership information. While some demand letters are valid, many are not, and are instead a means for patent owners to monetize their assets through threats alone. While uncertain scope and quality of existing patents enable this behavior, the ability to hide patent ownership creates further incentives to engage in this practice. Importantly, those receiving demand letters from faceless, untraceable shell companies may find that the demanding company's obfuscated ownership makes it more difficult to determine whether a prior contractual agreement that would

^{36.} See Menell & Meurer, supra note 1, at 5–6 (discussing the litigation costs borne by RIM after it failed to identify NTP as the relevant counterparty when it first entered the market); Letter from Colleen Chien, Assistant Professor, Santa Clara School of Law, to U.S. Patent & Trademark Office 1–2 (Jan. 25, 2013), available at http://www.uspto.gov/patents/law/comments/rpii-f_chien_130125.pdf (noting that parties assessing litigation risk care who the owner of a patent is in addition to what the patent covers).

^{37.} U.S. GOV'T ACCOUNTABILITY OFFICE, GAO-13-465, INTELLECTUAL PROPERTY: ASSESSING FACTORS THAT AFFECT PATENT INFRINGEMENT LITIGATION COULD HELP IMPROVE PATENT QUALITY 26–27 (2013) (summarizing data indicating that the cost of NPE suits range from a median of \$300,000 for small companies to \$600,000 for large companies, that damages in NPE cases were higher than in other types of suits, that many parties pay settlements upon receipt of demand letters, and that many companies receive several times more demand letters than they have infringement suits actually filed).

^{38.} While truly repetitive suits are barred by estoppel, see Taylor v. Sturgell, 553 U.S. 880, 895 (2008), parties may find that it is possible to extract redundant settlements from unsophisticated parties. See Feldman, supra note 13, at 17. In addition, some parties have attempted what amounts to "reverse trolling," in which Company B attempts to use a PTAB proceeding invalidate a patent that has been asserted against its ally or affiliate, Company A. Christopher Blaszkowski, A Definition for IPR 'Real Party-In-Interest', LAW360 (June 20, 2014, 4:24 PM), http://www.law360.com/articles/548079 (discussing such a scenario, which, while ultimately unsuccessful, nevertheless required substantial litigation).

^{39.} Tom Ewing, Indirect Exploitation of Intellectual Property Rights by Corporations and Investors: IP Privateering and Modern Letters of Marque and Reprisal, 4 HASTINGS SCI. & TECH. L.J. 1, 6–8 (2012).

^{40.} See, e.g., Executive Report, supra note 3, at 6-7.

^{41.} *Id*.

negate the demand letter's claims already exists. 42 In addition, even where no such agreement exists, hidden ownership allows the demanding company (or its parent) to demand payment without bearing the risks of counterclaims.⁴³ And should a party seek to preempt a demand letter by seeking declaratory judgment that it does not infringe a given patent, the filing party may struggle to identify the actual patent owner among a number of related parties.⁴⁴ Because determining the true owner of a patent may require a costly, detailed analysis of several layers of corporate structure,45 many parties receiving demand letters choose to simply pay a licensing fee to avoid litigation.⁴⁶

Parallel to the licensing issue, incomplete settlements may subject practicing entities to repetitive lawsuits. Because parties hide what patents

^{42.} See Justin R. Orr, Note, Patent Aggregation: Models, Harms, and the Limited Role of Antitrust, 28 BERKELEY TECH. L.J. 525, 549-50 (2013) (discussing how a practicing entity that agrees to subject all of its patents in a given space to RAND terms may nonetheless extract higher licensing fees by selling off a portion of those assets to another company that can then seek to license those assets on non-RAND terms); see also Changes to Require Identification of Attributable Owner, 79 Fed. Reg. 4105, 4109 (Jan. 24, 2014) (considered for codification at 37 C.F.R. pt. 1; currently abandoned) (noting that improved ownership information may help accused infringers determine if the patent at issue is subject to FRAND commitments); Feldman, supra note 13, at 17 (noting that unsophisticated parties may be tricked into making multiple payments to what is essentially the same entity); Lemley & Melamed, supra note 14, at 2164, n.196 (noting one troll attempted to extract settlements even though it knew a patent has already been

^{43.} See Executive Report, supra note 3, at 5 (noting that patent assertion entities, who are largely responsible for the demand letters, "[have] no rival products, so they can't be countersued). While in some instances, the demanding parties might still be sued on some other basis, the stakes are much lower for those parties. See id. at 5, 12. In addition, as in the litigation context, hidden identities deprive opponents of negotiating leverage, e.g. by limiting exposure to claims against one's own patent portfolio (if one exists). Cf. Ewing, supra note 39, at 34-35 (asking what parties do when they are faced with uncertainty regarding whom to sue).

^{44.} Ewing & Feldman, supra note 2, at 40 (discussing a scenario in which a company sought declaratory relief in California, only to have some of its claims dismissed because it failed to name the correct defendant; the defendant in the declaratory relief action was then able to file an infringement suit in its preferred venue). While this mistake might be traceable to attorney error, it is difficult to argue that the time and energy spent determining ownership information to initiate the suit was well spent.

^{45.} See id. at 2.

^{46.} See Executive Report, supra note 3, at 6; Attributable Ownership Public Hearing: Hearing before the U.S. Patent & Trademark Office at 37-41 (Mar. 26, 2014) (statement of Daniel Nazer, Electronic Frontier Foundation), http://www.uspto.gov/patents/ init_events/transcript_032614_uspto.pdf (noting, for example, that a settlement offer for \$50,000 is likely cheaper than the legal fees necessary to determine ownership in litigation).

they own and with whom they are affiliated, affiliates of an assertion entity sometimes remain able to send additional demand letters even after a practicing entity has settled the initial suit.⁴⁷ While estoppel provisions might theoretically apply to these interactions, the cost of determining whether such provisions actually apply makes settlement an attractive option, particularly because many settlements are sealed and subject to strict confidentiality terms.⁴⁸

As these techniques become widespread, a company seeking to reap the benefits of patent assertion without risking its reputation or the possibility of counterclaims⁴⁹ may choose to assign its patents to assertion entities. These entities then assert the patents on behalf of the original company without, strictly speaking, acting as agents of the corporation.⁵⁰ In this modern form of "privateering" Company A sanctions, or even directs, litigation that is ultimately carried out by Company B against Company C.⁵¹ This allows Company A to leverage obscured ownership information to benefit from patent assertion without exposing itself to the corresponding risk of counterclaims, estoppel provisions, or a damaged reputation.⁵²

B. LIMITED IMPROVEMENTS

The above symptoms arise because of market failures that produce "notice externalities."⁵³ Fortunately, in 2011, Congress took a crucial first step towards improving transparency through provisions included in the Leahy-Smith America Invents Act.⁵⁴ Congress revisited the issue of

^{47.} HP Comments, supra note 30, at 2.

^{48.} See Feldman, supra note 13, at 16–18 (noting that licensing agreements and settlement agreements may be subject to confidentiality agreements, and that even trial records may be sealed by courts).

^{49.} Parties subjected to infringement suits often assert patents they already own or acquire patents that they can then assert against the party who initiates the suit. Chien, *supra* note 10, at 299–300. This is a form of "mutually assured destruction" that can be largely avoided via patent privateering, which may prevent the alleged infringer from knowing whom it should countersue and may make initiating a new, separate suit against the privateer's sponsor more less desirable. *See* Ewing, *supra* note 39, at 5–8, 34-35; *see also* Chien, *supra* note 10, at 299–300.

^{50.} Ewing, *supra* note 39, at 5–8, 34–35.

^{51.} *Id*.

^{52.} *Id.* While estoppel provisions might apply in practice, the burden of proving that estoppel provisions apply falls on the defendant in the litigation, who lacks the necessary information to make such a showing.

^{53.} See Menell & Meurer, supra note 1, at 5.

^{54.} See EMILY M. LANZA, CONG. RESEARCH SERV., R43321, PATENT INFRINGEMENT PLEADINGS: AN ANALYSIS OF RECENT PROPOSALS FOR PATENT REFORM 4–5 (Nov. 22, 2013).

transparent patent ownership throughout 2013 and 2014 as an element of several new patent reform bills, though no laws ultimately passed.⁵⁵ In 2014, the White House also issued an executive action titled "Making 'Real Party-in-Interest' the New Default" that aimed to push reform efforts forward; that action led to the Proposed Rule discussed in Part II.⁵⁶ Viewed as a whole, these developments demonstrate the steps that have already been taken and outline the steps that remain to make transparent patent ownership the norm.

1. Real Party-in-Interest and the America Invents Act

The Leahy-Smith America Invents Act ("AIA") included provisions to improve clarity with regard to real party-in-interest ("RPI") information in patent proceedings.⁵⁷ In so doing, Congress hoped to prevent some of the abuses noted above.⁵⁸

Under the new regime, petitioners before the Patent Trial and Appeal Board ("PTAB") must identify all real parties-in-interest.⁵⁹ A party petitioning for post grant review ("PGR") or inter partes review ("IPR") who fails to disclose all real parties-in-interest will have her petition denied or dismissed.⁶⁰ In addition, AIA provisions apply estoppel and time-bar restrictions to "petitioner[s], real part[ies] in interest, or priv[ies] of the petitioner" in an attempt to prevent abusive and redundant litigation in actions before the PTAB, actions in civil court, and actions

^{55.} Jason Keener, 10 Ways Congress Tried to Address NPE Litigation in 2013, LAW360 (Jan. 2, 2014, 6:04 PM), http://www.law360.com/articles/494834.

^{56.} See Press Release, The White House Office of the Press Sec'y, Fact Sheet: Force on High-Tech Patents (June 4, White House Task http://www.whitehouse.gov/the-press-office/2013/06/04/fact-sheet-white-house-taskforce-high-tech-patent-issues.

^{57.} Leahy-Smith America Invents Act § 6 (2011) (creating rules and procedures that apply to real-parties-in-interest in patent review proceedings) (codified in part at 35 U.S.C. §§ 315(a)-(e) (2012)).

^{58.} *See* Lanza, *supra* note 54, at 4–5.

^{59.} Leahy-Smith America Invents Act § 6 (2011) (codified in part at 35 U.S.C. §312(a)(2)). Notably, the AIA does not precisely define the term "real party-in-interest," and Chief Judge James Donald Smith of the PTAB has noted that determining which parties are real parties-in-interest is a "highly fact-dependent question." Lionel M. Lavenue & R. Benjamin Cassady, Assuaging Estoppel Concerns: Defining "Real Parties in Interest" After the ALA, INTELLECTUAL PROPERTY TODAY (Apr. 2013), available at http://www.finnegan.com/resources/articles/articlesdetail.aspx?news=cd1ffd8f-8311-41dc-a517-2ca3cf7e1a9f.

^{60.} Leahy-Smith America Invents Act § 6 (2011) (providing that PGR and IPR petitions may be considered only if all real parties in interest are identified) (codified at 35 U.S.C. §§ 312(a)(2), 322(a)(2) (2012)).

before the International Trade Commission ("ITC").⁶¹ These rules incentivize transparency in patent litigation by limiting a PTAB petitioner's ability to use hidden ownership information to file multiple challenges to a patent in civil court and at the PTAB.⁶²

However, these rules do little, if anything, to change the behavior of those asserting patents outside of the patent office. Because those parties filing petitions before the PTAB seek to invalidate patents held by others, they do not own the patents at issue, though they may own other patents.⁶³ Thus in general, PTAB petitioners and civil court infringement plaintiffs are opponents,⁶⁴ and requiring disclosure of real parties-in-interest for PTAB petitioners is unlikely to clarify the ownership of most

^{61.} See id. (codified in part at 35 U.S.C. §§ 315(b), (e)); Office Patent Trial Practice Guide, 77 Fed. Reg. 48756, 48759 (Aug. 14, 2012) (noting that "real party-in-interest" and "privies" requirements seek "to protect patent owners from harassment via successive petitions by the same or related parties").

^{62.} The story of RPX v. VirnetX provides one example of AIA estoppel provisions preventing redundant litigation. After VirnetX sued Apple for patent infringement in district court in 2010, winning an initial jury verdict of \$368 million, Apple filed several IPR petitions at the PTAB in 2013 challenging the asserted patents. Christopher Blaszkowski, A Definition for IPR 'Real Party-In-Interest', LAW360 (June 20, 2014, 4:24 PM), http://www.law360.com/articles/548079; Ryan Davis, Full Fed. Circ. Won't Review Toss of \$368M Apple IP Award, LAW360 (Dec. 16, 2014, 8:16 PM), http://www.law360.com/articles/605302/full-fed-circ-won-t-review-toss-of-368mapple-ip-award. The PTAB threw out Apple's petitions as time-barred under 35 U.S.C. § 315(b). Christopher Blaszkowski, A Definition for IPR 'Real Party-In-Interest', LAW360 (June 20, 2014, 4:24 PM), http://www.law360.com/articles/548079. Apple also pursued several other means of challenging the patents at the PTAB, first attempting to join petitions filed by New Bay Capital, LLC. Id. After New Bay Capital terminated its petitions, Apple consulted with RPX, a defensive patent aggregator, possibly with the intention of using RPX-held patents to help invalidate the VirnetX patents at issue. Id. RPX then filed IPR petitions at the PTAB against the VirnetX patents that were the subject of the infringement suit. Id. The PTAB threw out those petitions in June 2014, concluding that Apple was the real party-in-interest in both the IPR and in the prior civil court proceeding and was therefore time-barred from filing the IPR petition. Id. Though Apple eventually succeeded in having the initial verdict thrown out on other grounds, Ryan Davis, Full Fed. Circ. Won't Review Toss of \$368M Apple IP Award, LAW360 (Dec. 16, 2014, 8:16 PM), http://www.law360.com/articles/605302/full-fed-circ-won-treview-toss-of-368m-apple-ip-award, this saga details the ways in which the current AIA rules protect patent holders from redundant suits by alleged infringers.

^{63.} See Courtenay C. Brinckerhoff, The USPTO Does Not Need The Onerous Proposed Attributable Owner Rules, PHARMAPATENTS (Apr. 4, 2014), http://www.pharmapatentsblog.com/2014/04/04/the-uspto-does-not-need-the-onerous-proposed-attributable-owner-rules/.

^{64.} See discussion at note 62, *supra*, for one example where the PTAB petitioner and civil court plaintiff were opposed in both proceedings.

patents and prevent abuses by parties asserting patents in other venues.⁶⁵ Consequently, patent ownership information remains hidden, notice problems continue to plague market participants, and the litigation abuses that occur mainly outside the PTO persist.

2. Other Legislative Initiatives

During the 113th Congress, lawmakers introduced several patent reform bills.⁶⁶ Their approaches to reform varied. Some sought to raise pleading standards in patent cases,⁶⁷ others hoped to shift costs and fees associated with patent litigation,⁶⁸ and most importantly for this discussion, several pieces of legislation aimed to combat the lack of transparency in patent ownership. Most notably, the End Anonymous Patents Act, the Patent Transparency and Improvements Act of 2013, and the Innovation Act all required disclosure of ownership information in an attempt to curb patent abuse.⁶⁹ While none of the proposals became law, the Innovation Act gained traction, and several congressmen voiced plans to raise these issues again during the 114th Congress.⁷⁰

These acts will be discussed in Part III, *infra*, as relevant starting points for future legislation.

II. THE PROPOSED RULE

The Proposed Rule also represented the culmination of more than five years of administrative discussion of potential reforms. The Federal Trade Commission ("FTC") published a report, *The Evolving IP Marketplace: Aligning Patent Notice and Remedies with Competition*,⁷¹ following a series

^{65.} Cf. Michael Smith, How To ID Real Parties-In-Interest In Inter Partes Review, LAW360 (Dec. 4, 2013, 1:19 PM ET) http://www.law360.com/articles/485399/how-to-id-real-parties-in-interest-in-inter-partes-review (discussing, in terms of the application of the AIA's estoppel provisions, the relationship between defendants in infringement suits and challengers in IPR proceedings, but not discussing the relationship between IPR parties and those asserting patents in other venues).

^{66.} Lanza, *supra* note 54, at 5–7.

^{67.} *Id.* (discussing both the Innovation Act, H.R. 3309, and the Patent Abuse Reduction Act, S. 1013, each of which contains such provisions).

^{68.} Id.

^{69.} End Anonymous Patents Act, H.R. 2024, 113th Cong. § 2 (2013); Patent Transparency and Improvements Act of 2013, S. 1720, 113th Cong. § 3 (2013); Innovation Act, H.R. 3309, § 4 (2013).

^{70.} Erica Teichert, Congress to Push Patent Troll Bill in 2015, Goodlatte Says, LAW360 (Nov. 18, 2014, 3:52 PM), http://www.law360.com/articles/597447/congress-to-push-patent-troll-bill-in-2015-goodlatte-says.

^{71.} FTC Report, *supra* note 1.

of roundtables⁷² where commenters raised concerns about patent quality and ownership transparency.⁷³ The PTO similarly sought input from stakeholders regarding possible ownership transparency reforms several times between 2011 and 2013.⁷⁴ Thus, by the time the White House issued an executive action on June 4, 2013, titled "Making 'Real Party-in-Interest' the New Default" ("Executive Action"),⁷⁵ the reform conversation was well under way. In the press release accompanying the Executive Action, the White House took direct aim at patent trolls, stating:

Patent trolls often set up shell companies to hide their activities and enable their abusive litigation and extraction of settlements. This tactic prevents those facing litigation from knowing the full extent of the patents that their adversaries hold when negotiating settlements, or even knowing connections between multiple trolls.⁷⁶

To deal with that problem; improve functioning at the PTO; and streamline technology transfer, collaboration, and licensing, the White House called upon the PTO to begin a rulemaking process to require patent applicants and owners to regularly update ownership information when a patent is involved in a proceeding before the PTO.⁷⁷

On January 24, 2014, the PTO published a proposed rule and accompanying notice of proposed rulemaking under the title "Changes to Require Identification of Attributable Owner" ("Proposed Rule" and

^{72.} *Id.* at 2–3; *The Evolving IP Marketplace: Hearing before the Fed. Trade Comm'n* (May 5, 2009), http://www.ftc.gov/sites/default/files/documents/public_events/evolving-ip-marketplace/090505transcript.pdf.

^{73.} E.g., The Evolving IP Marketplace: Hearing before the Fed. Trade Comm'n, transcript at 84 (Dec. 5, 2008) (statement of Daniel P. McCurdy), http://www.ftc.gov/sites/default/files/documents/public_events/evolving-ipmarketplace/evolvingiptranscript.pdf.

^{74.} Request for Comments on Eliciting More Complete Patent Assignment Information, 76 Fed. Reg. 72372 (Nov. 23, 2011); Notice of Roundtable on Proposed Requirements for Recordation of Real-Party-in-Interest Information Throughout Application Pendency and Patent Term, 77 Fed. Reg. 70385 (Nov. 26, 2012).

^{75.} Press Release, The White House Office of the Press Sec'y, Fact Sheet: White House Task Force on High-Tech Patent Issues (June 4, 2013), http://www.whitehouse.gov/the-press-office/2013/06/04/fact-sheet-white-house-task-force-high-tech-patent-issues.

^{76.} *Id*.

^{77.} *Id.* Notably, the White House called upon the legislature to require patentees and applicants who "[send] demand letters, fil[e] an infringement suit[,] or seek[] PTO review of a patent" to file similar information. *Id.*

"NPRM," respectively). Although the PTO decided not to finalize a rule, the Proposed Rule's strengths and weaknesses provide a valuable starting point for future reform discussion.

A. STATED GOALS AND RULEMAKING AUTHORITY

In the NPRM, the PTO cited several internal and external goals justifying the Proposed Rule. In particular, the PTO identified the following objectives:

Internal Goals:

- (1) Ensure current power-of-attorney in each application or proceeding;
- (2) Avoid potential conflicts of interest for USPTO personnel;
- (3) Determine scope of prior art under common ownership exception and identify instances of double patenting;
- (4) Verify that those making post-issuance proceeding requests are proper parties for those proceedings;
- (5) Ensure that the information the USPTO provides concerning published applications and issued patents is accurate and not misleading.

External Goals:

- (1) Enhance competition and increase incentives to innovate by providing information to help innovators better understand the competitive environment;
- (2) Enhance technology transfer and reduce transaction costs for patent rights;
- (3) Reduce risk of abusive patent litigation; and
- (4) Level the playing field for innovators.⁸⁰

In crafting a rule to achieve these goals, the PTO relied on its authority under 35 U.S.C. § 2(b)(2), which "authorizes the [PTO] to

^{78.} Changes to Require Identification of Attributable Owner, 79 Fed. Reg. 4105 (Jan. 24, 2014) (considered for codification at 37 C.F.R. pt. 1; currently abandoned).

^{79.} See Davis, supra note 8.

^{80.} Changes to Require Identification of Attributable Owner, 79 Fed. Reg. at 4106.

establish regulations, not inconsistent with the law, which 'govern the conduct of proceedings in the [PTO]."⁸¹ The PTO further cited its duty to disseminate information regarding patents.⁸² This obligation, the PTO noted, includes the requirement that information it has disclosed not be misleading.⁸³ The PTO relied on this authority to require patent owners to update information even after patent prosecution, including at times when a patent is not explicitly under review (e.g., at the time of payment of maintenance fees).⁸⁴

Although commendable,⁸⁵ the PTO's attempt to address both internal and external goals in a single rulemaking made the success of the Proposed Rule unlikely. While the Proposed Rule's breadth indicated that remedying external problems was its primary purpose,⁸⁶ the PTO's cited

^{81.} Changes to Require Identification of Attributable Owner, 79 Fed. Reg. 4105, 4107 (Jan. 24, 2014) (considered for codification at 37 C.F.R. pt.1; currently abandoned) (citing Star Fruits S.N.C. v. United States, 393 F.3d 1277, 1282 (Fed. Cir. 2005) and 35 U.S.C. § 2(b)(2)); 35 U.S.C. § 2(b)(2)(A) (2012).

The PTO does not have unlimited authority to promulgate new rules; instead, it may only promulgate rules with the force of law when acting "reasonably within" a congressional grant of authority. Letter from Arti K. Rai, Professor of Law, Duke Law School, to U.S. Patent & Trademark Office 1 (Jan. 30, 2012), available at http://www.uspto.gov/patents/law/comments/f_rai_120130.pdf (citing Chrysler v. Brown, 441 U.S. 281, 305–06 (1979)) [hereinafter Rai Assignment Comments].

^{82.} Changes to Require Identification of Attributable Owner, 79 Fed. Reg. at 4107 (citing 35 U.S.C. § 2(a)(2)).

^{83.} Changes to Require Identification of Attributable Owner, 79 Fed. Reg. at 4108 (referring to 35 U.S.C. § 122).

^{84.} See id. at 4108-09.

^{85.} See, e.g., Letter from Corey Salsberg, Senior Legal Counsel, Novartis Int'l AG, to James Engel, Senior Legal Advisor, Office of Patent Legal Admin., USPTO 1-2 (Apr. 15, 2014), available at http://www.uspto.gov/patents/law/comments/ao-e_novartis-20140415.pdf [hereinafter Novartis Comments] (supporting "many of the objectives" of the Proposed Rule and "appreciat[ing] the efforts of the [PTO's] latest efforts to improve transparency of patent ownership"); Letter from Matthew Tanielian, Coal. for Patent Fairness, and William G. Jenks, Jenks IP Law PLLC, to U.S. Patent & Trademark Office 2 (Apr. 24, 2014), available at http://www.uspto.gov/patents/law/comments/ao-a_coalition_20140424.pdf [hereinafter Coalition for Patent Fairness Comments]; Letter from Matthew Sarboraria, Assoc. Gen. Counsel, Oracle Corp., to James Engel, Senior Legal Advisor, Office of Patent Legal Admin. 1 (Apr. 24, 2014), available at http://www.uspto.gov/patents/law/comments/ao-e_oracle_20140424.pdf [hereinafter Oracle Comments].

^{86.} See Changes to Require Identification of Attributable Owner, 79 Fed. Reg. at 4107; see also Press Release, The White House Office of the Press Sec'y, Fact Sheet: White House Task Force on High-Tech Patent Issues (June 4, 2013), http://www.whitehouse.gov/the-press-office/2013/06/04/fact-sheet-white-house-task-force-high-tech-patent-issues; Novartis Comments, supra note 85, at 4–5 (arguing that the real purpose of the Proposed Rule was to deal with litigation abuse); AIPLA Comments, supra note 7, at 3–4.

rulemaking authority revolved primarily around setting procedural rules for internal proceedings.⁸⁷ The following discussion will focus on the Proposed Rule's potential efficacy regarding the PTO's cited external goals, with consideration of the internal goals only as needed.⁸⁸

B. THE PROPOSED RULE: "CHANGES TO REQUIRE DISCLOSURE OF ATTRIBUTABLE OWNER"

The PTO's decision to abandon the Proposed Rule came after significant opposition from a wide range of industry players during the most recent comment period. These comments built upon concerns voiced at various roundtables and in public responses to the PTO's solicitations for comments before the publication of the Proposed Rule. The Critics generally fell into two categories: those who argued that the Proposed Rule failed to require enough disclosure to meaningfully improve the transparency of the system, and those who argued that the Proposed Rule required excessively burdensome disclosures given its theoretical benefits. Notably, divisions in the assessment of the Proposed

^{87.} Changes to Require Identification of Attributable Owner, 79 Fed. Reg. at 4107. As discussed in Section II.C.1, *infra*, the PTO may have determined that its limited authority required the Proposed Rule to have internal procedural justifications, even though the actual purpose was to remedy external issues.

^{88.} The decision to frame the discussion in this manner fits with the focus of Parts III and IV, *infra*, which look to possible legislative solutions to the transparency problem and do not consider internal PTO functions.

^{89.} Comments during this period were offered in response to the Proposed Rule itself. Changes to Require Identification of Attributable Owner, 79 Fed. Reg. at 4105.

^{90.} See Roundtable on Real Party-in-Interest Information: Hearing before the U.S. Patent & Trademark Office (Jan. 11, 2013), http://www.uspto.gov/ip/officechiefecon/rpi_transcript_130111.pdf; Attributable Ownership Public Hearing: Hearing before the U.S. Patent & Trademark Office (March 26, 2014), http://www.uspto.gov/patents/init_events/transcript_032614_uspto.pdf.

^{91.} See Letter from Jeffrey I.D. Lewis, President, American Intellectual Property Law Association, to Saurabh Vishnubhakat, Expert Advisor, Office of Chief Economist, U.S. Patent & Trademark Office, at 5 (Jan. 25, 2013), available at http://www.uspto.gov/patents/law/comments/rpii-a_aipla_130125.pdf; AIPLA Comments, supra note 7, at 2–4.

^{92.} See, e.g., Coalition for Patent Fairness Comments, supra note 85, at 4 (noting that the proposed definition of attributable owner would not capture many parties that drive abusive litigation).

^{93.} See, e.g., AIPLA Comments, supra note 7, at 2–4 (noting that the rules try to address a legitimate concern, but do so through "overly harsh consequences" and "potentially high burdens on all users of the patent system"); Letter from Heath Hoglund, President, S.F. Intellectual Property Lawyers Assoc., to Michelle Lee, Deputy Dir., U.S. Patent & Trademark Office 2 (Apr. 24, 2014), http://www.uspto.gov/patents/law/comments/ao-a_sfipla_20140424.pdf [hereinafter SFIPLA Comments].

Rule broke along relatively distinct lines: large technology companies supported the goals of the Proposed Rule and fell into the former category. Universities, attorneys, large life science firms, and some venture capitalists fell in the latter category. Parties representing small businesses generally favored additional ownership transparency, but expressed concerns more in line with the latter category.

The Proposed Rule failed in three key respects. First, it required disclosure that was too broad and too costly, while still failing to force the parties most responsible for litigation abuse to fully disclose their patent interests. Second, the timing of the required disclosures was unlikely to provide information to parties when they most needed it. Third, the penalties cited by the PTO in the Proposed Rule were either too severe or too indeterminate to have deterred abuses and incentivized disclosure of ownership information.

1. Attributable Owners

To achieve greater transparency, the Proposed Rule required patent applicants and owners to disclose the "attributable owner" of a patent at various times during the life of the patent.⁹⁷ The term "attributable owner", which the PTO selected in order to avoid confusion with the

^{94.} See Oracle Comments, supra note 85, at 1; HP Comments, supra note 30, at 3, 5 (proposing modifications to expand, rather than limit, the scope of the Proposed Rule).

^{95.} See Association of Universities Comments, supra note 7, at 1; Letter from J. Michael Strickland, Assistant Gen. Counsel (Patents), GlaxoSmithKline, to James Engel, Senior Legal Advisor, U.S. Patent & Trademark Office (Apr. 24, 2014), available at http://www.uspto.gov/patents/law/comments/ao-e_glaxo_20140424.pdf [hereinafter GSK Comments]; Letter from Bobby Franklin, President & CEO, Nat'l Venture Capital Assoc., to Michelle K. Lee, Deputy Dir., U.S. Patent & Trademark Office 1–2 (Mar. 24, 2014), available at http://www.uspto.gov/patents/law/comments/ao-a_nvca_03252014.pdf [hereinafter NVCA Comments]; Attributable Ownership Public Hearing: Hearing before the U.S. Patent & Trademark Office 4-7 (Mar. 26, 2014) (statement of R. Reams Goodloe, solo practitioner), http://www.uspto.gov/patents/init_events/transcript_032614_uspto.pdf. [hereinafter Goodloe Statement].

^{96.} See, e.g., Attributable Ownership Public Hearing: Hearing before the U.S. Patent & Trademark Office 65 (Mar. 26, 2014) (statement of Mark Blafkin, Assoc. for Competitive Tech.), http://www.uspto.gov/patents/init_events/transcript_032614_uspto.pdf (expressing concern that broad attributable ownership rules might make it more difficult for start-ups to receive funding); Attributable Ownership Public Hearing: Hearing before the U.S. Patent & Trademark Office 22-27 (Mar. 26, 2014) (statement Brian Schar, attorney), http://www.uspto.gov/patents/init_events/transcript_032614_uspto.pdf (expressing concern that the Proposed Rule effectively "discriminate against small companies, especially small venture-funded startups").

^{97.} Changes to Require Identification of Attributable Owner, 79 Fed. Reg. 4105, 4106, 4109 (Jan. 24, 2014) (considered for codification at 37 C.F.R. pt. 1; currently abandoned)

definition of "real party-in-interest," would have included all (1) "titleholders," (2) "enforcement entities," (3) "ultimate parent entities," and (4) "hidden beneficial owners."

The PTO intended the definition of "Attributable Owners" to be broad, covering both parties immediately connected to ownership of the patent and those with substantial downstream connections. 99 The first category, "titleholders," was relatively narrow and included entities that have "been assigned title to the patent or application" and may have included exclusive licensees in cases where a grant of rights was broad enough to essentially constitute an assignment. The second category, "enforcement entities," was broader and captured entities who are not titleholders, but "who are necessary to be joined in a lawsuit in order to have standing to enforce the patent or any patent resulting from the application."101 The third category, "ultimate parent entities," was broader still, and included entities that control those in the first two categories and that are "not controlled by any other entity" as described in 16 C.F.R. § 801.1(a)(3).102 The definition of "ultimate parent entities" included people and companies that "(i) hold[] fifty percent or more of the outstanding voting securities of an issuer, or (ii) . . . hav[e] the right to fifty percent or more of the profits of the entity, or . . . the right in the event of dissolution to fifty percent or more of the assets of the entity."103 It also included parties who have contractual power to designate more than fifty percent of the directors of a company.¹⁰⁴ The fourth category, "hidden beneficial owners," was a catch-all category that included parties who had "temporarily divest[ed] themselves of ownership rights through contractual or other arrangements" to keep their identities hidden. 105 Importantly, this provision would have included parties who have taken

^{98.} *Id.* at 4106, 4110. While determining which parties are "real parties-in-interest" is a highly fact-dependent inquiry, *see supra* note 59, the Proposed Rule sought to identify not only those who might be expected to be "real parties-in-interest," but also the entities that ultimately controlled those parties. *See* Changes to Require Identification of Attributable Owner, 79 Fed. Reg. at 4107.

^{99.} See Changes to Require Identification of Attributable Owner, 79 Fed. Reg. at 4109–10.

^{100.} Id. at 4110.

^{101.} *Id*.

^{102.} *Id.* 16 C.F.R. § 801.1 provides definitions that pertain to pre-merger notification requirements in the antitrust context. *See* 15 U.S.C. §18(a) (2012); 16 C.F.R. §801.1 (2011).

^{103.} Changes to Require Identification of Attributable Owner, 79 Fed. Reg. at 4111.

^{104.} Id.

^{105.} Id. at 4110.

actions with either the "purpose or effect" of avoiding the definitions above. 106

Although the breadth of the attributable owner definition received some praise, 107 some parties complained that the definition was unclear or "irreducibly vague." In particular, various commenters raised the concern that determining who qualifies as an attributable owner for compliance purposes requires answering a host of complex business and legal questions. This arguably increases costs beyond those officially acknowledged by the PTO and places a heavy burden on small businesses in particular. 110

While requiring disclosure of titleholders was largely uncontroversial, some parties nevertheless objected to the possibility that Proposed Rule would require disclosure of some exclusive licensees. This concern was critical to universities, who feared being drawn into breach-of-contract disputes for disclosing licensees and that the value of their patents would be substantially diminished if parties were unable to acquire them under confidentiality obligations. 112

^{106.} Id. at 4111.

^{107.} See, e.g., Feldman, supra note 13, at 48–49 (noting that, while flawed, the Proposed Rule represented a "much bolder effort to strike at the heart of patent transparency problems").

^{108.} E.g., AIPLA Comments, supra note 7, at 3, 5.

^{109.} E.g., id.; Letter from Steven W. Lundberg, Managing Shareholder, Schwegman Lundberg & Woessner, P.A., to James Engel, Senior Legal Advisor, OPLA 1–3 (Apr. 24, 2014), available at http://www.uspto.gov/patents/law/comments/ao-d_slw_20140424.pdf [hereinafter Schwegman Comments].

^{110.} Letter from Phyllis T. Turner-Brim, Vice President, Chief IP Counsel & Russ Merbeth, Chief Pol'y Counsel, Intellectual Ventures, to James Engel, Senior Legal Advisor, Office of Patent Legal Admin.23–24 (Apr. 24, 2014), available at http://www.uspto.gov/patents/law/comments/ao-e_intellectualventures_20140424.pdf [hereinafter IV Comments]. Schwegman Comments, supra note 109, at 2. While larger companies may tend to have more complex ownership structures, smaller companies may be less able to pay to have attorneys and business experts sort through the requirements. See id

^{111.} Association of Universities Comments, *supra* note 7, at 1–2; Letter from William T. Tucker, Exec. Dir., Innovation Alliances & Servs., Univ. of Cal., Office of the President, to James Engel, Senior Legal Advisor, Office of Patent Legal Admin. 1–2 (Apr. 24, 2014), *available at* http://www.uspto.gov/patents/law/comments/ao-c_uofca_20140424.pdf [hereinafter UC Comments] (supporting the positions offered in the Association of Universities Comments). Universities also raised these concerns with regard to the second category of attributable owners. Association of Universities Comments, *supra* note 7, at 2.

^{112.} UC Comments, *supra* note 111, at 2. Life science companies including Novartis expressed similar concerns regarding the confidentiality provisions in their licensing agreements. *See* Novartis Comments, *supra* note 85, at 11–13.

The second category, "enforcement entities," was more controversial. First, it is often difficult to identify entities that "must be joined in order to have standing to enforce the patent or any patent resulting from the application." While including these parties in the second category might be necessary to prevent patent assertion entities from transferring ownership solely to gain the upper-hand in litigation and settlement, 114 the highly fact-dependent and complex nature of that determination would have imposed substantial burdens on all patent owners and applicants, including those who had not deliberately engaged in such opportunistic practices. Some parties also objected strongly to the notion that it would be easy to assess when the scope of rights given to licensees was substantial enough to require their joinder to perfect standing. 116

The third category, "ultimate parent entities," also encountered substantial opposition. In general, commenters argued that the incorporated C.F.R. provision is too broad to apply in all instances in the patent context. They thus concluded that the PTO erred in its decision to incorporate a definition divorced from its purpose, namely preventing mergers that raise antitrust concerns. In addition, there are often legitimate business reasons for seeking confidentiality related to ownership information (e.g., protecting business strategy and trade secrets), but the

^{113.} See Association of Universities Comments, supra note 7, at 2 (noting that the determination of necessary parties is often not obvious and that the PTO might lack the "authority or capability" necessary to make such a determination); HP Comments, supra note 30, at 3 (supporting the inclusion of a provision that reaches enforcement entities, but noting that identifying those entities will likely rely on a complex analysis of what patent rights have been transferred in a given agreement).

^{114.} See HP Comments, supra note 30, at 2–3 (noting that without a provision that reaches enforcement entities, parties could continue to use contractual arrangements to obscure ownership, and that some version of this provision is necessary to capture the benefits of the Proposed Rule).

^{115.} See GSK Comments, supra note 95, at 8–9 (noting that the burdens of parsing contract terms to identify enforcement entities would apply even if the patent application never matures into a patent and even if the patent is never enforced).

^{116.} See Novartis Comments, supra note 85, at 11–12 n.8 (noting that standing requirements, e.g., whether or not an exclusive licensee qualifies as an "assignee" for the purposes of enforcement, vary by jurisdiction because of the interaction between state contract law and federal patent law); Attributable Ownership Public Hearing: Hearing before the U.S. Patent & Trademark Office 80–81 (Mar. 26, 2014) (statement of Marcia Chang, Hewlett-Packard Co.), http://www.uspto.gov/patents/init_events/transcript_032614 _uspto.pdf.

^{117.} E.g., Goodloe Statement, *supra* note 95, at 11 ("The incorporation by reference should be totally rejected by the director of the Federal Register. They have rules to not allow incorporation by reference in the Federal Register").

manner in which the Proposed Rule incorporated the C.F.R. provision failed to account for this reality. 119 Moreover, the required disclosure of proprietary information may have constituted a regulatory taking. 120 And such disclosures would depart substantially from accepted international patent practices, directly in opposition to the PTO's stated goal of increasing harmony in that field.¹²¹ Moreover, there was some concern that investors would withdraw funding when faced with disclosure requirements that may reach equity investors who own less than a majority share in a company. 122 Parties representing small businesses, who often use still-pending patent applications as collateral to secure loans, voiced concern that they would have had to update ownership information to disclose the interest of their creditors or risk abandonment of pending applications. 123 Last, some argued that the required disclosure of ultimate parent entities, to the extent that it would require disclosure of ownership information that is unavailable to the title owner of the patent, may create conflict between licensor-owners and licensees. 124 In theory, the former group would need the ownership information to maintain the patent, while the latter group may be reluctant to disclose ownership information for legitimate business reasons, and, in rare cases, might actually benefit from invalidation of the patent. 125

While some viewed the proposed rule as overinclusive, many commenters felt it was underinclusive because it failed to reach all parties that stand to benefit from the patent (either through assertion, royalties,

^{119.} IV Comments, *supra* note 110, at 16 (noting that, in contrast to the required disclosure of ownership information in the antitrust context, the Proposed Rule would not have permitted parties to seek to have the required disclosures held in confidence); *Attributable Ownership Public Hearing: Hearing before the U.S. Patent & Trademark Office* 65–66 (Mar. 26, 2014) (statement of Mark Blafkin, Assoc. for Competitive Tech.), http://www.uspto.gov/patents/init_events/transcript_032614_uspto.pdf (citing Apple's confidential acquisition of companies and technologies before the release of the first iPod as an example of a pro-competitive use of confidentiality).

^{120.} Simon J. Elliott, *The Complexities of the USPTO Proposed Attributable Ownership Rules*, PHARMAPATENTS (Apr. 11, 2014), http://www.pharmapatentsblog.com/2014/04/11/the-complexities-of-the-uspto-proposed-attributable-ownership-rules.

^{121.} E.g., IV Comments, supra note 110, at 19.

^{122.} NVCA Comments, supra note 95, at 1-2.

^{123.} Attributable Ownership Public Hearing: Hearing before the U.S. Patent & Trademark Office 29–34 (Mar. 26, 2014) (statement of Brian Schar, attorney), http://www.uspto.gov/patents/init_events/transcript_032614_uspto.pdf.

^{124.} *Id*.

^{125.} Id.

etc.). 126 By focusing exclusively on those who own a majority stake in the patent or who are entitled to receive a majority of the licensing royalties, the Proposed Rule risked missing owners who share ownership among three or more parties even if those parties could effectively exercise control over the patent together.127

The final category of "hidden beneficial owners" also faced opposition. While it took aim at companies that use complicated corporate structures to hide their true identities from the public (as many patent assertion entities have done), its vague definition risked reaching all manners of other parties. 128 Notably, the Proposed Rule did not clarify what constitutes a "temporary" divestment of ownership. 129 Defining "temporary" is essential given that this category included only parties who would avoid disclosure obligations through actions undertaken with "the purpose or effect of temporarily divesting such an entity of attributable ownership."130 While limiting required disclosures only to "temporary" divestments might narrow the scope of this category, the use of "purpose

^{126.} E.g., Coalition for Patent Fairness Comments, supra note 85, at 3-4. These positions are not necessarily mutually exclusive. The Proposed Rule was inefficient in that it imposed heavy burdens on patent owners without requiring disclosure all of the relevant parties.

^{127.} Id. In theory, in such a scheme, all or some of the co-owning parties could avoid reaching the majority ownership stake required for disclosure. Id. C.F.R. § 801.1(a)(3) might cover such schemes as "joint ventures," but it is unclear whether that provision would have effectively resolved this problem. Compare NVCA Comments, supra note 95, at 2 (observing that the joint venture rules are very broad, implying that the provisions would capture such arrangements) with Coalition for Patent Fairness Comments, supra note 85, at 3-4 (arguing that using such an arrangement could allow an entity to avoid disclosure obligations).

^{128.} SFIPLA Comments, supra note 93, at 3-4 ("This sweepingly broad definition would capture perfectly legitimate licensing arrangements, including, for example, an option for an exclusive license that is triggered by a licensee meeting certain commercial or financial targets."). But see Dell and Cisco Comments, supra note 32, at 4-6 (arguing that the provision should be clarified but broadened); HP Comments, *supra* note 30, at 4.

^{129.} See Changes to Require Identification of Attributable Owner, 79 Fed. Reg. at 4119 (providing no definition for "temporarily divesting" in any of the proposed CFR provisions).

^{130.} See id. (drafting 37 CFR § 1.271); Dell and Cisco Comments, supra note 32, at 6 (arguing that "temporary" will be a source of dispute and that an interest that is hidden for any amount of time should be disclosed). Presumably, an owner that permanently divests itself of ownership would no longer qualify as an attributable owner, yet parties may be able to create long-term ownership arrangements in order to avoid disclosure obligations. Cf. id. (arguing essentially that the key issue is whether the ownership is purposefully hidden, not whether it is "temporarily" hidden). The Proposed Rule was unclear regarding when parties using such long-term strategies would be subject to disclosure requirements. See Changes to Require Identification of Attributable Owner, 79 Fed. Reg. at 4119 (drafting 37 CFR § 1.271).

or effect" is problematic given that even non-abusive, normal transactions may have the "effect" of changing patent ownership status. ¹³¹ It would be unnecessary and unduly burdensome to require disclosure of parties attempting to engage in legitimate transactions that merely have the incidental "effect" of avoiding disclosure obligations. ¹³²

Patent practitioners harshly critiqued the rule, arguing that the rule's complexities would burden the individuals who have to interpret and apply business and patent law concepts, even though few (if any) have the expertise and access to ownership information necessary to resolve these issues. This, they argued, would increase the costs associated with patent maintenance far beyond the estimated \$100/patent cost cited by the PTO. The Furthermore, the PTO did little to convince critics that its definition of "attributable owner" would improve internal PTO functions. Notably, the AIA's new common ownership exceptions for prior art place the burden on the patentee to demonstrate that they apply, so requiring additional ownership disclosure would be premature and unnecessary. Commenters similarly questioned the need for extensive

^{131.} Novartis Comments, *supra* note 85, at 15 (noting, for example, that a manufacturer who obtains an exclusive option to license or purchase a patent at some future date may appear to have done so to avoid disclosure obligations, even if the manufacturer has a more innocent objective, e.g., limiting risk while searching for funding partners).

^{132.} See id. at 15-16.

^{133.} See Goodloe Statement, supra note 95, at 11–12. A related complaint might not be that the burden on individual attorneys or practitioners is too great, but rather that resolving these issues will require the expertise of additional attorneys and/or business experts. This solution would lead to increased costs associated with patent applications and patent maintenance.

^{134.} Changes to Require Identification of Attributable Owner, 79 Fed. Reg. 4105, 4116 (Jan. 24, 2014) (considered for codification at 37 C.F.R. pt. 1; currently abandoned); Schwegman Comments, *supra* note 109, at 1–2; *see also* Novartis Comments, *supra* note 85, at 16–19.

^{135.} See Schwegman Comments, supra note 109, at 2.

^{136.} See Letter from Courtenay C. Brinckerhoff, Chair, IP Law & Practice, Foley & Lardner LLP, to James Engel, Senior Legal Advisor, Office of Patent Legal Admin. 1–3 (Apr. 24, 2014), available at http://www.uspto.gov/patents/law/comments/aof_brinckerhoff_20140424.pdf [hereinafter Brinckerhoff Comments] (noting, for example, that the patent applicant must show that the common ownership exception in 35 U.S.C. §102(b)(2)(C) applies). Where a patent applicant fails to disclose sufficient ownership information to access the common ownership exception, that failure presumably harms only the applicant. See id. And where ownership issues are relevant to patentability, existing requirements already require the applicant to disclose the relevant information. Id.

disclosures in order to identify conflicts of interest and verify power of attorney.¹³⁷

2. Timing

The Proposed Rule required the Attributable Owner information to be provided when:

An application is filed (or shortly thereafter);

An attributable owner changes during the pendency of an application (within three months of such change);

The issue fee is due for an application that has been allowed;

A maintenance fee is due; and

A patent becomes involved in certain post-issuance proceedings at the Office, including in supplemental examination, *ex parte* reexamination, or a trial proceeding before the PTAB. ¹³⁸

Following the White House's direction, these requirements required disclosure only when a patent is already before the PTO.¹³⁹ The Proposed Rule created no additional patent maintenance structures or opportunities for patents to come before the PTO after prosecution.¹⁴⁰ In so doing, the PTO apparently hoped to keep down the costs of maintaining ownership information.¹⁴¹

By requiring disclosure only at certain checkpoints when a patent is already scheduled to "touch" the PTO, the PTO sought to remain within its rulemaking prerogatives. However, commenters noted that the PTO may thereby have inadvertently created 1) substantial disclosure loopholes

^{137.} See id.; SFIPLA Comments, supra note 93, at 5.

^{138.} Changes to Require Identification of Attributable Owner, 79 Fed. Reg. at 4106.

^{139.} See Changes to Require Identification of Attributable Owner, 79 Fed. Reg. at 4106; Press Release, The White House Office of the Press Secretary, Fact Sheet: White House Task Force on High-Tech Patent Issues (June 4, 2013), available at http://www.whitehouse.gov/the-press-office/2013/06/04/fact-sheet-white-house-task-force-high-tech-patent-issues.

^{140.} See Changes to Require Identification of Attributable Owner, 79 Fed. Reg. at 4110-11.

^{141.} When asserting that the costs of compliance would not be substantial, the PTO noted that applicants and patentees would be reporting information "at a time they are otherwise interacting with the Office." *Id.* at 4117.

^{142.} For an extended discussion, see Section C.1, infra.

that parties could exploit, ¹⁴³ and 2) unjustifiable burdens on patent owners who must report information even when it has not changed. ¹⁴⁴

First, commenters expressed dismay with the latency period between required ownership updates. The PTO's failure to tie disclosure requirements to enforcement would have enabled parties to update information only to change it immediately prior to sending a demand letter or filing a lawsuit. Thus, the new, undisclosed information could have remained hidden for several years before the next required update. Furthermore, many NPEs litigate patents for which all maintenance payments have been made; this practice might have allowed these parties to avoid disclosure obligations altogether.

Commenters also argued that tying disclosure requirements to particular checkpoints, rather than simply requiring disclosure when ownership information changes, would have unnecessarily burdened patent holders, particularly small companies, by requiring updated attributable ownership information even when nothing has changed. As noted before, the parties updating this information (including lawyers and companies charged with paying maintenance fees) may not be well-positioned to identify all attributable owners, and may find themselves forced to choose between incurring greater costs to verify the accuracy of information and risking severe penalties for non-compliance. 150

^{143.} See, e.g., Coalition for Patent Fairness Comments, supra note 85, at 4-5.

^{144.} See, e.g., Novartis Comments, supra note 85, at 16–17 (challenging the merits of requiring additional disclosures when ownership has not changed).

^{145.} See Coalition for Patent Fairness Comments, supra note 85, at 4–5.

¹⁴⁶ See id

^{147.} See id. (noting that in general, maintenance fees are paid only three times, with four-year intervals between payments).

^{148.} Attributable Ownership Public Hearing: Hearing before the U.S. Patent & Trademark Office 52–53 (Mar. 26, 2014) (statement of Julie Samuels, Executive Director, Engine Advocacy), available at http://www.uspto.gov/patents/init_events/transcript_032614_uspto.pdf (noting that "[t]he research shows that a lot of patents are [sic] that are asserted by non-practicing entities are asserted at the end of their life" and concluding that more needs to be done regarding disclosure after payment of the final maintenance fee).

^{149.} See Novartis Comments, supra note 85, at 16–17; see also Schwegman Comments, supra note 109, at 2–3 (noting that disclosure obligations may be complicated for small companies who are "constantly taking investments" and who might thus be obligated to update filings or risk having pending applications abandoned); see also Letter from James A. Oliff, Oliff, PLC to James Engel 3 (Apr. 24, 2014), available at http://www.uspto.gov/patents/law/comments/ao-d_oliff_20140424.pdf [hereinafter Oliff Comments].

^{150.} Goodloe Statement, supra note 95, at 6-8.

3. Penalties

The Proposed Rule also created substantial ambiguity pertaining to the penalties for non-compliance. Non-compliance with the Proposed Rule during the pendency of a patent application would have led to the possible abandonment of the application.¹⁵¹ And revival would only have been possible if the applicant showed that the failure to comply occurred in good faith.¹⁵² Meanwhile, for non-compliant updating in post-grant procedures, the Proposed Rule mandated no particular penalty. ¹⁵³

Many argued that the pre-grant penalty was too harsh. Although the Proposed Rule allowed revival of abandoned patent applications in the case of good faith mistakes, the Proposed Rule threatened to penalize both honest mistakes and purposeful actions.¹⁵⁴ Some practitioners have argued that demonstrating "good faith" errors is virtually impossible, meaning that the revival provision would rarely apply.¹⁵⁵ In addition, while the worst litigation abuses take place at the end of patent life cycles, the harshest penalty, abandonment of pending applications, would have been imposed at the start of the patent life cycle and disproportionately harmed small, potentially less sophisticated, patent owners.¹⁵⁶

^{151.} Changes to Require Identification of Attributable Owner, 79 Fed. Reg. 4105, 4112–13, 4120 (Jan. 24, 2014) (considered for codification at 37 C.F.R. pt.1; currently abandoned). In order to avoid abandonment, the patent owner would need to provide attributable ownership information within the notice period. *Id.* at 4112. Abandonment would be automatic, but a party who failed to comply with the provisions would be able to revive its application if it demonstrated that noncompliance was unintentional. *See id.* at 4112–13.

^{152.} Changes to Require Identification of Attributable Owner, 79 Fed. Reg. 4105, 4112–13, 4120.

^{153.} See id.; see also Letter from Herbert C. Wamsley, Exec. Dir., Intellectual Prop. Owners Assoc. to Michelle K. Lee, Deputy Dir., U.S. Patent & Trademark Office 6 (Apr. 24, 2014), available at http://www.uspto.gov/patents/law/comments/ao-a_ipo_20140424.pdf [hereinafter IP Owners Assoc. Comments] (asking for clarification regarding the penalty for non-compliance after issuance of the patent); AIPLA Comments, supra note 7, at 3–4.

^{154.} See Oliff Comments, supra note 149, at 4; Goodloe Statement, supra note 95, at 16–18 (noting that petitions to revive patents after unintentional or unavoidable errors are rarely successful and may create problems for practitioners).

^{155.} Goodloe Statement, *supra* note 95, at 16–18.

^{156.} Since changes in attributable ownership during the pendency of an application must be reported promptly, the burden of disclosure would have been highest at this point. See AIPLA Comments, supra note 7, at 6. Small companies that receive new investments may have been required to disclose the identities of those investors. Id. This may have proved difficult for small companies unable to expend extra funds sorting out legal obligations. Id.

Commenters also derided the lack of clarity regarding post-grant penalties. In particular, some worried that courts could interpret non-compliance with the Proposed Rule as an instance of inequitable conduct, rendering the patent unenforceable.¹⁵⁷ Relatedly, such substantial penalties may merely shift the focus of litigation to proving intentional non-compliance and actually increase litigation.¹⁵⁸ Such an increase could arise in several ways. First, because failure to provide adequate attributable owner information could lead to abandonment or unenforceability, significant effort could be spent proving that a party failed to properly disclose information.¹⁵⁹ Second, demonstrating a good faith effort to disclose the appropriate information may necessitate introducing various financial records that are generally confidential, at least for private companies (e.g., partnership agreements and accounting information), which would only increase the scope of litigation by creating a new class of documents that would be relevant to the litigation.¹⁶⁰

C. THE DEMISE OF THE RULE

While there is substantial support for increased transparency in ownership, there was also concern that the Proposed Rule was poorly tailored to the ends it sought to achieve. While the rule aimed to improve PTO functions, it also sought to curb litigation abuse. By attempting to solve two problems simultaneously, the Proposed Rule solved neither. Limitations on the PTO's rulemaking authority, inappropriate definitions of ownership, mistimed obligations, and inappropriate penalties created a proposed system that both failed to effectively reach abusive litigation tactics while imposing substantial burdens on all patent owners.

1. Rulemaking Authority

The PTO's limited rulemaking authority may have produced some of the inadequacies that doomed the Proposed Rule. While the Proposed Rule was likely within the PTO's rulemaking authority, alternative, perhaps superior, proposals likely were not.¹⁶¹

^{157.} See Novartis Comments, supra note 85, at 19–20.

^{158.} See id.; Goodloe Statement, supra note 95, at 14–15 (noting that the Proposed Rule's disclosure requirements would essentially create an entirely new category of litigation and make most financial documents subject to discovery requests).

^{159.} See Novartis Comments, supra note 85, at 19–20; see also Oliff Comments, supra note 149, at 3.

^{160.} See Oliff Comments, supra note 149, at 3.

^{161.} For the statutory basis for the PTO's rulemaking authority, see Section II.A, supra.

Critics of the Proposed Rule were skeptical of the PTO's authority to draft extensive disclosure requirements. For example, some questioned whether the rule is procedural as the PTO's rulemaking authority required, given the penalties for non-compliance. 162 Others posited that a rule that adds requirements not present in any statute and that punishes non-compliance with patent abandonment cannot be procedural. 163 Meanwhile, others argued that some aspects of the patent code (e.g., those that make assignment disclosure optional) are inconsistent with the Proposed Rule and thus prevent the PTO from requiring the disclosure of ownership information and punishing non-compliance. 164 These complaints may or may not be correct, but they nevertheless point to limitations on the PTO's authority. In practice, the PTO itself acknowledged the limitations on its authority, 165 and the White House encouraged the PTO to adopt rules that affect patents only when their owners interact with the PTO.¹⁶⁶

Even assuming that the Proposed Rule did not exceed PTO rulemaking authority, it seems that the PTO's limited authority shaped key aspects of the Proposed Rule. First, while the Proposed Rule might have been more effective if it had imposed disclosure requirements beyond the PTO, the Proposed Rule's requirements arose only when a patent touched the PTO, when the PTO's rulemaking authority was greatest. Second, the penalties for noncompliance were harshest at the beginning of the patent's life cycle when, as noted before, the patent would have been

^{162.} Simon J. Elliott, The Complexities of the USPTO Proposed Attributable Ownership Rules, PHARMAPATENTS (Apr. 11, 2014), http://www.pharmapatentsblog.com/2014 /04/11/the-complexities-of-the-uspto-proposed-attributable-ownership-rules.

^{164.} IV Comments, supra note 110, at 17-18; see also Simon J. Elliott, The Complexities of the USPTO Proposed Attributable Ownership Rules, PHARMAPATENTS (Apr. 11, 2014), http://www.pharmapatentsblog.com/2014/04/11/the-complexities-ofthe-uspto-proposed-attributable-ownership-rules.

^{165.} Cf. Changes to Require Identification of Attributable Owner, 79 Fed. Reg. at 4107-08 (offering justifications for its authority, but relying on rules that allowed the PTO to govern its own conduct, e.g. by ensuring it did not disseminate misleading information, and the conduct of others only to the extent that disclosures were necessary to improve PTO procedures). And, perhaps chastened by the Office's experience in Tafas v. Dudas, 541 F. Supp. 2d 805 (E.D. Va. 2008), in which a district court struck down the PTO's proposed limitations on continuances and claims on the basis that held that any rule that affects "individual rights and obligations" is substantive, the PTO was likely to have taken such limitations seriously.

^{166.} Press Release, The White House Office of the Press Secretary, Fact Sheet: White House Task Force on High-Tech Patent Issues (June 4, 2013), available at http://www.whitehouse.gov/the-press-office/2013/06/04/fact-sheet-white-house-taskforce-high-tech-patent-issues.

before the PTO and the need to clarify procedural aspects of prosecution (e.g., identifying conflicts of interest) would have been at its peak. Third, and in contrast to the previous point, the Proposed Rule identified no particular penalty for failure to comply after issuance, when the internal procedural benefits justifying the Proposed Rule would have been minimal and when the PTO's authority would therefore have been most questionable. The impact of these issues is discussed in Sections II.C.2–II.C.4, *infra*.

2. Choosing the Wrong Standard: Underinclusion and Overinclusion of "Owners"

The definition of attributable ownership under the Proposed Rule was inappropriate because it was simultaneously underinclusive and overinclusive. The definition reached entities that need not be disclosed to achieve the goals of transparent ownership, while failing to reach the parties who may have been behind the most problematic behavior. As a result, compliance would have been costly, yet the information provided would have been of only moderate use to market participants.

Some of these issues can be traced to the requirement to disclose "ultimate parent entities" as defined in the C.F.R. provisions based on the Hart-Scott-Rodino Antitrust Improvements Act of 1976 ("HSR"). 167 Because HSR reaches through complex ownership schemes to clarify the relationships between various entities and prevent anticompetitive mergers, HSR seems attractive as a reference point for a rule seeking to provide greater patent ownership transparency. However, HSR's goals and manner of application are different than those of the Proposed Rule. For example, HSR requires disclosure of ultimate parent entities only for large mergers 168 and permits some disclosures to remain confidential. 169 HSR

^{167.} Hart-Scott-Rodino Antitrust Improvements Act of 1976, P.L. 95-435 (1976) (amending 15 U.S.C. § 18); 16 C.F.R. § 801.1 (defining "person" as it applies to HSR to include ultimate parent entities); IV Comments, *supra* note 110, at 10 (citing 78 Fed. Reg. 3814 (Jan. 23, 2014)). HSR is a piece of antitrust legislation that mandates disclosure of ownership information as part of a preclearance requirement for merger events that exceed a statutorily set value (generally in the tens of millions of dollars). JANICE E. RUBIN, CONG. RESEARCH SERV., RL31026, GENERAL OVERVIEW OF UNITED STATES ANTITRUST LAW 4 (2005). This is both a timing problem and a definitional problem. It is addressed here, with the remainder of the HSR discussion, for simplicity.

^{168.} See Feldman, supra note 13, at 47–48; IV Comments, supra note 110, at 10, 15–16.

^{169.} See IV Comments, supra note 110, at 15–16. Professor Feldman and Intellectual Ventures typically support different sides of the transparency debate; it is thus somewhat

only seeks to enable the Department of Justice and the FTC to prevent large-scale, anticompetitive mergers. 170 Given that the costs of complying with the HSR disclosure requirements are substantial—the definitions are complex, interrelated, and reach people and companies that control corporate voting or receive over fifty percent of corporate profits¹⁷¹—HSR only imposes those burdens on parties when necessary to prevent major problems.¹⁷² In contrast, the Proposed Rule would have required public disclosures at several times during the life of every patent, irrespective of whether that disclosure would have improved the patent system.¹⁷³ While the identity of ultimate parent entities might be beneficial in some instances, it is unlikely that requiring disclosing in every instance would have been justifiable. 174

In addition, it seems that most of the important disclosures required by the Proposed Rule would have come about in connection with the HSR definition; that is, the Proposed Rule relied on the HSR definition to do much of the heavy lifting of sorting through obfuscated patent ownership. While other parts of the Proposed Rule would also have required disclosure of hidden parties, the HSR disclosure requirements were the broadest and the most likely to reveal the networks of shell companies and relationships that lie at the heart of ownership obfuscation. Oddly, however, HSR's definition of "ultimate parent entity," while broad, would not have reached parties who stand to benefit from the assertion of a patent but who own less than the threshold amount necessary for disclosure.175

While the HSR provisions may provide a suboptimal definition of ownership, Professor Robin Feldman has noted that another area of business regulation, § 16 of the Securities Exchange Act of 1934, might be

noteworthy that they agree that antitrust provisions are inappropriate in the patent transparency context.

^{170.} See Rubin, supra note 167 at 4, n.7.

^{171.} See 15 U.S.C. § 18(a) (2012); see also Goodloe Statement, supra note 95, at 9-12.

^{172.} See Rubin, supra note 167, at 4.

^{173.} See Changes to Require Disclosure of Attributable Owner, 79 Fed. Reg. 4105, 4106-07 (Jan. 24, 2014) (considered for codification at 37 C.F.R. pt. 1; currently abandoned).

^{174.} See SFIPLA Comments, supra note 93, at 3.

^{175.} For example, companies that could split ownership of an assertion entity among three or more partners might avoid disclosure entirely since none would be an owner of more than fifty percent of the relevant patent assertion entity. See Coalition for Patent Fairness Comments, supra note 85, at 4; see also Feldman, supra note 13, at 48 (concluding generally that "[antitrust] thresholds are unlikely to be sensitive enough to serve as the appropriate analogy for patent transparency regulations").

more closely aligned with the needs of the patent system.¹⁷⁶ While § 16 aims to deter insider trading, its disclosure requirements also improve market transparency by requiring disclosure of those parties who stand to benefit from a given transaction.¹⁷⁷ The required disclosure of the "beneficial owner" prevents parties from using complex corporate structures to avoid disclosure obligations in the realm of insider trading;¹⁷⁸ a similar requirement could improve transparency by demonstrating which parties stand to gain financially from a patent's assertion.¹⁷⁹ Disclosure of "beneficial owners" is also broad, but such a requirement may do more to uncover the parties that benefit from litigation abuse than a straightforward ownership test would have.

3. Issues with Timing

In addition, by requiring updated attributable owner information only when patents were already at the PTO, the Proposed Rule failed to compel disclosure of relevant information when it would have been most useful to a majority of parties—during or before litigation. Setting aside the question of whether the disclosures would have actually improved the PTO's internal functions, the Proposed Rule's greatest failing was that it would not adequately curb litigation abuse by shedding light on the parties using and directing abusive practices. Parties interested in concealing ownership information could have easily circumvented the disclosure obligations by waiting until after disclosure checkpoints to transfer ownership. By continuing to conceal ownership, those parties could have retained their advantageous litigation and bargaining positions even while complying with the Proposed Rule.

In addition, the Proposed Rule imposed costs on all patent owners, by requiring patent owners to file information regardless of whether ownership had changed. While the PTO assumed the costs of verifying that ownership had not changed would be minimal, this may not be the case. For small entities, verifying that ownership had not changed within the meaning of the Proposed Rule could have required a particularly damaging use of resources, contrary to the PTO's goal of making

^{176.} Feldman, *supra* note 13. Professor Feldman's article provides a thorough discussion of the relationship between § 16 disclosures and patent disclosures and proposes § 16 as a potential source of guidance for future legislative reform. *Id.*; *see also* 15 U.S.C. § 78p (2012) (codifying in part the Securities Exchange Act of 1934 § 16 (1934) as amended through P.L. 112-158).

^{177.} *Id.* at 25–26.

^{178.} Id.

^{179.} Id.

innovation more rapid and efficient. However, requiring disclosure of ownership information that had not changed would have merely created additional inefficiency in the system.

Because of these timing problems, the parties that currently bear the costs associated with hidden ownership information would have continued to bear those costs and would have incurred new costs, and any benefits of additional disclosure would likely have been minimal.

D. FINAL THOUGHTS ON THE PROPOSED RULE

The PTO's decision to abandon the Proposed Rule was reasonable. As constituted, it appeared unlikely to significantly aid the patent system, and it might have done more harm than good. Yet the Proposed Rule should be praised for its ambition, for moving the reform conversation forward, and for encouraging patent stakeholders to participate in the reform discussion out in the open.

Some aspects of the Proposed Rule, including the breadth of disclosure obligations, the attempt to limit disclosure obligations to specific times, and the attempt to maintain updated ownership information throughout the life of the patent should remain parts of future reforms. In addition, some critiques of the Proposed Rule were unpersuasive. For example, the costs of complying with disclosure may be substantial because of actions taken by the patent owners themselves Where disclosure requirements place a greater burden on complex ownership structures, companies can assess whether complex structures remain beneficial and plan accordingly. In addition, shifting the burden of determining ownership from patent owners does not remove the burden from the system, but instead keeps it situated on other market participants. For all of its possible failings, the Proposed Rule and its rulemaking process should meaningfully inform future legislative solutions.

III. BACK TO THE LEGISLATURE: EXISTING PROPOSALS AND CAUSE FOR OPTIMISM

When the PTO announced its decision to abandon the Proposed Rule, it indicated that it would defer to Congress to address the need for

^{180.} This is not to say that the burden could not be lessened or more narrowly tailored to avoid creating unnecessary problems for legitimate businesses. Instead, altering who bears the burden of determining ownership information will inevitably have associated costs, and that those costs likely best reside with the owners themselves.

increased patent ownership transparency. ¹⁸¹ Legislative reform is likely more appropriate for effecting change, particularly since Congress can adopt legislation that affects behavior outside the PTO, where most abuses take place. ¹⁸² This Part examines proposed legislation from the 113th Congress to extract ideas that will be applicable moving forward. Though none of these bills became law, lawmakers from both parties have expressed optimism that a bill targeting patent reform will pass during the 114th Congress. ¹⁸³

1. Innovation Act

The Innovation Act sought to require parties who file a complaint for patent infringement to disclose ownership information to the PTO, the court, and to each adverse party. In particular, the Innovation Act would have required a party filing a complaint for patent infringement to disclose (1) any assignee of a patent, (2) any entity with the right to sublicense or enforce the patent, (3) any entity that the party asserting the patent knows to have a financial interest in the patent, and (4) the ultimate parent entity of any entity identified in (1)–(3). Importantly, the Innovation Act defined "financial interest" as the right to receive proceeds from assertion of the patent or the ownership or control (direct or indirect) of more than five percent of the plaintiff entity. This definition also excluded noncontrolling interests in mutual investment funds and certain interests in mutual insurance companies or mutual savings corporations. The party

^{181.} Ryan Davis, *USPTO Backs Away From Patent Transparency Rules*, LAW360 (Oct. 24, 2014, 4:48 PM), http://www.law360.com/articles/590197/uspto-backs-away-from-patent-transparency-rules.

^{182.} See, e.g., how the PTO's limited rulemaking authority hamstrung some of its wider-reaching reform efforts discussed in Section II.C.1, supra. Legislative solutions face no such limitations.

^{183.} Erica Teichert, Congress to Push Patent Troll Bill in 2015, Goodlatte Says, LAW360 (Nov. 18, 2014, 3:52 PM) http://www.law360.com/articles/597447/congress-to-push-patent-troll-bill-in-2015-goodlatte-says.

^{184.} Innovation Act, H.R. 3309, 113th Cong. § 4 (2013). Much of the Innovation Act is unrelated to ownership transparency and beyond the scope of this Note. See, e.g., id. §§ 1-4, 5-10. It is worth noting that many objections to the Innovation Act were based on provisions outside of its § 4 transparency requirements. See H.R. REP. NO. 113-279, at 95 (2013) (providing opinions opposed to H.R. 3309 that nevertheless note that it "contains some common sense proposals that [. . .] would improve the patent system," including transparency requirements).

^{185.} Innovation Act, H.R. 3309, 113th Cong. §§ 4(b), (d), (e)(3) (2013). This Innovation Act's definition of ultimate parent entity would have incorporated the same HSR-derived definition as the Proposed Rule. *See id.* § 4(e)(3).

^{186.} Innovation Act, H.R. 3309, § 4(e)(1).

^{187.} Innovation Act, H.R. 3309, § 4(e)(2).

asserting the patent would also be required to submit updated identification information to the PTO within ninety days of any change regarding the parties identified in (1), (2), and (4).¹⁸⁸

The Innovation Act would require increased disclosure of ownership information, like the Proposed Rule, but would do so in a manner much more aptly tailored to curbing litigation abuse. While this limits the requirement's efficacy in pre-litigation licensing transactions (because information during those transactions could remain hidden), it would nevertheless accomplish much of what the Proposed Rule sought to do. And it would do so at a significantly reduced cost, since only those parties who file a complaint (or have filed a complaint on the patent in the past) are required to provide updated information. This makes the proposed legislation appealing: it is a limited remedy that attempts to curb litigation abuse, but because it is explicit about its purpose, it is more likely to be effective.

The Innovation Act's definition of ownership also represents a moderate improvement on the Proposed Rule's definition. First, determining the assignee of the patent as well as anyone with a right to sublicense or enforce the patent should be manageable. Although these determinations require some assessment of contract terms where there is a dispute regarding whether the rule applies (particularly when it is unclear if an exclusive license is a de facto assignment of the patent), determining parties with a right to sublicense or enforce the patent appears to be a simpler alternative to determining parties for whom it would be necessary to join to perfect standing in a suit for declaratory relief. 189 In addition, the requirement to disclose parties that the plaintiff knows to have an interest in the patent takes important steps towards solving the beneficial owner problem identified in Section II.B.1, supra, although the definition of "financial interest" may be broader than necessary. Lastly, requiring disclosure of the ultimate parent entity for any of the first three categories raises some of the problems that plagued the Proposed Rule, but does not worsen them.

^{188.} Innovation Act, H.R. 3309, § 4(d).

^{189.} First, given the timing of disclosure under the Innovation Act, the venue (and thus the governing law) would not be indeterminate (as it would have been under the Proposed Rule). Second, "those with a right to enforce or sublicense the patent" and "assignees" are terms that seem more concrete than "all parties necessary to be joined in a suit," which may include exclusive licensees, assignees, parties with standing to enforce the patent, any of those categories, or some combination thereof, depending on the jurisdiction. See *supra* note 116 for criticisms of the inclusion of the standing provision in the Proposed Rule.

Importantly, since these requirements attach only when an infringement suit is filed, they provide a choice for patent holders who wish to avoid disclosure requirements and thus they functionally exempt the vast majority of patent holders from the disclosure requirements. ¹⁹⁰ By leaving patent holders the option to initiate the disclosure requirements, the Innovation Act's requirement burdens the enforcement right but imposes some of the costs associated with non-disclosure on the parties who create those costs. It does not create costs for all users of the patent system irrespective of whether they extract benefits from obfuscation of ownership. Given the limited number of patents that are actually litigated and the climbing percentage of litigation attributable to NPEs, this burden seems likely to fall precisely where it is needed most.

In addition, perhaps the most useful provision in the Innovation Act is its call for the PTO to maintain ownership information. Once a party has asserted a patent and disclosed ownership information, the PTO would make that information accessible to the public, 191 which could help with preclearance, with the assessment of inequitable conduct, and with settlement negotiations should the patent be the source of future litigation.

Lastly, by providing clear penalties—barring, in particular, the recovery of attorney's fees under § 285 and increased damages under § 284¹⁹²—the Innovation Act creates a reasonable balance between incentives to disclose and penalties for non-compliance. Compared to the Proposed Rule's abandonment remedy, which commenters worried would predominantly affect unsophisticated patent applicants, decreased recovery is more palatable and affects the parties most likely to abuse the system.

2. Other Acts

Other failed bills¹⁹⁴ proposed similar alterations to the patent code. The End Anonymous Patents Act ("EAPA"), for example, would have

^{190.} As some parties noted, only two percent of patents are ever involved in litigation. Novartis Comments, *supra* note 85, at 5–6.

^{191.} See Innovation Act, H.R. 3309, §§ 4(d), 7(b)(1).

^{192.} Innovation Act, H.R. 3309, § 4(d)(2).

^{193.} See discussion *supra* notes 149 and 156; *see also* AIPLA Comments, *supra* note 7, at 6.

^{194.} Other bills discussed improved transparency and are not discussed here, including the Patent Abuse Reduction Act (S. 1013) and the Patent Litigation and Innovation Act (H.R. 2639). Transparency in demand letters is a topic beyond the scope of this Note. Several states have indicated an intention to regulate demand letters. Joshua

amended 35 U.S.C. § 261 to require disclosure of all real-parties-ininterest when new patents issue, at payment of maintenance fees, and whenever a patent, patent application, or interest therein is sold, granted, or conveyed.¹⁹⁵ Under the EAPA, any entity with a legal right to enforce the patent, any ultimate parent entity of an entity that can enforce, and any entity that has a controlling interest in the enforcement of the patent is a real party-in-interest.¹⁹⁶ To penalize non-compliance, the EAPA would bar plaintiffs from recovering damages before the date on which all ownership information is properly updated.¹⁹⁷

Notably, the EAPA applies whenever patent ownership changes rather than only during litigation or only during PTO proceedings, and establishes a penalty that is harsh but that does not prevent assertion of the patent. These alterations signal alternative approaches that might better align the goals of increased disclosure with the costs of administering a new rule.

The Patent Transparency and Improvements Act of 2013 ("PTIA"), meanwhile, would require disclosure of parties with (1) "a financial interest (of any kind) in the subject matter in controversy or in a party to the proceeding" or (2) "any other kind of interest that could be substantially affected by the outcome of the proceeding" upon filing an infringement suit. ¹⁹⁸ The PTIA supplements this broad requirement by demanding updated assignment information any time the ultimate parent entity of the patent changes. ¹⁹⁹ While the PTIA's ownership definition is perhaps too broad, the formulation indicates that expansive disclosure requirements might be accompanied by limiting triggering events for those requirements, a trade-off that makes broad disclosure requirements more

Alston, NJs 'Patent Troll' Law Would Have More Bark Than Bite, LAW360 (Oct. 27, 2014, 2:11 PM), http://www.law360.com/articles/590339/nj-s-patent-troll-law-would-have-more-bark-than-bite (noting that New Jersey and eighteen other states have passed or attempted to pass legislation to curb abusive patent litigation practices by focusing on demand letters).

^{195.} End Anonymous Patents Act, H.R. 2024, 113th Cong. § 2 (2013).

^{196.} End Anonymous Patents Act, H.R. 2024, § 2(e)(4). While this definition included "Ultimate Parent Entities," it is worth noting that it did not incorporate the HSR definition into the requirement.

^{197.} End Anonymous Patents Act, H.R. 2024, § 2(e)(5).

^{198.} Patent Transparency and Improvements Act of 2013, S.1720, 113th Cong. § 3(b) (2013).

^{199.} Patent Transparency and Improvements Act of 2013, S.1720, § 3(b)(1) (amending 35 U.S.C. to add §263(b)).

palatable.²⁰⁰ In addition, the PTIA punishes non-compliance by limiting recovery of increased damages and attorney fees (under § 284 and § 285, respectively) and by requiring the court to award a "prevailing accused infringer reasonable attorney fees and expenses incurred in discovery any previously undisclosed ultimate parent entities in the chain of title."²⁰¹

IV. RECOMMENDATIONS

A rule to bring transparency to patent ownership information, whether promulgated by the PTO or passed by Congress, must require disclosure at times meaningful to stakeholders and must ensure that the disclosures provide stakeholders with valuable information. At the same time, administrative costs must not outweigh the benefits of increased ownership transparency. Ownership transparency is a worthy goal, but only within limits. Transparent ownership is not a cure-all, nor is a lack thereof the primary problem in the patent system. Without resolving issues related to patent quality and the boundaries of patents, even full ownership disclosure will not resolve every pre-litigation problem. Consequently, a narrowly tailored rule that provides limited pre-litigation transparency and that shifts burdens to parties seeking to exploit the system through litigation is most appropriate.

To that end, Part IV applies lessons from the Proposed Rule and recent legislative proposals to identify the features that best serve these goals. Most importantly, Part IV recommends a bifurcated system²⁰² that mandates one set of disclosure requirements independent of any adversarial proceedings and another that would necessitate greater disclosure by a party asserting a patent. Part IV also suggests that Congress require the PTO to maintain a database containing all ownership information disclosed under the new rule. While these

^{200.} For example, by requiring parties to disclose ownership information only when suits are filed or when the ultimate parent entity changes, the PTIA's requirement is narrower than a disclosure requirement that triggers whenever any ownership information changes. Nevertheless, the PTIA's particular formulation is unlikely to be palatable given that there appears to be no limit on when an "interest" in the litigation, party, or subject matter of a proceeding that would be small enough to escape disclosure. While it would reach more parties than the beneficial owner definition from § 16 (for example), it seems likely that it would reach so many parties that in practice it would be impossible to administer. Moreover, disclosing *every* party with *any* interest in the litigation risks drowning users of the patent system in information, much of which might be useless.

^{201.} Patent Transparency and Improvements Act of 2013, S.1720, § 263(d)(1)–(2).

^{202.} At least one commenter proposed a similarly bifurcated system with separate requirements applying to all patent owners and to those applying only to those engaged in litigation. Novartis Comments, *supra* note 85, at 5–8.

733

proposals are not as broad as the Proposed Rule, they provide a balance between the burdens and benefits of disclosure.

A. TIMING AND GENERAL REQUIREMENTS

To begin, an effective disclosure requirement must result in greater access to ownership information when it is most meaningful to all parties. Parties might find additional ownership information useful at three distinct times: when seeking to enter a market protected by patents, when a patent is involved in licensing negotiations, and when a patent is threatened to be or is enforced (either in civil court, or at the ITC). To provide information at those times and decrease burdens on patent owners, disclosure should be required concurrently with two triggering events: (1) the assignment of patent rights, and (2) the filing of infringement claims in an adversarial proceeding.

First, patent owners and assignees should update ownership information upon the assignment of patent rights through a mandatory assignment recordation system maintained by the PTO.²⁰³ Initial disclosure should take place upon the filing of a patent application and should be maintained thereafter by patent applicants and owners. Requiring disclosure of ownership information upon assignment provides

203. While the PTO failed to make assignment information mandatory just a few years ago, the PTO's old proposal suffered from several problems that need not be imported into a new legislative rule. First, the PTO's definition of an assignee was a "real party[-]in[-]interest." Request for Comments on Eliciting More Complete Patent Assignment Information, 76 Fed. Reg. 72372 (Nov. 23, 2011). As discussed previously, identifying the real party-in-interest is a highly fact-dependent, complicated inquiry. See Lavenue & Cassady, supra note 59. Second, that proposal would have required disclosure of this information whenever a party communicated with the PTO during prosecution. Request for Comments on Eliciting More Complete Patent Assignment Information, 76 Fed. Reg. at 72372. This might have necessitated complicated, costly assessments of the real party-in-interest multiple times during the pendency of the patent application. In support of these changes, the PTO cited some of the same goals as it did in the Proposed Rule, including those directed at improving internal PTO functioning. Id. As at present, those issues pale in comparison to the abuses that occur outside the PTO in litigation and licensing, and thus scarcely justified additional disclosure. See Letter from William G. Barber, President, Am. Intellectual Prop. Law Assoc., to Saurabh Vishnubhakat, Attorney Advisor, Office of Chief Economist, USPTO 1-3 (Jan. 23, 2012), available at http://www.uspto.gov/patents/law/comments/a_aipla_120123.pdf. Based on these considerations, it is likely that the assignment disclosure contemplated here would be more palatable as part of a broader attempt at improving transparency in ownership and litigation.

"Assignment" of a patent might mean the literal assignment of a patent, or might be interpreted more broadly to mean the grant of any set of rights that constitutes the functional assignment of the patent. In the interest of clarity and to avoid creating an excessively complicated definition, "assignment" here should be interpreted narrowly.

market participants with more accurate information both during licensing negotiations and during freedom-to-operate analyses. For example, parties seeking to enter a given market would have contact information for potential licensors and would benefit from the additional contextual information that an assignment chain provides. This additional information would help shed light on the relationships between entities and, given the value of contextual information discussed in Section I.A.1, *supra*, would provide interested parties with additional information regarding the strength of the patent. In addition, recordation of assignment information would make it easier for parties seeking declaratory judgments to identify the owner of a patent, which would improve litigation efficiency, e.g., by limiting the instances in which a party could move to dismiss a declaratory action for failure to name the proper defendant.²⁰⁴

Importantly, costs associated with this disclosure requirement would be less than those under the Proposed Rule, since patent holders would not need to update information unless the patent changed hands. In addition, the PTO could theoretically manage the mandatory recordation of assignment information by leveraging the already-significant number of recorded assignments to further limit costs.

Second, ownership information should be disclosed upon the commencement of an infringement proceeding. By requiring public disclosure once litigation has been initiated, defendants will be able to better assess their risk and will more openly negotiate settlements. In addition, parties seeking to game the system will find it more difficult to use privateering techniques to surreptitiously litigate patents and thereby avoid litigation risk.²⁰⁵ By requiring disclosure upon the filing of an

^{204.} *Cf.* Ewing & Feldman, *supra* note 2, at 40 (discussing a scenario in which a company sought declaratory relief in California, only to have some of its claims dismissed because it failed to name the correct defendant, i.e. the actual holder of the patent. Once this was sorted out, the defendant in the declaratory relief action was then able to file an infringement suit in its preferred venue).

^{205.} Even where beneficial owners are disclosed, the appeal and availability of privateering techniques may persist. This is particularly true where the company encouraging the privateering receives no direct benefits from the assertion of the patent and where that company has never owned the patent asserted. See Ewing, supra note 39, at 6–8 (discussing how corporate sponsors of privateers receive mainly consequential benefits from patent assertions). Nevertheless, where patent ownership is more transparent, it will be more difficult to carry out some forms of privateering. First, a party that is merely outsourcing the assertion of a patent to another entity will likely have to disclose ownership, either directly during litigation (parties that use complex structures to avoid ownership obligations can qualify as beneficial owners under the proposed

infringement action, Congress would correct information asymmetries and better realign litigation rewards with the underlying value of the patents.

Alternative triggering events offer fewer benefits or increase burdens substantially. For example, a rule requiring disclosure of ownership information when sending a demand letter might seem desirable, but the number of letters sent each year would create unsustainable administrative costs. ²⁰⁶ In addition, requiring disclosure any time a patent comes before the PTO (e.g., at the filing of maintenance fees) would raise many of the concerns discussed in Section II.C.3, *supra*, including burdening patent holders who have neither transferred ownership nor are engaged in abusive litigation or licensing practices, while failing to provide information at times that would help curb abuse.

B. ATTRIBUTABLE OWNERS

The disclosure requirements need not and should not be the same for both triggering events. To maximize benefits associated with disclosure while limiting burdens placed on legitimate interests, a legislative solution should require minimal disclosures upon assignment of the patent and more substantial disclosures upon initiation of litigation.

Legislation should also require assignees to update only basic assignment information with the PTO when the assignment takes place. Since the goal of additional disclosure at this point would be improving market information for licensing transactions and freedom-to-operate analyses, it need not include disclosure of beneficial owners, ultimate

definition) or indirectly when updating assignment information at the PTO. Second, as more information regarding the relationships between parties is disclosed during litigation, it should become easier for interested parties to assess the implied relationships between assertion entities and their sponsors. While sponsors may still benefit from the uncertainty surrounding their involvement in a privateering scheme, the benefits associated with those schemes should decrease as transparency increases.

206. One particularly active troll has sent more than 16,000 demand letters on his own. Ryan Davis, FTC Settlement with 'Patent Troll' May Signal Wider Action, LAW360 (Nov. 7, 2014, 7:54 PM), http://www.law360.com/articles/594533/ftc-settlement-with-patent-troll-may-signal-wider-action. Moreover, the FTC and several states have indicated a desire to regulate demand letters independently of any new legislative action by enforcing existing antifraud and consumer protection statutes. See id. (noting that the FTC successfully enforced existing law to prevent the "troll" in question from using "deceptive sales claims and phony legal threats' in patent licensing demand letters"); see also Joshua Alston, NJ's 'Patent Troll' Law Would Have More Bark Than Bite, LAW360 (Oct. 27, 2014, 2:11 PM), http://www.law360.com/articles/590339/nj-s-patent-troll-law-would-have-more-bark-than-bite (noting that New Jersey and eighteen other states have passed or attempted to pass legislation to curb abusive patent litigation practices by focusing on demand letters).

parent entities, or any of the more expansive definitions included in past proposals. Disclosure of those entities may compromise some legitimate business interests, and without a substantial need for thorough disclosure of ownership information prior to litigation,²⁰⁷ it is difficult to justify such broad disclosure. Limited disclosure, in contrast, addresses concerns that disclosure of too much information at this stage would discourage investment, for example by making it harder for companies to move into new markets without revealing plans to their competitors. Similarly, requiring only limited disclosure when patents are assigned would compromise far fewer confidentiality provisions in existing agreements, including many between universities and their exclusive licensees. Lastly, and perhaps most importantly, disclosure of only assignment information will reduce the administrative costs of disclosure for both patent holders and the PTO.²⁰⁸

At the same time, recordation of titleholders and assignees would provide information about whom to contact to initiate a licensing transaction and would provide some contextual information (e.g., a record of the number of times a patent has changed hands) that would help a diligent market participant to assess whether the patent is likely to be litigated.²⁰⁹ By soliciting and recording assignment information, the PTO could provide the public with chain-of-title information that would correct some of the imbalances in the licensing market and allow

^{207.} Prior to litigation, there are fewer costs traceable to limited ownership information (rather than traceable to fuzzy patent boundaries, for example). Prior to litigation, the assertion that "what matters is not who owns the patent, but rather what the patent covers" is more accurate. See IV Comments, supra note 110, at 8–9.

^{208.} While the PTO believed the cost of compliance with the Proposed Rule would have been negligible in many instances and would have cost only \$100 in others (based on input it had previously received at a roundtable), many commenters argued that this vastly underestimated the cost of compliance because of the complex analysis of corporate structure that would have happened multiple times pre- and post-issuance. See, e.g., Schwegman Comments, supra note 134, at 2. Under this proposal, costs are more likely to align with the PTO's proposal. Identifying assignees of patents is a much more straightforward inquiry than identifying all attributable owners, and because assignment information will only need to be updated when it changes, there will presumably be fewer instances when most patent owners will be required to undertake the ownership inquiry in the first place. In addition, since an assignment database is already in place, the PTO is more likely to be able to improve its existing structures in order to implement this requirement and less likely to need to create a new system from scratch. See Novartis Comments, supra note 85, at 6.

^{209.} See Chien, supra note 26, at 301-02.

companies to more easily and efficiently assess risk, identify potential partners, and obtain or transfer patent rights as needed.²¹⁰

Once a patent is the subject of litigation, however, greater disclosure of ownership information is necessary. At this stage, additional disclosure is desirable to curb litigation abuse, not merely to improve ex ante licensing and freedom-to-operate analyses. Achieving this goal requires ferreting out parties who benefit from litigation, particularly those who use hidden ownership to artificially increase the value of their patents through questionable litigation practices. To adequately reach relevant parties, a broad definition similar to that in the Proposed Rule is necessary. To that end, the party that asserts a patent should disclose not only the identity of the current patent owner, but also the identities of parties who stand to benefit from assertion of the patent.

Here, the Proposed Rule and the Innovation Act provide some guidance. Analysis of the Proposed Rule militates for the removal of the HSR definition of "ultimate parent entities" given that it is burdensome without being particularly probative.²¹¹ Meanwhile, the Innovation Act's definition, if amended to avoid incorporating the HSR definition of "ultimate parent entity," provides a means to reach parties with a financial interest, and not merely an ownership interest, in patent enforcement cases. Indeed, the Innovation Act's definition of attributable ownership would reach many parties without requiring unnecessarily complex assessments related to standing and "temporary" divestment of ownership.

Based on these considerations and those in Part II, *supra*, a party initiating an infringement action should be required to disclose (1) the assignee and titleholder of a patent, and (2) any beneficial owner of the patent. "Beneficial owners" should include parties identified by the Innovation Act, namely those who stand to receive proceeds from the assertion of the patent or who own five percent or more of the plaintiff entity. The definition could be explicitly expanded, however, to include those parties who, by virtue of control over a beneficial owner or by use of an arrangement designed to avoid this provision, qualify as beneficial owners themselves.²¹² Section 16 of the Securities Act supplies similar

^{210.} See HP Comments, supra note 30, at 7.

^{211.} See supra notes 171–74 and the accompanying discussion.

^{212.} On its face, such a provision is likely to capture creditors and investment funds, much as the HSR provisions would have. However, because these disclosures would come about primarily during litigation rather than throughout the life of the patent, this disclosure is more justifiable. *Cf.* NVCA Comments, *supra* note 95, at 2 (noting that at times there is no reason for an investor to resist disclosure, and proposing a means to keep ownership concealed only where a party agrees not to seek licensing revenue or

rules that could serve as a model for these requirements.²¹³ Disclosure of these parties would shed light on many of the complex arrangements used to obscure ownership information and would do so with greater precision than disclosing ultimate parent entities would. This necessarily places a burden on plaintiffs with complex ownership structures, irrespective of whether that plaintiff has a complex structure for the purpose of gaming the litigation system or not. But, notably, this disclosure requirement would not create the burden, but rather shift it from defendants, who lack the information, to plaintiffs, who are better suited to disclose the information and who created the burden (for legitimate reasons or otherwise) when they chose a particular corporate structure. Moreover, since large companies are more likely to use complicated ownership structures, the disclosure burden would theoretically be less significant for small businesses and independent inventors looking to assert their rights.

Although these requirements could apply to both parties in an adversarial proceeding, they ought to apply only to the party who asserts the patent.²¹⁴ This limitation prevents parties from filing actions for the purpose of imposing disclosure costs on competitors and more closely aligns the costs and purposes of disclosure. This limitation also preserves the ability to choose whether to incur the costs of disclosure; ideally, this will deter some abusive litigation and prevent disclosure requirements

litigate a given patent). For example, since their investment may remain hidden until litigation arises, investors should be less concerned about telegraphing their investment strategies to competitors. The Innovation Act's explicit exclusion of ownership of an interest in certain mutual investment funds or insurance companies from the definition of "financial interest" might also serve as the basis for a provision limiting the application of this provision to creditors and investment funds. *See* Innovation Act, H.R. 3309, § 4(e)(1)(B) (2013).

213. Section 16 requires disclosure only above a ten percent ownership threshold; this number represented a compromise after the five percent threshold that both houses of Congress initially sought was abandoned. Feldman, *supra* note 13, at 31, 36–37. Alternatively or in supplement, full incorporation of the definition of "beneficial ownership" from § 16 might help alleviate any uncertainty in how "financial interest" might be determined given the extensive case law that already exists in that area. *See id.* at 39. Explicit incorporation of the § 16 definition risks requiring patent attorneys to perform complex analyses not unlike those that incorporation of the HSR definition would have required. However, since this analysis would take place during litigation only, the costs would not apply to all parties and would not have to be performed only by attorneys in charge of maintaining patents and patent applications.

214. This phrasing is intended to require disclosure of ownership for parties who assert the patents in civil court or at the ITC. The AIA requires PTAB petitioners to disclose real parties-in-interest. *See* Section I.B.1, *supra*.

from imposing unnecessary, unjustifiable burdens on parties employing legitimate business strategies.²¹⁵

Crucially, information disclosed at assignment and during litigation should be maintained by the PTO in a searchable database. The goal of transparency is best served when information is readily accessible, and by pooling information from litigation disclosures and assignments, the PTO could provide the public with a wealth of currently inaccessible information. 216 Notably, as information becomes accessible, the benefits associated with access to that information will increase rapidly, and the total value of the information disclosed through assignments and litigation will be greater than the sum of those parts. For example, mapping relationships between companies may help facilitate licensing and freedom-to-operate analyses pre-litigation. 217 In addition, uncovering these relationships burdens those seeking to keep their ownership information hidden; with each disclosure, a hidden owner would again have to alter its ownership structure, and any benefits derived from the change would be reduced to the extent that it will be disclosed in the future.

However, no definition or disclosure requirement will prevent all forms of litigation or licensing abuse,²¹⁸ and this Note consciously promotes disclosure requirements both at assignment and during litigation that fall short of creating a perfectly transparent system. A system that

^{215.} Placing this burden on a party exercising its right to sue for infringement may be inappropriate because it will deter legitimate suits. This is a reasonable concern. However, there are always costs associated with the exercise of a right, and the question here is not whether such costs should exist, but rather who should bear those costs to the extent that they do exist. Cf. Menell & Meurer, supra note 1, at 5-6 (noting that notice costs not borne by one litigant in a patent case were instead borne by the opposing party; the costs did not go away in the absence of a rule pinning those costs to a given party).

^{216.} The PTO's ability to administer such a database might be in doubt given the state of its current system. See Letter from Colleen Chien, Assistant Professor, Santa Clara Sch. of Law, to USPTO, at 4-6 (Jan. 25, 2013), available http://www.uspto.gov/patents/law/comments/rpii-f_chien_130125.pdf different recommendations for improving the current system, several of which involve improving public access to information the PTO already has). A legislative solution, however, could include provisions aimed at improving the current recordation system and could provide the PTO with the resources to do so (e.g., by permitting the PTO to use the fees it already collects to improve the system instead of continuing to divert fees to

^{217.} Consequently, while the cost of transparency will be borne by plaintiffs with hidden ownership structures, the benefits of transparency will flow to the public at large.

^{218.} And some forms of abuse are better dealt with by other areas of the law, e.g., antitrust, consumer protection, and antifraud.

required disclosure of licensing agreements for all transfers of patent rights would improve transparency, but at costs that would be enormous, and it seems implausible that such a rule would gain widespread approval. The patent system is inefficient, but it is not entirely broken, and other changes (e.g., to the manner in which courts assess patent scope) might be more appropriate means for improving the functioning of the pre-litigation patent system.

C. PENALTIES

Clear, meaningful penalties are necessary to make disclosure requirements worthwhile. In principle, penalties for noncompliance should also be proportional to the burden that noncompliance places on others.²¹⁹ Consequently, in contrast to the Proposed Rule, which imposed a severe penalty for nondisclosure during the pendency of an application but identified no particular penalty for noncompliance after issuance, a legislative solution should reserve its most severe penalties for noncompliance during litigation.

The Proposed Rule and legislative proposals, particularly the Innovation Act, provide guidance for possible penalties, particularly in regard to noncompliance during litigation. First, limiting recovery of attorney's fees and enhanced damages unless ownership information is updated provides a penalty that is both reasonably tied to the costs imposed by obfuscated ownership—in that it affects litigation costs—and does not jeopardize the enforceability of the patent. While this establishes a good baseline, Congress should also award discovery costs associated with determining beneficial ownership information to parties who show that the opposing party did not satisfy its disclosure obligations. Such a remedy would further limit the appeal of hiding ownership information in litigation and could be based on the language included in the PTIA, ²²⁰ which required the court to award costs and fees associated with determining undisclosed ultimate parent entities to prevailing accused infringers.

Second, a permanent bar on recovery of monetary damages for infringing activities that took place when ownership information was not

^{219.} That is, penalties for non-compliance need not be punitive to be effective and might be more palatable to the industry if they resemble compensatory damages.

^{220.} Patent Transparency and Improvements Act of 2013, S.1720, 113th Cong. § 3(b) (2013) (drafting 35 U.S.C. §263(d)(2) as follows: "the court shall award a prevailing accused infringer reasonable attorney fees and expenses incurred in discovering any previously undisclosed ultimate parent entities in the chain of title.")

properly maintained, should serve as an additional penalty in truly exceptional cases. For this rule, an exceptional case is one where the court determines that the plaintiff has acted egregiously and used abusive tactics to manipulate the litigation and settlement (or licensing) process. This definition can leverage the definition of "exceptional" used when awarding attorney fees under 35 U.S.C. § 286.²²¹ While a complete bar to recovery is too harsh a penalty to apply in most instances, judges should be able to use ownership information to assess harsher penalties as needed. Notably, this rule would only apply to monetary damages, meaning a court could still award injunctive relief to a successful plaintiff under the *eBay* standard.²²²

The above penalties focus on litigation abuse and non-compliance at the initiation of litigation, but it is also necessary to establish a clear penalty for failure to disclose proper ownership information at the time of assignment. Two remedies are appropriate. First, failure to update assignment information may, in exceptional circumstances, lead to a bar on recovery of monetary damages in an infringement suit for all times when ownership information was not properly recorded.²²³ This remedy is harsh, but it would apply rarely and would attempt to curb the most egregious forms of litigation abuse. In particular, this remedy would not affect pre-litigation abuses. Second, to penalize noncompliance prelitigation, the PTO should assess fines that would scale up depending on the duration of non-compliance. Congress should grant the PTO authority to determine the exact value of those fines. To enforce that provision, the PTO could rely on assistance from others, who, upon becoming aware that assignment information is not up-to-date—e.g., via a failed attempt to contact the listed party for licensing purposes—could report that potential violation to the PTO for review. This would limit the

^{221. 35} U.S.C. § 286 (2012). "[A]n 'exceptional' case is simply one that stands out from others with respect to the substantive strength of a party's litigating position (considering both the governing law and the facts of the case) or the unreasonable manner in which the case was litigated." Octane Fitness, LLC v. Icon Health & Fitness, Inc., 134 S. Ct. 1749 (2014).

^{222.} eBay, Inc. v. MercExchange, LLC., 547 U.S. 388 (2006). Under the *eBay* factors, it is very difficult for an NPE to obtain injunctive relief. *See id.* at 391 (laying out the four-factor test for injunctive relief; the factors take into account equitable considerations including the public interest and the balance of hardships between the plaintiff and defendant). Accordingly, barring injunctive relief in order to combat abusive litigation practices would be an inappropriate remedy given that the primary concern in litigation comes from abusive practices by NPEs, and patent trolls in particular.

^{223.} This provision is intended to conform to the penalty for non-compliance during litigation, *supra*.

PTO's expenditures in tracking down and verifying assignment information.

D. SUMMARY

A sound patent ownership-transparency rule should contain the following elements:

Disclosure obligations triggered 1) upon assignment, and 2) upon filing of an infringement suit at the ITC or in district court. The latter obligations should attach only to the party asserting the patent.

Different obligations depending on the triggering event, namely 1) disclosure of the assignee and titleholder upon assignment; and 2) disclosure of assignees, titleholders, and beneficial owners of the assignee, titleholder, or patent upon filing of an infringement suit.

Penalties a) barring enhanced damages and recovery of attorney's fees for parties who do not comply with disclosure obligations during litigation; b) requiring fee-shifting for costs associated with discovery of ownership information; c) permitting, in exceptional cases, a bar to recovery of monetary damages based on infringing activity that occurred when patent ownership information was not current; and d) imposing fines, whose value should be determined by the USPTO, for noncompliance prelitigation.

These elements limit the costs associated with compliance while improving transparency in ownership both pre-litigation—for licensing and freedom-to-operate analyses—and during litigation. While this proposal imposes substantial costs on certain parties, it also mitigates the concerns raised in response to the Proposed Rule and legislative proposals.

V. CONCLUSION

Transparent patent ownership is a necessary goal that promises to curb litigation abuse and improve the efficiency of patent licensing negotiations, patent transfers, and freedom-to-operate analyses. It will also promote innovation and ensure that patent holders receive compensation that is commensurate with the value of their innovations.

While the PTO abandoned the Proposed Rule because it would have imposed substantial costs on patent owners without providing much additional ownership transparency, it nevertheless deserves praise for attempting to bring patent ownership out into the open. Additionally, the rulemaking process produced a meaningful conversation between a wide variety of stakeholders about means to improve transparency while protecting legitimate business interests.

As the patent reform conversation moves forward, legislative proposals offer hope. Congress has the ability to carry this discussion forward and forge new transparency rules from the ashes of the past attempts. This Note has provided the essential elements of one possible approach, which aims to match the benefits and burdens of disclosure and to provide information when it will be most useful to stakeholders. The goal of transparent patent ownership remains both important and achievable.