

Before the

FEDERAL TRADE COMMISSION

Hearings on Competition and Consumer Protection
in the 21st Century

Session #4:
Innovation and Intellectual Property Policy

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Engine Advocacy (“Engine”) submits this comment in response to the Federal Trade Commission’s Request for Public Comment on its Hearings on Competition and Consumer Protection in the 21st Century. The comment specifically concerns [the fourth session](#) on innovation and intellectual property policy held on October 23rd and 24th, 2018. Engine believes that the FTC plays an important role in promoting balanced intellectual property policy that ensures thriving competition and an innovative economy.

Engine is a nonprofit technology policy, research, and advocacy organization that bridges the gap between policymakers and startups. Engine works with government and a community of high-tech, growth-oriented startups across the nation to support the development of technology entrepreneurship. These startups are among the most innovative and fastest-growing companies in the country; they work to fundamentally alter and challenge entrenched business models, ideas, and institutions across all industries. Engine has previously participated in a variety of government proceedings relating to intellectual property policy, including submitting comments on the White House’s development of the Joint Strategic Plan for Intellectual Property Enforcement,¹ providing amicus briefs to the Supreme Court and other courts on the impact of patent law on innovation,² testifying before Congress on the impact of bad patents on American business,³ and others.

I. Patents

A. *Improving the Quality of Patents Issued by the Patent and Trademark Office*

Startups across the country are the engines of innovation and economic growth.⁴ Some startups apply for patents to protect their intellectual property, and they see patents as important

¹ Comments of Engine to the White House Intellectual Property Enforcement Coordinator on the Joint Strategic Intellectual Property Enforcement Plan, Nov. 13, 2018, <https://www.recreatecoalition.org/wp-content/uploads/2018/11/Engine-IPEC-Comments-re-Joint-Strategic-Plan-2018.pdf>.

² See, e.g., Brief of Amicus Curiae Engine, *Samsung Electronics Co. v. Apple*, 137 S. Ct. 429 (2016) (No. 15-777); Brief of Amicus Curiae Engine, *HP Inc. v. Berkheimer* (U.S. Nov. 13, 2018) (No. 18-415).

³ *The Impact of Bad Patents on American Businesses: Hearing Before the H. Subcomm. On Courts, Intellectual Prop. & the Internet*, 115th Cong. 4 (2017) [hereinafter *Hearing*] (statement of Julie P. Samuels, President of the Board, Engine), https://judiciary.house.gov/wp-content/uploads/2017/07/Samuels_Written_Testimony_Bad_Patents_July2017.pdf

⁴ See, e.g., Tim Kane, Kauffman Found., *The Importance of Startups in Job Creation and Job Destruction* 2 (2010), <https://perma.cc/ZXW2-MH24> (explaining small business are responsible for all net job growth); Kathryn Kobe, U.S. Small Bus. Admin., *Small Business GDP Update 2002-2010* (2012), https://www.sba.gov/sites/default/files/rs390tot_1.pdf (finding small business are responsible for nearly 50% of GDP); Bay Area Econ. Council Econ. Inst., *Technology Works: High-Tech Employment and Wages in the United States* (2012), <http://documents.bayareacouncil.org/TechReport.pdf> (finding every new high-tech job creates 4.3 additional jobs in the surrounding community); U.S. Bureau of Labor and Statistics, *Table G. Distribution of Private Sector Firms by Size Class: 1992/Q1 Through 2018/Q1, Not Seasonally Adjusted* (June 19, 2018), https://www.bls.gov/web/cewbd/table_g.txt (reporting startups created 1 million jobs in 2017 alone). See generally, Ian Hathaway, Kauffman Found., *Tech Starts: High-Technology Business Foundation and Job Creation in the United States* (2013), <https://perma.cc/P7GX-5Y6D>.

assets in managing the risk that comes with bringing new ideas to fruition. However, many startups do not rely on patents for their business models.⁵

Indeed, numerous startups only encounter the patent system through abusive patent assertions. Patent litigation abuse is a serious problem that disproportionately affects startups and small businesses. Abusive litigation often consists of lawsuits and threats of lawsuits that invoke weak, overbroad patents—patents that should have been more carefully tailored in scope or never issued at all. As has been widely reported, these meritless patents suits are often brought by non-practicing entities (NPEs), also called patent trolls for the tolls they extract from inventors. NPEs do not produce or use the inventions covered by their patents, but rather seek to monetize their patents through litigation and through forcing as many entities as possible to pay for legally unnecessary licenses in order to avoid or settle their abusive lawsuits. NPEs have a significant bargaining advantage based on the disparity in risk, time, and operational focus between themselves and the practicing companies they target. While litigation takes away considerable time, attention, and money from the core business of practicing entities, it is the sole focus of an NPE. In short, NPEs force productive companies to pay the NPE to go away so the companies can focus on what they do best: research and innovation.

This troll problem is an acute menace that adversely impacts the operations and viability of companies that can least afford these threats. Following the implementation of the America Invents Act⁶ and recent Supreme Court decisions, such as *Alice Corp v. CLS Bank International*⁷ and *TC Heartland, LLC v. Kraft Foods Group Brands, LLC*,⁸ the negative impact of patent trolls have been reduced, but they remain a serious threat to innovation. Since startups and small businesses are key drivers of innovation and job growth, troll threats against them are particularly stifling to American economic growth and prosperity.

Research shows that startups bear the brunt of troll abuse and that the impact of troll threats on startups is disproportionately severe: as of 2012, 82% of troll activity targeted small and medium-sized businesses, and 55% of troll suits were filed against companies with revenues of less than \$10 million.⁹ Since then, trolls have only continued their targeting of small companies.¹⁰ Even the smallest of companies are vulnerable: 62% of surveyed companies with revenues of less than \$100,000 reported that an NPE had adversely impacted their business.¹¹

⁵ For a general discussion of patent law and its impact on startups, see Engine's recently issued patent booklet report. Engine, *The Strength of the American Patent System and the Impact in Startups* (2018), <http://www.engine.is/news/category/the-strength-of-the-american-patent-system>.

⁶ Leahy-Smith America Invents Act, Pub. L. No. 112-29, 125 Stat. 284 (2011) (codified in scattered sections of 37 U.S.C.).

⁷ 573 U.S. 208 (2014).

⁸ 137 S. Ct. 1514 (2017).

⁹ Colleen Chien, Patent Assertion Entities, Presentation to the Dec 10, 2012 DOJ/FTC Hearing on Patent Assertion Entities (Dec. 10, 2012), <http://ssrn.com/abstract=2187314>.

¹⁰ See *RPX Data Update: Patent Litigation Volatility Persists as Strategies Shift*, RPX (Jan. 3, 2017), <https://bit.ly/2QDMuRU> (reporting two-thirds of abusive patent assertions were against companies with revenues under \$100 million in 2016).

¹¹ Colleen Chien, *Startups and Patent Trolls*, 17 Stan. Tech. L. Rev. 461, 476 (2014).

As Justice Stevens has noted, abusive patent litigation “can take a particular toll on small and upstart businesses.”¹² The impact on startup operations is acute: a very high percentage of startups who received a demand letter reported incurring a “significant operational impact” in the form of deferred hiring, change in strategy, cost-cutting, decreased valuation or total shut-down.¹³ The time and money required to fight back against a troll could put the viability of their entire business in jeopardy.

Low quality patents are a root cause of abusive patent litigation. Trolls rely on weak and overbroad patents to extort licenses or harm potential competitors. Without these low-quality patents, they would have a much harder time threatening to bring anti-competitive, anti-innovation lawsuits. Thus, improving patent quality is the most effective way to stop pernicious litigation. Moreover, allowing low quality patents to be granted reduces confidence in the entire patent system.

As Michal Rosenn noted at the FTC’s hearing on October 24, 2018, “an average of 40,000 software patents are granted each year and those patents are often laid out in unreasonably vague terms. Take that together with the fact that there is no easily searchable index of patents nor is there a real consistency in definition used across patents. And you can see why startups and small businesses often face no chance when they are confronted with a lawsuit.”¹⁴

It is extremely difficult for small entities, including startups, to evaluate the merits of a demand letter without uniform definitions or an easily searchable database—making the endeavor cost up to \$50,000 on its own.¹⁵ This is particularly troubling when so many of the patents currently in effect never should have been issued. Startups especially are vulnerable to extortion in part because they generally lack the resources to decipher these vague and often bogus demand letters. In the words of Justice Stevens again, “[w]hen it comes to patents, ‘clarity is essential to promote progress.’”¹⁶

What is not patentable is just as important as what is patentable for a healthy patent system. As the Supreme Court has said, the public “has a ‘paramount interest in seeing that patent monopolies . . . are kept within their legitimate scope.’”¹⁷ When patents improperly issue, ideas that are rightfully in the public domain are constrained to private property. This is a serious problem, because when invalid patents issue, the ‘the public may continually be required to pay tribute to would-be monopolists without need or justification.’¹⁸ Consequently, vague, ambiguous, and overbroad patents deter innovation, even when those patents cover a patentable invention at their core. Because it is extremely difficult to invalidate a patent after issuance,

¹² *Bilski v. Kappos*, 561 U.S. 593, 656 (2010) (Stevens, J., concurring in judgement).

¹³ Colleen Chien, “Startups and Patent Trolls,” 17 *Stan. Tech. L. Rev.* 461, 465 (2014).

¹⁴ Transcript of Federal Trade Commission Hearing No. 4: Competition and Consumer Protection in the 21st Century at 84-85 (Oct. 24, 2018).

¹⁵ *Hearing* at 4.

¹⁶ *Bilski*, 561 U.S. at 655 (Stevens, J., concurring in judgement).

¹⁷ *Medtronic, Inc. v. Mirowski Family Ventures, LLC*, 134 S. Ct. 843, 851 (2014) (quoting *Precision Instrument Mfg. Co. v. Automotive Maintenance Machinery Co.*, 324 U.S. 806, 816 (1945)).

¹⁸ *Lear, Inc. v. Adkins*, 395 U.S. 653, 670 (1969).

inventors have to adapt around patents with vague boundaries.¹⁹ This is especially difficult in industries where overbroad patents proliferate. For example, one study estimates that, if challenged in court and litigated to judgment, approximately 39% of software patents would be found invalid, meaning that invalid and low-quality patents are ubiquitous and unavoidable for software engineers and startups.²⁰ Low-quality patents create patent thickets that are difficult to navigate, exacerbating transaction costs and needlessly creating liability risks, deterring innovation and investment.

For innovation to flourish, only truly novel and inventive discoveries should receive patents. Patents should not create a minefield of liability that stymies innovation; rather, they should minimize the inherent risk that comes with bringing new ideas to market and provide an appropriate incentive for innovation and entrepreneurship. High quality patents should therefore fulfill all four of the following essential characteristics:

1. *The patent must not claim any matter which is in the prior art or otherwise belongs in the public domain*
2. *The patent must have a clear scope*
3. *The patent must have a complete, detailed, and accessible file wrapper that informs the public as to the complete prosecution history of the patent*
4. *The patent must satisfy all statutory requirements*

Recommendations:

The FTC should recommend Congress undertake comprehensive patent litigation reform similar to the PATENT Act considered in 2015. Only legislation can fully deter trolls and ensure that all patents are held to high standards. Congressional reform should include the following:

- Patent Quality Standards: Congress should clarify and provide rigorous patent quality standards. Congress should require that patents have clear scopes and comprehensive, accessible file wrappers that give the public complete access to the prosecution history of a patent. These file wrappers should include an explicit record of claim construction, transcripts of all interviews between examiners and applicants, and thorough statements of reasons for allowance.
- The Patent and Trademark Office Should Prioritize Quality: The PTO should make maintaining high patent quality their number one goal. Other goals such as improving efficiency or applicant experience should only be pursued so long as there is no negative impact on patent quality. The PTO must retain its focus on being “the guardian of the public domain.”²¹

¹⁹ See, *infra*, Part I.B.

²⁰ Shawn P. Miller, *Where's the Innovation: An Analysis of the Quantity and Qualities of Anticipated and Obvious Patents*, 18 Va. J.L. & Tech. 1, 46 (2013), available at http://vjolt.org/wp-content/uploads/2017/Articles/vol18/issue1/v18i1_1-Miller.pdf.

²¹ Patent Quality Summit, U.S. Patent and Trademark Office (Mar. 26, 2015), <http://livestream.com/uspto/PatentQualitySummit> (statement of Paul Michel).

- Patentable Subject Matter: Congress should ensure that any new legislation does not weaken § 101 and the *Alice* standard for patentable subject matter. The *Alice* test for patent-eligible subject matter has proved to be an extremely effective test for screening out low-quality patents.
- Patent Trial and Appeal Board Proceedings (PTAB): Congress should broaden the scope and accessibility of PTAB proceedings by adopting the reforms presented in Part I.C below.

B. Lowering the Cost of Patent Litigation

Patent trolls exploit not only poor quality patents but also a litigation system that is stacked in their favor to extract nuisance settlements from vulnerable startups. Patent litigation is extremely expensive, and startups typically cannot afford the high costs of defending a patent suit, even if it is meritless or based on an invalid patent. Trolls take advantage of these high costs and the inability of startups to bear them.²² Trolls also sometimes hide behind shell companies in order to leverage uncertainty about patent ownership and ambiguity about what their patents purport to cover. Without engaging in good-faith due diligence, they routinely send demand letters and file suits alleging infringement against multiple parties, on a widespread basis, demanding settlement payments from their innocent targets. Trolls have also been known to target a company’s customers in an effort to extort quick settlements that would otherwise not be warranted.²³ The troll abuse problem is exacerbated by the fact that trolls typically amass and deploy poor quality patents—vague, abstract, or overly broad patents that should not have been issued in the first place.

Litigation costs range between \$1 million and \$6 million and can easily mean financial ruin for a fledgling business.²⁴ Thus, startups often have no choice but to capitulate and pay a settlement that is damagingly expensive but still less than the cost of litigation. Having spent limited funds paying off the troll, the startups are then forced to lay off employees or hire fewer programmers. For example, Ditto, a virtual eyewear company, had to lay off four of its 15 employees in response to a troll demand.²⁵ Although the infringement claim was dismissed, the suit resulted in a reduction in Ditto’s valuation of \$4 million.²⁶ Another startup, Life360, spent \$1.5 million fighting back against a patent that supposedly covered any technology that marks

²² See James Bessen, “The Evidence Is In: Patent Trolls Do Hurt Innovation,” *Harv. Bus. Rev.* (Nov. 2014), <https://hbr.org/2014/07/the-evidence-is-in-patent-trolls-do-hurt-innovation>.

²³ See generally Colleen Chien & Edward Reines, *Why Technology Customers Are Being Sued en Masse for Patent Infringement and What Can Be Done*, 49 *Wake Forest L. Rev.* 235 (2014).

²⁴ As Jim Bessen noted at the FTC’s hearing on October 24, 2018, “Since 2001, litigation costs have soared.” Transcript of Oct. 24 FTC Hearing at 262. See also, Ben Lee, “Twitter: It’s Time for Patent Trolls to Bear the Cost of Frivolous Lawsuits,” *GigaOm* (Oct. 8, 2012), <https://gigaom.com/2012/10/08/twitter-time-for-trolls-to-pay-full-price-for-patent-mischief/>.

²⁵ Marcus Wohlsen, “Patent Trolls Are Killing Startups—Except When They’re Saving Them,” *Wired* (Sept. 10, 2013), <https://www.wired.com/2013/09/patent-trolls-versus-startups/>.

²⁶ *Id.*

the location of a person on a map and calls them. Life360 won a jury trial but could have spent \$1.5 million on new jobs or development rather than fighting a frivolous patent suit.²⁷

Similarly, sometimes startups are forced to cease operations under the threat of litigation. Another startup Nutrionix, which sells calculators and databases for consumers and restaurants, was sued for potential infringement by patent troll DietGoal, which held a patent for the abstract idea of having a picture of a menu on a computer. Because of this baseless threat, Nutrionix withheld sales of its nutrition calculator. However, after the Supreme Court's crucial ruling in *Alice Corp. v. CLS Bank International*, 573 U.S. 208 (2014), DietGoal's patent was ruled invalid and Nutrionix was able to reenter the market. It then hired eight new employees.²⁸

This chokehold on innovation requires a multi-pronged set of remedies. The courts, the 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.²⁹ If rigorously implemented by the PTO and by lower courts, these decisions should continue to have the effect of improving the quality of prospective patents. However, the decisions will have little impact on the many existing patents in trolls' arsenals and on a litigation system that is unbalanced and unfair. Reform from Congress is needed.

Recommendations:

The FTC should recommend Congress undertake comprehensive patent litigation reform similar to the PATENT Act considered in 2015. Only legislation can deter trolls from exploiting a litigation deck stacked against startups to extort settlements. Patent reform should include the following reforms:

- **Transparency:** Patent owners should be required to disclose ownership post-issuance and throughout the life of the patent. Mandatory disclosures must include the specific names of patent owners rather than merely listing shell entities, so startups know exactly who is threatening them, can access information about who else a troll may be suing, and can better evaluate how to respond.
- **Demand Letters:** Demand letters must include specific and clear basic information about the infringement claim (e.g. the patent at issue and the purported infringement at issue) and should not make false claims about the patent holder's rights to the patent.

²⁷ *Hearing* at 11.

²⁸ *Hearing* at 17.

²⁹ While one important Supreme Court case, *Octane Fitness v. Icon*, 572 U.S. 545 (2014), addressed at least some of this problem, it has 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." *Id.* at 557-58. Another Supreme Court decision, however, has resulted in a somewhat improved environment for startups. *TC Heartland LLC v. Kraft Foods Group Brand LLC*, 137 S. Ct. 1514 (2017), interpreted the patent venue statute in a way that will often make it harder for small companies to be sued far from where they mainly operation, which would help cut down on litigation costs.

- Heightened Pleading Standard: At the outset of litigation, parties should be required to disclose all important basic information available, such as how a patent is infringed, what products allegedly infringe it, and who owns that patent. This information is easily known to any patent holder at the outset of any bona fide claim of infringement. Yet startups are often left with no choice but to hire a lawyer to try to understand the scope of the threat they face, which can cost tens of thousands of dollars. Many startups are left no choice but to turn to outside counsel because they don't have an in-house lawyer, let alone one who specializes in patents. These heightened standards will not hurt legitimate plaintiffs. If a party legitimately cannot find some of this information after making a "reasonable inquiry," it should still be able to file suit, providing protection both for patent holders that are acting reasonably and for startups accused of infringement.
- Standard for Injunctions: Congress should maintain the *eBay* standard for injunctions. Proposals that would permit automatic or even easier injunctions in patent litigation would allow courts to unnecessarily halt the sale and manufacture of goods that depend on patents. Startups would be particularly hurt by automatic injunctions because a troll could gain tremendous leverage by threatening to stop, or stopping, a product from being manufactured or sold with a frivolous lawsuit.
- Discovery: Discovery should be stayed until after a court has a chance to hear early dispositive motions. The high cost of discovery serves as leverage against cash-strapped startups. A statute should provide reasonable limits on discovery to those documents directly related to the litigation and cap discovery costs by enabling the court to determine what the disputed patent covers and the scope of the claims.
- Fee-Shifting: Fees should be awarded to the winning party if a court determines that a losing party's position was not "objectively reasonable." Startups currently have almost no chance of recovering fees and costs even if they choose to fight and ultimately win. It is nearly impossible for most startups to find the resources to fight a patent suit, but the opportunity to recoup litigation expenses at the end of a litigation would make securing those resources easier. Moreover, provisions should be included that enable the real party in interest to be held liable for any costs assigned to shell entities. Specifically, a party that does not make or sell anything utilizing its patents should be required to show that it can pay fees if they are awarded. Only with this incentive can many startups afford to take on a troll threat, which would then serve to discourage bad-faith actors from bringing frivolous cases in the first place.
- Customer Liability: Customers should not be held liable for infringement. Because trolls are increasingly suing consumers and other users for infringement to gain further leverage, innocent users should be protected with a "customer stay" provision that halts such actions and allows manufacturers to defend the infringement allegations. Manufacturers should be able to actively step in on behalf of customers if customers are threatened with litigation for patent infringement from purchasing a good that allegedly infringes on a patent.

C. Improving Patent Trial and Appeal Board Proceedings

The Patent Trial and Appeal Board (PTAB) at the PTO serves an especially important role in the patent system and should be protected and expanded in any IP and innovation policy proposal. PTAB proceedings allow the public to challenge the validity of a patent. Of the three types of PTAB proceedings, Inter Partes Review (IPR), Post-Grant Review, and Covered Business Method (CBM) Reviews, IPRs account for 92% of the proceedings.³⁰ The PTAB is an essential backstop for ensuring patent quality because PTAB proceedings both (1) allow the PTO to correct errors after incorrectly issuing a patent and (2) provide opportunities to reassess the validity of a patent as the legal standards for patentability are clarified over time through the common law process. Thus, PTAB proceedings are extremely important for the health of the patent system as they prevent the proliferation of the weak patents that facilitate abuse and anti-competitive behavior.

IPRs and the other PTAB proceedings are much cheaper than full-blown litigation in district court, allowing more entities to challenge invalid patents. For example, IPRs allow startups to challenge meritless patent threats or lawsuits that they otherwise could not afford to litigate, allowing those startups to resolve questions of potential liability without having to pay for litigation or a legally unnecessary license. IPRs have allowed plaintiffs and defendants save at least \$2.31 billion by providing an efficient avenue of challenging a patent's validity.³¹ IPRs also are much faster than district court litigation; most are resolved within one year of their initiation.³² Since IPRs became available following the implementation of the America Invents Act in 2013, startup activity has increased by a staggering 194%, R&D spending has increased by 44%, and venture capital funding has grown by 86%.³³ PTAB proceedings are an important ingredient to a thriving national startup ecosystem.

However, IPRs can still cost around \$250,000 in legal fees,³⁴ which—while much less expensive than district court litigation—is still prohibitively expensive for many startups. Therefore, it is important to continue working to reduce the cost of PTAB proceedings.

Covered business method review (CBM) provides an effective way to revoke patents that are invalid under *Alice*. CBM allows for the review of patents claiming methods of performing data processing and other operations relating to financial product and services, which frequently are weak, vague, and overbroad. However, CBM is currently only available as a response to a patents asserted within nine months of the patent's issuance, greatly limiting its applicability.

³⁰ *Trial Statistics: IPR, PGR, CBM*, Patent & Trademark Office, 3 (Dec. 2017), https://www.uspto.gov/sites/default/files/documents/Trial_Statistics_2017-12-31.pdf.

³¹ Josh Landau, *Inter Partes Review: Five Years, Over \$2 Billion Saved*, Patent Progress (Sept. 14, 2018), <https://www.patentprogress.org/2017/09/14/inter-partes-review-saves-over-2-billion/>.

³² 35 U.S.C. § 316(a)(11) (explaining that all IPRs must be resolved within a year unless the Director of the PTO grants a six month extension)

³³ High Tech Innovators Alliance, *An Open-Letter: Innovation is Thriving*, (June 29, 2018), https://docs.wixstatic.com/ugd/3929b0_74c746db8c9e4c-f9ad37421bb614ec02.pdf

³⁴ Joe Mullin, “New Patent Review Process Has Saved Billions—So Why Is It Under Attack?,” *Ars Technica* (Sept. 19, 2017), <https://arstechnica.com/tech-policy/2017/09/new-patent-review-process-has-saved-billions-so-why-is-it-under-attack/>.

Despite some alarmist commentary, serial IPR abuse is simply not real. Procedurally, abuse is prevented because the PTAB's estoppel rules require a party to bring all claims in an initial claim filing or forfeit them. And practically, IPRs serve simply as an alternative to more expensive district court litigation reducing the burdens of legal fees in patent litigation. They do not provide new causes of action, but simply replace district court litigation that would otherwise be more expensive.³⁵

Indeed, only 0.002% of active patents have been subjected to IPR proceedings as of the end of 2016. The vast majority of IPRs are in the areas of technology where weakest and improperly granted patents are most common.³⁶ Only 7% of IPRs were in pharmaceuticals and biotechnology, where patents tend to be clearer and narrower in scope.³⁷ In 2016, approximately 65% of all PTAB petitions were challenging patents owned by non-practicing entities.³⁸

IPRs are not a threat to small companies. Indeed, the opposite is true: small companies and startups rely on IPRs to effectively defend against abusive patent litigation within financial constraints.

Recommendations:

The FTC should recommend that Congress build on the success of PTAB proceedings by making it easier for startups and small companies to initiate such proceedings and invalidate patents that never should have been issued. Congress should direct the PTO to enact the following reforms:

- Reduce PTAB Instigation Fees: The PTO should lower the fees that small and micro entities (i.e. small business and independent inventors) must pay to instigate PTAB proceedings. Currently, the PTO has reduced fees for small and micro entities during patent prosecution and for some PTAB filings. However, small business and independent inventors must pay the same fees for instituting PTAB proceedings; the cost to simply begin a PTAB proceeding can be as much as \$38,000, creating substantial barriers to the use of these proceedings.³⁹
- Expanding Covered Business Method Reviews: CBM reviews should be extended so that they are available for all patents that were issued before the *Alice* decision in 2014, instead of being limited to patents issued within the previous nine months. *Alice*

³⁵ Indeed, over 86% of IPR petitions are related to patents that are already being litigated. Saurabh Vishnubhakat & Arti K. Rai, *Strategic Decision Making in Dual PTAB and District Court Proceedings*, 31 Berkeley Tec. L.J. 45, 69 (2016).

³⁶ Transcript of Federal Trade Commission Hearing No. 4: Competition and Consumer Protection in the 21st Century at 85 (Oct. 23, 2018) (comment of Michal Rosenn).

³⁷ *Id.* at 86.

³⁸ *2016 Annual Patent Dispute Report*, Unified Patents, fig. 13 (Jan. 1, 2017), <https://www.unifiedpatents.com/news/2016/12/28/2016-annual-patent-dispute-report>.

³⁹ See 37 C.F.R. § 42.15; USPTO Fee Schedule, U.S. Patent & Trademark Office (Jan 16, 2018), <https://www.uspto.gov/learning-and-resources/fees-and-payment/uspto-fee-schedule>.

dramatically clarified the law governing the patentable subject matter eligibility of business methods, and all covered business methods should be reviewable in light of the clarified law.

- Expanding Inter Partes Review: IPRs should allow for patents to be challenged under § 101 and § 112, bases currently prohibited under 35 U.S.C. § 311(b). This would allow the PTO to correct mistakes where patents are improperly granted because they either cover ineligible subject matter (§ 101) or contain an inadequate written description (§ 112).

II. Copyright

A. *Avoiding the Harms of Overbroad Copyright*

The United States currently is home to the world's most vibrant, innovative, and successful software companies. These successes were largely made possible by the United States maintaining balance in its copyright regime rather than adopting an overly aggressive approach to copyright. The birth and rapid emergence of the American software industry occurred at the end of the previous century. In 1970, software sales totaled \$440 million. By 1980, they had reached \$6.1 billion and they topped \$100 billion by 2000.⁴⁰ Notably, the early technological innovations in software that drove this growth and helped make software an essential part of the modern American economy occurred despite Congress not formally recognizing copyright for software until 1980.⁴¹

Indeed, even when Congress did recognize copyright protections for software, it did so against a statutory background that was intended to limit the potential of overly strong copyright to stifle innovation in software: 17 U.S.C. § 102b, which limits the classes of subject matter that are copyrightable, was explicitly added to the Copyright Act of 1976 to prevent an overbroad interpretation of copyright.⁴² As the House report on the Act stated, "Section 102(b) is intended, among other things, to make clear that the expression adopted by the programmer is the copyrightable element in a computer program, and that the actual processes or methods embodied in the program are not within the scope of the copyright law."⁴³ Copyright for software was thus explicitly cabined. Copyright protections for software were further cabined in the 1990s as *Altai*⁴⁴ and its progeny prevented copyright for the "look and feel" of computer programs. These cases—notably *Sega*⁴⁵—even held that a developer can copy the exact code of other software if it is necessary to achieve interoperability.⁴⁶ Despite all these limitations on the overall scope of copyright over software, the industry's explosive growth has continued unabated.

⁴⁰ Pamela Samuelson, *The Uneasy Case for Software Copyrights Revisited*, 79 Geo. Wash. L. Rev. 1746, 1757 (2011).

⁴¹ See Act of Dec. 12, 1980, Pub. L. No. 96-517, 94 Stat. 3015 (codified at 17 U.S.C. §§ 101, 117).

⁴² H.R. Rep. No. 1476, 94th Cong., 2d Sess. 57 (1976); see also Pamela Samuelson, *Why Copyright Law Excludes Systems and Processes from the Scope of Its Protection*, 85 Tex. L. Rev. 1921, 1944-52 (2006).

⁴³ H.R. Rep. No. 94-1476, at 57 (1976), reprinted in 1976 U.S.C.C.A.N 5659, 5670.

⁴⁴ *Computer Assocs. Int'l, Inc. v. Altai, Inc.*, 982 F.2d 693, 713 (2d Cir. 1992).

⁴⁵ *Sega Enterprises Ltd. v. Accolade, Inc.*, 977 F.2d 1510, 1517 (9th Cir. 1992), as amended (Jan. 6, 1993).

⁴⁶ Samuelson, *The Uneasy Case* at 1767-73.

Claims that the vibrancy of the American software industry is “in large part due to our strong framework of copyright protection”⁴⁷ ignore this history. Digital innovation has not been driven by the expansion of copyright, but rather by the careful and purposeful limiting of potential copyright liability. For example, § 512(c) of the Digital Millennium Copyright Act (DMCA) provides online platforms with significant immunity for the copyright violations of their users under certain circumstances, and has been essential for the development of Internet intermediaries ranging from small blogs to Facebook and from Wikipedia to YouTube.⁴⁸ Without the DMCA, it would be effectively impossible to develop an online platform that, like most of the Internet today, relies on user generated content because of the sheer amount of content that would have to be monitored for possible copyright infringement. Recognizing that it is impossible to monitor all user posts in advance, § 512 instead requires online platforms to take down content that violates copyright, but only in response to specific takedown notices from copyright holders, who are better equipped than platforms to know when their copyrights are being infringed.⁴⁹

Maintaining balance in our copyright system has therefore been essential for innovators building the companies that have made the Internet the ubiquitous, vibrant, and innovative space that it is today, and efforts to disrupt that balance would cause great harm. For example, proposals to require platforms to monitor or filter user uploads for infringing material in advance are unworkable and would seriously hamper innovation. Filtering tools available to startups and other platforms -- other than a handful or very large and entrenched players -- are highly inaccurate: For example, one popular tool for identifying online copyrighted material has an error rate of 1-2%, an unacceptably high rate for a startup with limited capital that must avoid ruinous litigation.⁵⁰ Because of the unreliability of these tools, YouTube has spent over \$60 million to develop its own current content ID system,⁵¹ an amount that is simply out of the question for any startup. Proposals to modify the DMCA to require so-called “staydown” orders for online piracy,⁵² which would necessarily require constant monitoring of user uploads for copyright violation, would be disastrous for startups and online innovation.

Preserving innovators’ ability to innovate and pursue valuable startup ideas, while preserving copyright’s incentives to create new content, requires thoughtful and strategic limits and exceptions to copyright, not expansion of it. As another example, collaboration is becoming increasingly common in the software industry, leading to the rise of software and operating

⁴⁷ Transcript of Oct. 23 FTC Hearing at 183 (comment of Keith Kupferschmid).

⁴⁸ See, Comments of Engine to U.S. Copyright Office in the Matter of Section 512 Study: Request for Additional Comments 1-2, 2015, https://www-cdn.law.stanford.edu/wp-content/uploads/2017/03/512_Additional_Comments_Engine_Advocacy_As_Filed.pdf; David Kravets, *10 Years Later, Misunderstood DMCA Is the Law that Saved the Web*, *Wired* (Oct. 27, 2008), <https://www.wired.com/2008/10/ten-years-later/>.

⁴⁹ 17 U.S.C. § 512(c)(1)(C).

⁵⁰ Evan Engstrom and Nick Feamster, “The Limits of Filtering: A Look at the Functionality and Shortcomings of Content Detection Tools,” (March 2017), at 16. <http://www.engine.is/the-limits-of-filtering>.

⁵¹ Hearing on Section 512 of Title 17 before the H. Judiciary Subcomm. on Courts, Intellectual Prop., & the Internet, 113th Cong. 47 (2014), at 49 (testimony of Katherine Oyama).

⁵² Transcript of Oct. 23 FTC Hearing at 208 (comment of Eric Cady).

systems that are the product of the copyrightable contributions of many individuals.⁵³ Fair use is essential to allowing innovators to build apps, software, and other products that can interact with software and operating systems without the need to constantly seek out licenses and incur high costs to comply with the terms of licenses.⁵⁴ Otherwise an “anticommons” problem emerges where it becomes unacceptably burdensome to collect the necessary permissions to innovate on a piece of software with a large number of copyright holders.⁵⁵ As such, rather than claiming that “overly-broad applications of fair use [would force] the software industry . . . to retrench to a closed model of no longer sharing code,”⁵⁶ scholars have instead found that “expanding the scope of software copyright compounds possible anticommons concerns that the collaborative, interconnected nature of modern software innovation leads to.”⁵⁷

Recommendations:

The FTC should therefore recommend that Congress be cautious in changing current copyright law. It is particularly important that any copyright recommendations the FTC makes in its final report to Congress include the following provisions to ensure the continued vibrancy of software startups and small businesses:

- **Overall copyright strength:** Proposals to increase the scope or strength of copyright are unnecessary and should be rejected. Current fair use doctrine should be retained. History and the current state of the software industry show that maintaining balance in copyright is essential to continue the collaboration and sharing of ideas that has let this industry flourish for the past several decades. Strengthening copyright and narrowing fair use would let companies charge high fees for legally unnecessary licenses and create barriers hindering innovative software development.
- **The Digital Millennium Copyright Act:** Changes to § 512 of the DMCA that would require advance monitoring or filtering, or create a “notice and staydown” regime for allegedly infringing content, should be rejected. Allowing copyright holders to obtain staydown orders against online platforms would create a legal requirement to monitor content for online piracy that is technologically and financially impossible for startups to meet. It would make the risk of investing in new Internet platforms prohibitively high and foreclose startups from innovating in that space.

⁵³ See Clark D. Asay, Software’s Copyright Anticommons, 66 Emory L.J. 265, 285 (2017); Carliss Baldwin & Eric von Hippel, Modeling a Paradigm Shift: From Producer Innovation to User and Open Collaborative Innovation, 22 Org. Sci. 1399, 1412 (2011).

⁵⁴ Asay at 280-86.

⁵⁵ *Id.* at 265.

⁵⁶ Transcript of Oct. 23 FTC Hearing at 183 (comment of Keith Kupferschmid).

⁵⁷ Asay, 66 Emory L.J. at 280. See also Edward Lee, *Technological Fair Use*, 83 S. Cal. L. Rev. 797 (2010) (arguing for reforming the law around fair use so it becomes easier, not harder, to invoke in court).

B. Rejecting or Narrowing the CASE Act

At first glance, startups might seem like the prototypical “little guys” who are unable to sue for copyright infringement given the current high cost of litigation, making them key beneficiaries of a new small-claims court.⁵⁸ But startups also would suffer from the abuse of a poorly designed small-claims copyright court. The Copyright Alternative in Small Claims Enforcement Act, H.R. 3945 (“the CASE Act”), aims to create an alternative way for independent artists and other small copyright holders to enforce their rights by creating a “Copyright Claims Board” that could process copyright enforcement claims more easily. But the CASE Act’s system for enforcing copyright is indeed poorly designed and could easily become a litigation mill, churning out default judgments against unsophisticated defendants, including the users of startup platforms.

By making the CCB a default venue for small copyright claims, housing it outside the judicial branch, and allowing plaintiffs to collect up to \$30,000 in damages per proceeding, the CASE Act sets up a system that would be ripe for copyright trolls and abusive threats and litigation.⁵⁹ Under the CASE Act, an individual accused of infringing a creative work would receive a notice that informs the defendant of the pending action before the CCB and the defendant’s right to opt out of the CCB’s jurisdiction. If the defendant does not respond saying that she wants the case heard in federal court, she would be forced into litigating before the CCB, which is not part of nor answerable to the courts and would sit only in Washington, D.C. Many ordinary Americans who use online platforms, including those created by startups, may be unlikely to know how to handle these notices and could thus end up subject to the unfamiliar rules of a potentially faraway, non-judicial tribunal.

If a person then did not adequately respond to a complaint filed with the CCB, a default judgment would be entered against her. Such a default judgment would not be small – a defendant could be liable for as much as \$15,000 in damages per infringement and \$30,000 per proceeding – and the CASE Act does not include provisions to ensure that the CCB would take the same cautious approach as do federal courts when granting default judgments or would provide similar procedures to set judgments aside to avoid injustice when unsophisticated defendants are involved. And even if a defendant did figure out how to respond to the CCB complaint, she would still have to find appropriate counsel or other means to defend her claims at the CCB, leading her to incur substantial fees.

The chance to secure routine, sizable default judgments from unsophisticated defendants would make the CCB an attractive venue for copyright trolls seeking to make easy money from a litigation mill. This increased copyright troll activity would harm not only Internet users but also startups and small Internet platforms. While platforms that acted in good faith and in compliance with the DMCA would be less likely to face increased risk of liability for infringement, the

⁵⁸ Transcript of Oct. 23 FTC Hearing at 212-14 (comment of Keith Kupferschmid).

⁵⁹ The problems with the CASE Act have been outlined in much greater detail elsewhere. For a more thorough explanation for the CASE Act’s flaws, see, for example, Meredith Filak Rose, *The CASE Act: Small Claims, Big Risks*, Public Knowledge (Nov. 07, 2017), <https://www.publicknowledge.org/news-blog/blogs/the-case-act-small-claims-big-risks>; Letter by the Electronic Frontier Foundation et al. to Representatives Robert Goodlatte and Jerrold Nadler (Apr. 26, 2018), <https://www.eff.org/document/letter-house-judiciary-committee-opposing-case-act>.

chilling effect of the CASE Act on their users would cause considerable harm to the platforms as well. When trolls take advantage of the flaws in the Act to target some users of a platform with abusive litigation, many other users likely will be dissuaded from using that platform even though their use would have been entirely legal. The increased copyright troll litigation would impede the online economy and hurt new entrants and other startups that are building innovative online platforms.

Recommendation:

Given the range of unintended negative consequences that the CASE Act would have on unsophisticated users and platform startups and innovators, the FTC should include the following recommendation in its final report:

- Rejecting or at least amending the CASE Act: The CASE Act's flaws and dangers outweigh its potential benefits. Although routine copyright infringement is a challenge for independent artists and small copyright holders, the proposed Copyright Claims Board is not the right solution. If a version of the Act does move forward, it should be amended to require defendants to opt in to the Copyright Claims Board and affirmatively waive their right to a judicial resolution, rather than sweeping them into the CCB system by default unless they opt out. This shift would make the system a less attractive target for trolls. Reducing the maximum amount in damages that the CCB could award, to bring the system more in line with the national average for other small claims courts, roughly \$6,000 in damages,⁶⁰ also would lower the risk that the Act would lead to damaging troll activity.

III. Trade Secrets

Increased or overly aggressive trade secret protection will not increase startup viability or innovation. The Defend Trade Secrets Act (DTSA) creates an unnecessarily ambiguous legal framework that compounds uncertainty in trade secret litigation, which has become more difficult for founders of startups and small businesses to navigate. The primary danger of the DTSA for startups is an indirect one: employees interested in starting or joining small businesses may be afraid to make the leap for fear of a DTSA suit due to the lack of clarity in the law.

Companies can abuse trade secret litigation by using claims to stifle competitors and hinder employee movement. Alleged trade secret misappropriation claims often involve former employees or business partners striking out on their own, rather than foreign cyber criminals hacking U.S. enterprises. The trade secrets at issue in misappropriation cases may be ambiguous and are not always eligible for protection. The resulting uncertainty can cause employees who might possess trade secrets to decide not to move to new companies or not to start their own enterprises out of fear of being accused of misappropriation, even if they would be careful to protect the secrets and do nothing wrong. This chilling of employee mobility and company creation inhibits competition and reduces innovative activity. One of the reasons California has been such a hotbed of innovation is because it facilitates employee mobility, which has resulted

⁶⁰ Rose and EFF Letter, *supra* note 59.

in a huge boon in startup activity and success.⁶¹ California courts will not enforce non-compete clauses in employment contracts.⁶² But companies can instead use the fear of trade secret litigation to chill rivals from hiring employees or to discourage employees from starting their own businesses or moving to other companies.

There is also a risk that DTSA's most prominent feature—an ex parte seizure provision in 18 U.S.C. § 1836 that is far more powerful than any similar remedy available under state law—can be used by larger entities to harm smaller competitors by making those startups the targets of inappropriate seizures. For example, if an engineer possessing an algorithm that is purportedly a trade secret leaves her employer to join a small startup, her former employer could effectively put the startup out of business by alleging that both the engineer and her new company have misappropriated its trade secrets, even if no inappropriate disclosure has occurred. The former employer could also seek an ex parte seizure of all the startup's computer systems on the grounds that they would be used to disseminate the alleged trade secret. Even if the plaintiff's seizure was later found to be groundless, the seizure itself is enough to bankrupt most small companies.

Recommendations:

- **Enforcement:** The FTC should encourage clarity in enforcement of the Defend Trade Secret Act to ensure that uncertainty about, or inappropriate or overbroad application of, the DTSA does not chill valuable employee mobility and curtail innovation without any countervailing effect on actual theft of trade secrets.
- **Ex Parte Seizures:** The FTC should encourage cautious enforcement of the DTSA's ex parte seizure provision, particularly as applied to startups. To prevent overbroad seizures that could be used for anticompetitive purposes, courts should continue to use the ex parte seizure provision sparingly.⁶³ The FTC should also use caution when asked to support investigations enforcing ex parte seizures. Enforcement should be limited to seizures where material is discrete, readily discoverable, and can be seized without requiring access to or confiscation of non-secret material.

⁶¹ California has banned non-compete clauses since 1872. The California Business and Professional Code states: "Except as provided in this chapter, every contract by which anyone is restrained from engaging in a lawful profession, trade, or business of any kind is to that extent void." Cal. Bus. & Prof. Code § 16600 (1941). See Norman D. Bishara, *Covenants Not To Compete in a Knowledge Economy: Balancing Innovation from Employee Mobility Against Legal Protection for Human Capital Investment*, 27 Berkeley J. Emp. & Lab. L. 287 (2006); Bruce Fallick, Charles A. Fleishman, & James B. Rebitzer, *Job-Hopping in Silicon Valley: Some Evidence Concerning the Microfoundations of a High-Technology Cluster*, Rev. of Econ. and Stats. (2006), <https://www.mitpressjournals.org/doi/10.1162/rest.88.3.472>; Timothy B. Lee, "A little-known California law is Silicon Valley's secret weapon," Vox (Feb. 13, 2017), <https://www.vox.com/new-money/2017/2/13/14580874/google-self-driving-noncompetes>.

⁶² *Id.*

⁶³ Eric Goldman, *Is the DTSA Ex Parte Seizure Provision Constitutional?* Tech. & Marketing L. Blog (Nov. 12, 2018), <https://blog.ericgoldman.org/archives/2018/11/is-the-dtsa-ex-parte-seizure-provision-constitutional.htm>.