The Pace of Change: Non-practicing Entities and the Shifting Legal Landscape

By Robin Feldman*

In ordinary circumstances, legal doctrines evolve at a glacial pace. As I have discussed in prior work, law is constantly driven to adapt to changing circumstances within existing frameworks, as tested and refined through various spheres of acceptance. This is not, however, a speedy process, and it can take years or even decades for issues on the ground to bubble up to the level of an administrative agency, let alone the Supreme Court or Congress.

Patent law is somewhat of an exception.² The compressed time frame of twenty years—after which the patent expires—encourages patent holders to identify and move quickly on issues related to the boundaries of those rights. In addition, the pace of science itself is rapid, which means that patents are constantly interpreted and applied in an environment of rapidly changing meaning and context. These factors can drive patent law to evolve more rapidly than many areas of law.

Nevertheless, even for the field of patent law, the pace of change in recent years has been astounding. One can see this on numerous levels—from public awareness, to scholarship, to court decisions, to legislative and regulatory decisions at the state and federal level. Much of this focus is attributable to non-practicing entities. Known by various names, including "monetizers," "patent assertion entities," "NPEs," and the more colorful appellation of "patent trolls," non-practicing entities have exploded onto the scene in the last five to seven years, altering business models across numerous sectors.

This piece will explore the impact that non-practicing entities are having on the business and legal landscape in this

^{*} Harry & Lillian Hastings Professor of Law and Director of the Institute for Innovation Law, University of California Hastings College of the Law. I am grateful to Dean Tom Campbell for his kind invitation to participate in this symposium and to Hadas Livnat, UC Hastings public service librarian, for her research assistance.

¹ ROBIN FELDMAN, THE ROLE OF SCIENCE IN LAW 94 (2009) (describing the mismatch of law and science).

 $_2\ See$ ROBIN FELDMAN, RETHINKING PATENT LAW 27–29 (2012) (comparing patent law to other legal regimes).

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country. The first part of the piece will explore what we know about non-practicing entities, and what we do not know. The

second part will describe recent shifts in common law doctrines, as well as regulatory and legislative actions. The last part will consider the road ahead.

I. NON-PRACTICING ENTITIES

A considerable amount of ink has been spilled on how one should define a non-practicing entity ("NPE"). With much money at stake, numerous entities have an incentive to craft the definition in a way that omits their own business model, a process that has resulted in intense lobbying not only of governmental officials, but also of academics. Throughout my work, I try to use an uncomplicated definition: non-practicing entities are those whose core business activity involves licensing and litigating patents, rather than making products. This definition includes everyone with that business model, regardless of whether they are organized as a partnership, a trust, or in any other manner.³

Monetization activity and non-practicing entities have existed in the patent world across time. In recent years, however, new types of business entities have emerged that are far more sophisticated and extensive than what has been seen in the past. For example, in a little over five years, the largest non-practicing entity accumulated between 30,000 and 60,000 patent assets, giving it the fifth largest patent portfolio of any domestic U.S. company and the fifteenth largest of any company in the world.⁴

Whether by accident or by design, the business model of non-practicing entities has the potential to be quite lucrative, regardless of the merit of any underlying patent claims. Taking a simple patent lawsuit to trial costs between \$1 million and \$6 million.⁵ Faced with such costs, a rational product company

³ For an extensive discussion of the different definitions used and the implications of each, see Robin Feldman, *Patent Demands & Startup Companies: The View from the Venture Capital Community*, 16 YALE J.L. & TECH. 236 (2014). Data for the study came from the Lex Machina database, which extracts information from public databases including the U.S. District Court websites and the U.S. Patent and Trademark Office website. The Lex Machina database is available to academics free of charge. In addition, in deciding whether a plaintiff was an operating company or a non-practicing entity, the study used only publicly available data.

⁴ Tom Ewing & Robin Feldman, The Giants Among Us, 2012 STAN. TECH. L. REV. 1, \P 1.

⁵ Colleen V. Chien, Of Trolls, Davids, Goliaths, and Kings: Narratives and Evidence in the Litigation of High-Tech Patents, 87 N.C. L. Rev. 1571, 1584 (2009); AM. INTELLECTUAL PROP. LAW ASS'N, 2011 REPORT OF THE ECONOMIC SURVEY (2011). For smaller cases where the amount in controversy is under \$1 million, the average trial itself

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may choose to buy a license, regardless of whether the patent is valid or in any way infringed by a company's products. The problem is magnified for non-practicing entities with large portfolios. If a non-practicing entity asserts a large number of patents, the cost of investigating the validity of the claims may be greater than the cost of simply taking a license.

When a company that makes a product asserts its patents against another product company, the targeted company can threaten to retaliate by asserting its own patents against the first company's products. This mutually assured destruction can act as a brake on the behavior of product companies. Non-practicing entities, however, do not make any products and thus are not vulnerable to the disciplining effect. In addition, non-practicing entities are frequently structured as shell companies, in which money is distributed to other entities. Thus, even if a targeted company were to receive a judgment for attorney's fees or sham litigation damages—an unlikely event under current law—the non-practicing entity could have no available assets to pay the judgment. This business model creates pressure for product companies to buy a license, irrespective of the merits of the claim.

The impact of non-practicing entities, and the pace at which those entities have come to dominate the patent landscape, can be seen in recent studies of patent litigation. The following information comes from an extensive academic study examining all 13,000 patent lawsuits filed over four recent years. In 2007, non-practicing entities filed only 25% of the patent lawsuits. That percentage rose sharply in 2008, and by 2012, non-practicing entities were filing a majority of the patent lawsuits in the United States. In addition, of the top ten most frequent filers of patent litigation, all ten were non-practicing entities.

The impact of NPEs on patent litigation can be seen in terms of defendants sued, as well as cases filed. The number of defendants sued actually drops after passage of the America Invents Act, but those numbers are still far above where we were in 2007.9

costs almost a million dollars. Chien, supra, at 1592–93. For larger cases where the amount in controversy is greater than \$25 million, the average trial costs almost \$6 million. Id. at 1584.

⁶ See Robin Feldman, Tom Ewing & Sara Jeruss, The AIA 500 Expanded: The Effects of Patent Monetization Entities, UCLA J.L. & TECH., Fall 2013, at 1, 6.

⁷ *Id*. at 7.

⁸ *Id.* at 58.

⁹ Id. at 43-57.

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In particular, the America Invents Act, which became law in September of 2011, changed patent lawsuit rules known as joinder rules. The changes were intended to make it more difficult to include many defendants in the same lawsuit. As a result, if you want to sue a number of defendants after passage of the America Invents Act, you have to file more lawsuits. For academics looking at the data, it means one cannot simply count lawsuits. A rise in lawsuits could simply mean that people are engaging in the same amount of activity—they are just suing the same number of people spread out across more lawsuits. Thus, one must also look at the number of defendants sued. Looking at the number of defendants sued confirmed a substantial increase in litigation activity across the six-year period from the earliest year of the study to the latest year. 10

Although the number of defendants sued rises substantially across time, the number of defendants sued by non-practicing entities decreased from 2011 to 2012. To consider this further, the study looked month-by-month, and the results were fascinating. There was a huge spike in the total number of defendants sued by non-practicing entities in the month before the America Invents Act was signed into law.¹¹ In other words, non-practicing entities rushed to the courthouse to get their lawsuits filed the month before the act was signed. In fact, the increase was so high that we had to adjust the scale on the slide just to get the picture onto a single image. Product companies also increased the number of defendants sued that month by a slight amount, but nothing compared to the sky-high levels at which non-practicing entities increased their litigation activity.¹²

The number of defendants sued by non-practicing entities the month *after* passage of the America Invents Act returned to where it had been before the spike, until about six months later, when the number of defendants sued began to rise again. Anecdotal evidence suggests that non-practicing entities were able to find a workaround to avoid the changes in the America Invents Act. The critical point, however, is the following: despite the reduction in defendants sued after passage of the America Invents Act, the number of defendants sued—even in the lower period—remains well above the earlier years. Thus, despite some impact from the America Invents Act, the train still appears to be barreling down the tracks.¹³

¹⁰ *Id*.

¹¹ *Id*.

¹² *Id*.

¹³ *Id.* at 49.

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There have been a number of other studies of non-practicing entities in U.S. litigation. These include studies by: the Government Accountability Office ("GAO"); Cotropia, Kesan, and Schwartz; Chien; and by nonprofits and private groups. 14 The results among these studies are remarkably consistent. What varies is the way in which the authors slice the data. The GAO study is a good example. I am intimately familiar with the GAO data because I was one of three scholars who collected and coded the data for the GAO. 15 The GAO used a sample of 500 cases from 2007 to 2011 and looked at the number of lawsuits, not the number of defendants. Its report shows a smaller increase in the number of lawsuits filed by non-practicing entities across the relevant periods than other studies do. Much of the difference occurs because the GAO looked only at what it defined as "entities," which it defined to include only corporations or partnerships. The GAO did not include anyone organized as a trust or operating as an individual; adding in trusts and individuals makes its results similar to everyone else's. 16

By removing individuals and trusts, however, the GAO figures missed important activity. For example, in the GAO's own sample of 500 lawsuits, the party filing the greatest number of lawsuits turned out to be a trust—one whose business activity is licensing and litigating patents, and one that is well-known in the patent arena.¹⁷ Thus, the number one non-practicing entity

¹⁴ See, e.g., Christopher Anthony Cotropia, Jay P. Kesan & David L. Schwartz, Unpacking Patent Assertion Entities (PAEs), 99 MINN. L. Rev. 649 (2014), available at http://papers.ssrn.com/pape.tar?abstract_id=2346381; Colleen V. Chien, Assistant Professor, Santa Clara Univ. Sch. of Law, Presentation at 2012 FTC/DOJ Workshop on PAEs at Santa Clara University: Patent Assertion Entities (Dec. 10, 2012), available at http://ssrn.com/abstract=2187314; All About NPEs, PAT. FREEDOM, https://www.patentfreedom.com/about-npes/litigations (last updated July 14, 2014); PRICEWATERHOUSECOOPERS, 2013 PATENT LITIGATION STUDY: BIG CASES MAKE HEADLINES, WHILE PATENT CASES PROLIFERATE (2013), available at http://www.pwc.com/en_US/us/forensic-services/publications/assets/2013-patent-litigation-study.pdf.

¹⁵ Sara Jeruss, Robin Feldman & Joshua Walker, *The America Invents Act 500: Effects of Patent Monetization Entities on US Litigation*, 11 DUKE L. & TECH. REV. 357 (2012) (Lex Machina co-authors Sara Jeruss and Joshua Walker were joined by Professor Robin Feldman of UC Hastings, College of the Law to code the five hundred cases in order to establish the types of entities involved in each of the lawsuits and to examine additional details of the suits. The GAO requested only the coded data without analysis, and the authors provided this with the understanding that they would publish their own analysis separate from the GAO report.).

¹⁶ See U.S. GOV'T ACCOUNTABILITY OFFICE, GAO-13-465, INTELLECTUAL PROPERTY: ASSESSING FACTORS THAT AFFECT PATENT INFRINGEMENT LITIGATION COULD HELP IMPROVE PATENT QUALITY 17 n.35 (2013) (noting the exclusion of individuals and trusts and the resulting variation from the expanded analysis in *supra* note 6); Feldman, *supra* note 3, at 245–50 (describing confusions resulting from the GAO's definition of "entity").

¹⁷ Feldman, supra note 3, at 245.

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was left out of the GAO conclusions simply because it was organized as a trust.

Despite issues such as these, the litigation data itself is remarkably consistent across researchers. By all accounts, however, litigation is "only the tip of the iceberg." Most patent demands never result in a lawsuit, and some estimates suggest that only ten percent of patent demands proceed all the way to filing a lawsuit. 19 Patent demands outside of a lawsuit are potentially the most troubling interactions because they happen outside the purview of the sovereign, without the disciplining effects of judges and legal procedures.

Good, objective research into patent demands outside lawsuits is excruciatingly difficulty to accomplish. These interactions are shrouded in non-disclosure agreements, ones that reportedly reach well beyond protecting intellectual property or confidential business information. I often shake my head at those who impose aggressive non-disclosure agreements and then argue vociferously that the government must not act because it has no data.

There are, however, a limited number of small studies on patent demands outside lawsuits. These studies frequently use survey data, including several surveys related to patent demands and startup companies. ²⁰ For example, in *Patent Demands & Startup Companies: The View from the Venture Capital Community*, ²¹ I examined responses from roughly 220 venture capitalists and their portfolio companies. Key results include that 70% of the venture capitalists have portfolio companies that have received patent demands, with those demands increasing over the last five years. ²² Of those that have received patent demands, 70% have experienced demands in the information technology sector and 30% have experienced demands in the life sciences. ²³ Most patent demands against startup companies are coming from non-practicing entities, and demands are having a significant financial and human impact on the startups.

¹⁸ Id. at 30.

¹⁹ *Id*.

²⁰ See generally, e.g., supra note 3; Colleen V. Chien, Startups and Patent Trolls 1 (Santa Clara Univ. Legal Studies Research Paper No. 09-12, 2012) [hereinafter Startups and Patent Trolls], available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2146251; Colleen V. Chien, Patent Assertion & Startup Innovation (Sept. 5, 2013) (unpublished manuscript), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2321340.

²¹ See Feldman, supra note 3.

²² *Id*.

²³ *Id*.

Other interesting data focus on where the money is going and where it is coming from. Economic data also is difficult to come by, but the available information is sobering. In what economists are calling the "leaky bucket," very little of the money paid to non-practicing entities flows back to inventors or innovation. ²⁴ Only an estimated 20% of the payments to non-practicing entities gets back to the original inventors or into any internal research and development.²⁵

In terms of who is paying, the majority of non-practicing entity lawsuits are filed against small businesses. I am not talking about the recent rise of patent demands against mom-and-pop stores. Even before this phenomenon, there has been data showing that the majority of non-practicing entity lawsuits are filed against small businesses with revenues under \$10 million.²⁶

Despite these important forays, data on patent demands outside of litigation remain critically important and difficult to come by. It is certainly not an easy task to get 220 busy venture capitalists and startup folks to respond, but it is nothing like being able to look at public data on 13,000 lawsuits filed. Managing that difficulty is the challenge ahead for academic researchers.

Not all of the assertions about non-practicing entities have held up to scrutiny. This is true regardless of whether those assertions were advanced in support of patent reform or in opposition to patent reform. For example, stories have circulated that non-practicing entities particularly target companies at funding events, such as when a company receives its first round of venture capital fundraising. My survey of venture capitalists and their companies did not find evidence that such a practice is widespread.²⁷

On the flip side, a narrative had circulated suggesting that the NPE business model spurs venture capital investment. According to that theory, venture capitalists will be attracted to the possibility that a startup company's patents can be monetized if the company fails, and this attraction spurs investment.²⁸ The results of the startup company survey soundly refuted that

²⁴ See James Bessen & Michael Meurer, Essay, The Direct Costs from NPE Disputes, 99 CORNELL L. REV. 387 (2014); Fiona Scott Morton & Carl Shapiro, Strategic Patent Acquisitions (July 2, 2013) (unpublished manuscript), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2288911.

²⁵ Bessen & Meurer supra note 24, at 411.

²⁶ Startups and Patent Trolls, supra note 20, at 1–2.

²⁷ See Feldman, supra note 3.

²⁸ Id. at 240 & n.13 (citing a speech by a federal regulatory official).

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assertion. The majority of venture capitalists who responded do not consider the potential for selling patents to NPEs when they decide whether to invest in a company. If it does not matter to them, it cannot be attracting capital. As one venture capitalist commented, "VCs swing for the fences; they are not interested in pennies on the dollar."²⁹

Moreover, venture capitalists and startups do not see patent assertion activity in general as good for the startup community. To paraphrase one venture capitalist, when companies are spending time and money responding to patent demands, they are not inventing and they are not hiring.³⁰

Testing various narratives and assertions such as these will be critical as the policy debates move forward.

II. THE LEGAL SYSTEM RESPONDS

As the non-practicing entity business model has increased so dramatically in recent years, public attention has increasingly focused on the phenomenon. The legal system has responded on many different levels—both federal and state, as well as on the legislative, regulatory, and common law front. On the legislative front, the U.S. House of Representatives approved an extensive patent reform bill in the fall of 2013, aimed largely at litigation reform.³¹ The bill died in the Senate Judiciary Committee, after extensive hearings and debate behind the scenes. Leadership of both the House and the Senate have indicated that patent reform will continue to be high on the agenda.

On the regulatory front, the White House released a report on patent assertion, along with a series of executive orders.³² The U.S. Patent and Trademark Office instituted its own reforms in response to the executive orders, and the Federal Trade Commission initiated a rare section 6(b) investigation into the economic effects of non-practicing entities, focusing on twenty-five such entities.³³ On the state level, a handful of state legislatures and attorneys general initiated legislative or

 $_{\rm 30}\,$ Feldman, supra note 3, at 243.

²⁹ Id. at 280.

³¹ Innovation Act, H.R. 3309, 113th Cong. (2013) (a bipartisan bill aimed at combating abusive patent litigation).

³² See EXEC. OFFICE OF THE PRESIDENT, PATENT ASSERTION AND U.S. INNOVATION (2013), http://www.whitehouse.gov/sites/default/files/docs/patent_report.pdf.

³³ See FTC Seeks to Examine Patent Assertion Entities and Their Impact on Innovation, Competition, FED. TRADE COMMISSION (Sept. 27, 2013), http://www.ftc.gov/news-events/press-releases/2013/09/ftc-seeks-examine-patent-assertion-entities-their-impact.

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regulatory action against non-practicing entities that allegedly engage in fraudulent or deceptive practices.³⁴

Perhaps the largest immediate impact may be felt by Supreme Court decisions during the most recent term. The Court penned six patent decisions, the largest number in any single year since the specialized patent appeals court—the Federal Circuit—was created in 1982. In each opinion, the Justices soundly rejected the logic of the Federal Circuit. In case after case, the decisions cut back on the broad roaming range that patent holders have come to enjoy and expect from the Federal Circuit.³⁵ The decisions included issues such as: making it easier to overturn a patent for indefiniteness;³⁶ maintaining the burden on the patent holder to prove that a patent is valid in a declaratory judgment action;37 and making it slightly easier for trial courts to award fees to prevailing parties in "exceptional' cases."38 Taken together, these decisions will have the effect of reducing the bargaining power that non-practicing entities have wielded against companies against whom they are asserting patents.

The most dramatic Supreme Court decision of last term, however, is the patentable subject matter decision of *Alice v. CLS Bank.* ³⁹ *Alice* concerned the question of whether and to what extent software and business method patents may be patentable. A favorite of non-practicing entities, these broadly worded patents have proven an effective weapon to wield against product companies. In rejecting the Federal Circuit's logic, the Supreme

³⁴ The Vermont state legislature passed a bill, Bad Faith Assertions of Patent Infringements, H. 299, 2013 Leg., Reg. Sess. (Vt. 2013), codified at VT. STAT. ANN. tit. 9, §§ 4195–4199 (2014). In addition, the Vermont Attorney General filed a complaint against MPHJ Technology, alleging that MPHJ engaged in unfair and deceptive practices when it sent letters threatening patent litigation to small businesses and non-profits in the state. Complaint at 1, State v. MPHJ Tech. Invs., LLC (Vt. Super. Ct. 2014) (No. 282-5-13 Wncv), 2014 WL 2178325. The Oregon Senate passed S. 1540, 77th Leg. Assemb., Reg. Sess. (Or. 2014) (making patent trolling a violation of the state's Unlawful Trade Practices Act). In Wisconsin, the legislature passed S. 498, 2013 Leg., Reg. Sess. (Wis. 2014) (making it a crime to send patent-licensing demand letters that contain false or misleading information). In New York, the state Attorney General entered into a settlement with MPHJ. OFFICE OF THE ATTORNEY GEN. OF THE STATE OF N.Y., IN THE MATTER OF THE INVESTIGATION BY ERIC T. SCHNEIDERMAN, ATTORNEY GENERAL OF THE STATE OF NEW YORK, OF MPHJ TECHNOLOGY INVESTMENTS, LLC 9 (2014), available at http://ag.ny.gov/pdfs/FINALAOD MPHJ.pdf (restricting the patent assertion activities within the state of New York).

³⁵ See Robin Feldman, Coming of Age for the Federal Circuit, 18 GREEN BAG 2D 27 (2014) (describing in detail the Supreme Court's six patent decisions in the 2013–2014 term).

³⁶ Nautilus, Inc. v. Biosig Instruments, Inc., 134 S. Ct. 2120, 2123 (2014).

³⁷ Medtronic, Inc. v. Mirowski Family Ventures, L.L.C., 134 S. Ct. 843, 845 (2014).

³⁸ See Octane Fitness, L.L.C. v. ICON Health & Fitness, Inc., 134 S. Ct. 1749, 1751 (2014); Highmark, Inc. v. Allcare Health Mgmt. Sys., Inc., 134 S. Ct. 1744, 1745 (2014).

³⁹ Alice Corp. Pty. Ltd. v. CLS Bank Int'l, 134 S. Ct. 2347 (2014).

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Court established a test that will be difficult for many of the existing software and business method patents to meet.⁴⁰ In fact, in the first four months after the Supreme Court's decision, the lower courts rejected fifteen patents as failing to satisfy patentable subject matter under the *Alice* test.⁴¹

The impact of the *Alice* decision will be heightened by new procedures for post-grant review of patents. As part of the 2011 patent reform legislation, known as The America Invents Act, parties can now petition the Patent and Trademark Office to review the validity of patents that have been granted with procedures that were not previously available. Although complex and costly, these post-grant review opportunities will allow companies to challenge software and business method patents that were granted by the Patent and Trademark Office in the decades prior to *Alice*.

In short, the outpouring of information and public attention has prompted activity at a variety of state and federal levels. Taken together, these common law, legislative, and regulatory actions represent a remarkably swift motion in the normally glacial legal landscape.

III. WHAT LIES AHEAD

As legislative and regulatory activity has increased, the rhetoric has heated up as well. Commentary has been advanced with a vehemence normally reserved for debates about topics such as abortion. It is a sign of the overheated nature of the commentary when the Supreme Court is attacked as "political" for its patent decisions and commentators are called "those who want to destroy the patent system."42 Although I do not always agree with decisions rendered by the Supreme Court, for example, the Court's patent rulings certainly are not subject to the lobbying donations that pour in during congressional deliberations. Nor do they evidence the type of ideological splits that could conceivably be termed political. In fact, all six of the patent decisions Court's this term were unanimous. Nevertheless, I offer this as a simple example of the overheated rhetoric and fury that can easily disregard the genuine

⁴⁰ See generally id.

⁴¹ Dan Liu & Glaser Weil, A Sea Change After 'Alice': Recent Court Decisions Show Patents Are Vulnerable Under Section 101 Attack, LAW.COM (Oct. 30, 2014), http://www.law.com/sites/jdsupra/2014/10/30/a-sea-change-after-alice-recent-court-decisions-show-patents-are-vulnerable-under-section-101-attack/?slreturn=20150116141543.

⁴² Gene Quinn, Silicon Valley's Anti-patent Propaganda: Success at What Cost?, IP WATCHDOG (Oct. 12, 2014, 10:00 AM), http://www.ipwatchdog.com/2014/10/12/silicon-val leys-anti-patent-propaganda-success-at-what-cost/id=51643/.

challenges faced by the patent system in this period of intense change.

The challenges are mammoth, indeed. The modern non-practicing entity business model has rapidly changed the patent landscape in a remarkably short period of time. As I have noted in comments to various government bodies, in theory, monetization could serve positive economic ends by providing market mechanisms so that those who patent ideas could connect with those who could translate the ideas into products. The ways in which patent monetization is playing out at the moment, however, are troubling. Opportunities for anti-competitive behavior are rampant and, for the most part, the system seems to operate primarily as a tax on current production, rather than as a mechanism for bringing forth new products. It is these perspectives that seem most troubling.

The changes rendered in recent years—including post-grant review procedures, tighter requirements for patent validity, and increased possibility for fee awards in "exceptional cases"—all have the effect of shifting the bargaining leverage for those who receive patent demands. The changes do not, however, go to the heart of the problems that have emerged as the non-practicing entity business model has accelerated. In addition, the patent system remains a complex and byzantine affair—one that is primarily for the well-heeled and not for the faint of heart. Small players can easily be trampled, and little in either the current patent system or in the patent reforms will help such a problem.

The pace of change in the patent landscape—not to mention the impact of those changes—is occurring at an extraordinary rate. The question is whether we can tone down the rhetoric and manage to do anything that has a lasting impact on the problems created. On that question, the jury is still out.

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