PATENT REFORM IN 2015

BUILDING A STRONGER, FAIRER SYSTEM FOR ALL

Patent litigation abuse is a real problem, and one that disproportionately targets startups and small businesses. This so-called troll problem is an acute and growing menace that adversely impacts the operations and viability of companies who can afford these threats the least. Since startups and small businesses are key drivers of innovation and job growth, troll threats against them are particularly stifling of American economic growth and prosperity. Trolls cost the U.S. economy at least $29 billion per year.[1]

For instance, one well-known patent troll, MPHJ, sent scores of demand letters to startups and small businesses that employed office scanners[2]. MPHJ alleged that basic tasks like scanning and emailing a document violated their patents. Using litigation-proof shell companies, MPHJ demanded licensing fees from targets across the country, seeking payments on the order of $1,000 for each employee. MPHJ is not alone. ArrivalStar continues to wreak havoc, targeting all entities that use tracking technology, from retailers like Home Depot to municipal transit systems like Port Authority of New York and New Jersey.[3] And DietGoal LLC filed lawsuits non-stop against anyone offering an online meal planning widget or recipe database.[4]

Trolls exploit poor quality patents and a litigation system that is stacked in their favor to extract pre-litigation nuisance settlements from vulnerable startups, typically with baseless claims. They hide behind shell companies in order to exploit uncertainty about patent ownership and ambiguity about what their patents purport to cover. Without any due diligence, they routinely send demand letters alleging infringement to multiple parties, on a wholesale and indiscriminate basis, demanding settlement payments from their innocent prey. The troll abuse problem is exacerbated by the fact that trolls amass and deploy poor quality patents—vague, abstract, or overly broad patents that fail to meet the law's requirements –-that were erroneously issued in the first place.

This chokehold on innovation requires a multi-pronged set of remedies; the courts, the Patent and Trademark Office (PTO), and Congress each must play an essential role. The Supreme Court has taken significant steps on the judicial front, issuing several key decisions that clarify and strengthen patent quality, particularly the requirements for patent eligibility. *If* rigorously

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[1] Bessen, James and Michael Meurer. "The Direct Costs from NPE Disputes." 28 June 2012. *Cornell Law Review*, Vol. 99, 2014, forthcoming. Boston Univ. School of Law, Law and Economics Research Paper No. 12-34: p. 2. https://www.bu.edu/law/faculty/scholarship/workingpapers/documents/BessenJ_MeurerM062512rev062812.pdf.

[2] Mullin, Joe. "Meet the nice-guy lawyers who want $1,000 per per worker for using scanners." Ars Technica, 7 April 2013. http://arstechnica.com/tech-policy/2013/04/meet-the-nice-guy-lawyers-who-want-1000-per-worker-for-using-scanners/.

[3] Mullin, Joe. "A new target for tech patent trolls: cash-strapped American cities." Ars Technica, 15 March 2012. http://arstechnica.com/tech-policy/2012/03/a-new-low-for-patent-trolls-targeting-cash-strapped-cities/. *See also*, Letter from Rep. Daniel Lipinski (D-IL) to FTC Chairwoman Edith Ramirez, 25 June 2013. https://www.eff.org/files/lipinski_ltr_ftc.pdf.

[4] Masnick, Mike. "Patent Holder Sues Basically Anyone Who Offers Recipes Or 'Meal Planning' Online." TechDirt, 15 June 2012. https://www.techdirt.com/articles/20120615/03122319332/patent-holder-sues-basically-anyone-who-offers-recipes-meal-planning-online.shtml.

implemented by the PTO and by other courts, these decisions should have the effect of improving the quality of prospective patents. However, the decisions will have little impact on the many already-issued patents in trolls' arsenals.

It's important to note that patent quality is but one side of the troll equation. Trolls thrive because of a grossly uneven patent litigation playing field that incentivizes and rewards frivolous claims. Only legislation can change that. We need a robust reform bill that contains all of the core elements in the House's 2013 Innovation Act, reintroduced in 2015 as HR9, giving startups, small businesses, and even individuals an equal chance to have their day in court when faced with a troll threat. Unless these reforms are enacted, patent trolls will force startups to drain critical energy and resources away from the business of innovating and creating jobs.

I. THE IMPACT OF TROLL ABUSE ON STARTUPS AND INNOVATION

Startups and small businesses develop breakthrough technologies that fuel innovation and drive economic growth and job creation. In fact, research shows that startups are responsible for all net new job growth in the United States.[5] So trolls' crushing impact on startups reverberates throughout the ecosystem, impeding innovation and hurting the U.S. economy at large.

Research also shows that startups bear the brunt of troll abuse[6] and the impact of troll threats on startups is disproportionately severe: 82 percent of troll activity targets small and medium-sized businesses, and 55 percent of troll suits are filed against startups with revenues of less than $10 million.[7] Generally lacking in resources to decipher vague and often bogus demand letters, startups are vulnerable to extortion. They cannot afford to jeopardize their business to fight back.

Trolls' impact on startup operations is acute: a very high percentage of startups who received a demand letter reported "significant operational impact" in the form of deferred hiring, change in strategy, cost-cutting, reductions in personnel, decreased valuation or total shut-down.[8] This adverse impact has ripple effects throughout the innovation ecosystem.

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[5] Hathaway, Ian. "Tech Starts: High-Technology Business Formation and Job Creation in the United States." Kauffman Foundation Research Series: Firm Formation and Economic Growth, August 2013. http://www.kauffman.org/~/media/kauffman_org/research reports and covers/2013/08/bdstechstartsreport.pdf.

[6] Savitz, Eric. "Are Patent Trolls Now Zeroed In On Start-Ups?" Forbes, 17 January 2013. http://www.forbes.com/sites/ciocentral/2013/01/17/are-patent-trolls-now-zeroed-in-on-start-ups/.

[7] Chien, Colleen V. "Patent Assertion Entities." Presentation to the Dec 10, 2012 DOJ/FTC Hearing on PAEs, 10 December 2012. http://ssrn.com/abstract=2187314.

[8] Chien, Colleen. "Startups and Patent Trolls." 28 September 2012. *Stanford Technology Law Review*, forthcoming. Santa Clara University Legal Studies Research Paper No. 09-12: p.2. http://ssrn.com/abstract=2146251.

The economic incentives in the troll model are clear: a bare bones and vague demand letter provides immediate low-risk, low-cost leverage over a startup, even when the claim is baseless. It can easily cost a startup $50,000 just to simply hire a patent lawyer to evaluate demand letter claims. Litigation costs range between $1 million and $6 million, and can mean life or death for a fledgling business.[9] So startups often capitulate, and lay off an employee or hire one less programmer in order to pay off the troll. For example, Ditto, a virtual eyewear company, had to lay off four of its 15 employees in response to a troll demand. Although the infringement claim was dismissed, the suit resulted in a reduction in Ditto's valuation of $4 million.[10]

The mere threat of troll suits has chilling effects on the investment community. In a survey of 200 venture capitalists, 100 percent indicated that the presence of a patent demand could be a major deterrent in deciding whether to invest.[11] It is estimated that VC investment in startups would have been $8 billion higher but for troll threats in the last five years alone.[12]

Yet, trolls paint themselves as the champions of the small guys, as legitimate entities who help independent inventors monetize their patents by enforcing them on the inventor's behalf. In fact, trolls increasingly *target* small entities, and statistics show that very little of a patent troll's revenue is transferred to actual inventors.[13] Patent trolling activities are associated with half a trillion dollars of lost wealth to their victims—largely startups and small businesses—from 1990 to 2010 alone.[14]

II. BAD PATENTS ARE KEY DRIVERS OF TROLL SUITS

Trolls frequently assert poor quality patents—improperly issued patents that would likely be invalidated if challenged. Poor quality patents are especially common in the software space and are often patents on so-called business methods. These patents are often so vague and broad or lacking in clear boundaries that it is impossible to determine what the patent claims to cover; such patents are trolls' favorite weapons. In fact, Internet patents are between 7.5 and 9.5 times more likely to be litigated than non-Internet patents, and they are much more likely

[9] Lee, Ben. "Twitter: It's time for patent trolls to bear the cost of frivolous lawsuits." GigaOm, 8 October 2012. https://gigaom.com/2012/10/08/twitter-time-for-trolls-to-pay-full-price-for-patent-mischief/.
[10] Mullin, Joe. "New Study Suggests Patent Trolls Really Are Killing Startups." Ars Technica, 11 June 2011. http://arstechnica.com/tech-policy/2014/06/new-study-suggests-patent-trolls-really-are-killing-startups/.
[11] Feldman, Robin. "Patent Demands & Startup Companies: The View from the Venture Capital Community." 28 October 2013. UC Hastings Research Paper No. 75: p. 11. http://ssrn.com/abstract=2346338.
[12] Tucker, Catherine. "Patent Trolls and Technology Diffusion." 23 March 2014. Massachusetts Institute of Technology, Management Science, Working Paper, 201. http://ssrn.com/abstract=2136955.
[13] Bessen, James, and Michael Meurer. "Patent Trolls in Public." Patently-O, 19 March 2013. http://patentlyo.com/2013/03/patent-trolls-in-public.html..
[14] Bessen, James, Jennifer Ford, and Michael Meurer. "The Private and Social Costs of the Patent Trolls." 19 September 2011. Boston Univ. School of Law, Law and Economics Research Paper No. 11-45, p. 17. http://ssrn.com/abstract=1930272.

to be invalidated.[15] When actually litigated, Internet patents were upheld in only three percent of cases. [16] In other words, these patents are at least partially invalidated in court well over 90 percent of the time. Moreover, an increasing number of these patents are being invalidated through the PTO's post grant review proceedings. This high invalidation rate also underscores the poor quality of these patents. However, the PTO procedures, though operating as intended, do not scale enough to have much effect on the troll business model.

III. THE STATUS OF REFORM EFFORTS

Recognizing that patent troll abuse harms innovation and serves as a tax on startups and businesses, the Obama Administration called for comprehensive patent reform legislation to curb abuse, and made other recommendations for the PTO to improve patent quality. In December 2013, the House of Representatives passed a strong patent reform bill—the Innovation Act—by a 325-91 margin. The Senate considered its own bill last year and was poised to mark up compromise legislation in May, until Majority Leader Reid signaled his intent to sideline the bill under pressure from special interests opposed to reform.

Since then, President Obama has reiterated his call for robust patent reform legislation; a bipartisan coalition in the House led by House Judiciary Committee Chairman Goodlatte reintroduced the Innovation Act (HR9); and newly elected Republican Senate leaders have joined senators on both sides of the aisle vowing to pass patent reform in this Congress. While there have been positive developments in the courts and at the PTO, the impact of these decisions is limited to the tiny fraction of bad patents that are actually challenged. They have little impact on bad behavior. Furthermore, most trolling occurs pre-litigation and remains veiled in secrecy, rendering the full scope of the problem not impossible to quantify.

IV. WHY WE NEED PATENT REFORM LEGISLATION

Only legislation can deter trolls from exploiting a stacked litigation deck to extort settlements. Congress must therefore pass a strong patent reform bill that removes existing incentives to assert bad patents and creates a level litigation playing field for all inventors. Such legislation must include the following:

- Because trolls often hide behind shell companies, the bill must require transparency of a patent's ownership so startups know exactly who is threatening them, can access

[15]Allison, John, et al. "Patent Litigation and the Internet." 20 January 2012. *Stanford Technology Law Review 3*, p. 4. http://stlr.stanford.edu/pdf/allison-patent-litigation.pdf.
[16] *Ibid.*, p. 27.

information about whom else a troll may be suing with the same patent, and can better evaluate how to respond.

- Because current patent litigation rules allow for the initiation of a lawsuit on the basis of a bare-bones form filing, legislation is needed to raise pleading standards to require the identification of claims asserted and the nature of alleged infringement before a troll is able to drag a startup into court.
- Because the high cost of discovery is a cudgel of leverage, legislation should place reasonable limits on discovery, allowing discovery of core documents but staging additional discovery until after the court determines what a disputed patent actually covers. Courts should also be able to shift the costs of extra discovery as appropriate, so that essentially the entire burden does not fall on the defendant.
- Because current law allows for the awarding of attorneys' fees only in "exceptional" cases, a startup has almost no chance of recovering fees and costs even if it fights and wins. The bill must give judges real discretion to award attorney fees and costs to a prevailing party when the behavior and conduct of a losing party was not objectively reasonable or substantially justified. A fee-shifting provision like this should in no way discourage or hamper the ability of a patent holder to assert any valid claims, but would provide some downside risk to trolls who are otherwise free to engage in frivolous litigation with impunity. The fee-shifting provision must be accompanied by a provision that enables the party to whom fees are awarded to recover by holding the real party in interest liable; otherwise, the fee-shifting provision would be toothless against a shell plaintiff with no assets.[17]
- Because trolls are increasingly suing consumers and other users for infringement to gain further leverage, the bill must shield innocent users with a "customer stay" provision that halts such actions and allows manufacturers to defend the infringement allegations.
- Because trolls notoriously deploy abusive and opaque demand letters that lack any information about the alleged infringement, the bill must include provisions that require specificity and clarity in demand letters. This will allow startup targets to understand why they are being threatened, how they are alleged to be infringing, and whether the claim has any merit.

[17] Lumen View's suit against FindTheBest is a case in point. The judge found the patent invalid and ordered the plaintiff to pay FindTheBest's legal fees and costs, deeming the case "exceptional" because of LumenView's egregious behavior. But FindTheBest has been unable to collect the fees awarded by the court because the plaintiff is a shell entity with no assets. Attempting to pierce the corporate veil to hold the ultimate owners liable could end up costing more than the fee award. FindTheBest has the resources to fight the case through litigation whereas most startupstartups don't, and even they have been unable to collect the attorney fees awarded by the court. (Mullin, Joe. "Patent troll ordered to pay $300K to FindTheBest in 'matchmaking' case." Ars Technica, 29 October 2014. http://arstechnica.com/tech-policy/2014/10/patent-troll-ordered-to-pay-300k-to-findthebest-in-matchmaking-case/.)

- Because the ability of threatened startups to petition the PTO to review and potentially rescind patents is limited in scope, the bill should include provisions that would expand the PTO's to review low-quality patents that are vague, abstract, or overly-broad.

We need legislation that contains all of these core elements to reduce existing incentives in the patent assertion system that enable trolls to threaten startups with baseless infringement claims. Unless these patent litigation reforms are enacted, patent trolls will continue to be free to exploit dubious patent claims and the high cost of litigation to extort settlements from startups.

V. THE COURTS AND THE PTO MUST CONTINUE TO IMPROVE PATENT QUALITY

It is clear that bad patents play a central role in the troll business model, and the courts and the PTO must continue to wrestle with clarifying standards and rigorously implementing them in reviewing issued patents and issuing new ones. A series of recent Supreme Court decisions has clarified and strengthened standards on patentability, but the impact of these decisions is limited to the tiny percentage of cases that are litigated or challenged through the PTO's post-grant proceedings. Even then, their impact will depend on the extent to which lower courts vigorously enforce these requirements and the extent to which the PTO adopts and rigorously implements these rulings at every stage of the examination process.

The Supreme Court issued six unanimous patent rulings in 2014. In *Alice Corp v CLS Bank*, the Court found the abstract business method patents involved invalid and declared them to be ineligible subject matter. In doing so, the Supreme Court sent a strong message that Internet patents need to do "substantially more" than to take an abstract idea and generically implement it on a computer or on the Internet. The Court did not invalidate software patents or business method patents per se, but the decision has cast doubt on the validity of these types of patents because so many are based on abstract or obvious ideas merely implemented on a computer or on the Internet.

Since the *Alice* decision in June 2014, the lower courts, including the Federal Circuit, have invalidated a string of "do it on a computer" patents. There is also some early evidence that the PTO is rejecting software patents at a higher rate in light of *Alice*. It is imperative that the courts and the PTO rigorously apply the requirements of *Alice*; but even if they do, improperly issued patents will continue to pose a real threat to startups. Hundreds of thousands of software patents have been issued and most will never be challenged in court or at the PTO. In fact, the majority of post-grant proceedings at the PTO explicitly do not allow a party to challenge patents on these grounds. So there is nothing in the *Alice* decision, or any other

decision, that makes it any harder for bad actors to assert patents to extract nuisance settlements.

In another important case, *Nautilus v Biosig*, the Supreme Court raised the standard for "definiteness," or specificity and clarity, in patent claims. Patents are required by law to include clear boundaries in order to serve its notice function. The *Nautilus* decision should make it easier to invalidate vague patents that lack clear boundaries. More specific claims are essential for effective technology transfer and putting the public on notice of what has actually been invented.

If properly implemented, these cases should help startups that face patent threats. *Alice* will enable the PTO to reject claims on abstract business methods that do not meet the "substantially more" test. This will be a useful tool since startups are particularly likely to be sued on these types of patents. The *Nautilus* decision should similarly encourage the PTO to reject claims that do not have clear and definite boundaries. Startups typically get demand letters with vague assertions of infringement based on patents that would be invalidated under *Nautilus*. The PTO has a clear mandate from the Court to ensure that vague or broad claims that reach beyond the actual invention are rejected. [18]

The PTO must also uphold its end of the bargain. It should adopt a more rigid standard for "functional claiming." It's not a coincidence that patent trolls use software patents as their weapon of choice. Indeed, one of the reasons those patents are the most dangerous is that they are so vague and so broad. Many patents lay claim to all possible approaches to a problem, instead of the specific solution proposed by the inventor. This is known as functional claiming and is endemic to software. Imagine this in the context of a different field: if for example, someone tried to claim any arrangement of molecules in a pill to cure headaches without specifying the composition that accomplished that goal. The resulting dangers are obvious.

This functional claiming problem can be fixed by requiring patent applicants to claim their particular solutions and how to actually implement those solutions (e.g., specific algorithms or even code) that accomplishes a task. In addition to functional claiming, the PTO should adopt better measurements of patent quality. The current measures essentially assume that if the PTO is taking the steps it believes to be necessary, patent quality will be satisfactory. We

[18] These cases do not address the patent troll's other most favored weapon: the outrageous costs of patent litigation. Patent litigation is notoriously expensive, of course, and trolls exploit this. While one important Supreme Court case, *Octane Fitness v. Icon*, addressed at least some of this problem, it's so far had limited effect. The Court held that a judge could make a loser pay a winner's legal fees in "exceptional" cases, but, unfortunately, troll cases are no longer "exceptional." Furthermore, troll-friendly districts, such as the Eastern District of Texas, consistently deny attorneys' fees even in light of *Octane*.

believe the current quality metrics would greatly benefit from the introduction of more objective, and ideally external, criteria.

The PTO must continue to strive to improve patent quality by rigorously applying the law, and the courts must continue to enforce all of the requirements of the law as now clarified by the Supreme Court. But those alone are insufficient remedies, and only comprehensive legislation can remove the existing incentives in the litigation system that enable troll activity.

VI. REFORM LEGISLATION WOULD HAVE NO EFFECT ON PATENT HOLDERS ASSERTING VALID PATENTS OR GOOD FAITH CLAIMS

Opponents of robust reform legislation argue that the proposed changes in the law would have the unintended consequence of making it harder to assert valid claims. In fact, nothing in proposed comprehensive reform legislation would hinder an inventor from monetizing, asserting, or enforcing valid patents, or making claims that are substantially justified or objectively reasonable. Versions of legislation that we've seen so far, particularly the Innovation Act, strike the right balance and ensures that the bill in no way prejudices valid patents or meritorious claims made in good faith. The fact remains that the litigation playing field under current law is disproportionately skewed in favor of patent holders. It is therefore not surprising that companies that are likely to be patent plaintiffs, and the patent bar—which profits from ballooning patent litigation—would exaggerate potential unintended consequences in an effort to maintain their own existing advantages. Needed comprehensive legislation would create an equal playing field for plaintiffs and defendants; its passage is essential to curbing abuse and giving startups a fair shot at defending themselves against frivolous suits that extort inventors. If the 114th Congress is to enact any bipartisan legislation next year, patent reform must be at the top of the list. It is time for the President to sign meaningful legislation into law in order to relieve startups of this crushing threat and barriers to innovation.

About Engine

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