

Joshua Landau Responses
Questions for the Record From Chairman Tillis

1. What would be the impact on litigation rates if the proposed changes to IPR in the STRONGER Patents Act were enacted by statute?

Litigation rates would be extremely likely to substantially increase if the proposed changes to IPR in the STRONGER Patents Act were enacted. The increase would also be likely to come almost entirely from patent assertion entities, rather than operating companies, individual inventors, startups, or universities.

Reviewing litigation trends, the number of lawsuits filed by operating companies has been relatively constant over the past 20 years.¹ Neither the *eBay* case nor the passage of the AIA have had a significant impact on operating company litigation frequency, although the passage of the AIA does appear to have reduced the cost of litigation.²

However, the rate at which patent assertion entities (PAEs)³ filed lawsuits was rapidly increasing prior to the passage of the America Invents Act. This increase was curtailed by the creation of the AIA trial system, including IPR, with PAE litigation rates being reduced from their peak and effectively holding steady at levels similar to those observed just before passage of the AIA.⁴

Given this, a reduction in the availability or effectiveness of IPR would provide minimal change to litigation rates for operating companies, while being likely to cause the resumption of the rapid growth of PAE lawsuits observed during the 2000s. The STRONGER Patents Act proposes a number of such changes, as outlined in detail in my written testimony.⁵

The STRONGER Patents Act would thus be likely to cause the resumption of a rapid increase in PAE litigation without significantly modifying patent assertions by operating companies, startups, inventors, or universities.

¹ Miller *et al.*, *Who's Suing Us? Decoding Patent Plaintiffs since 2000 with the Stanford NPE Litigation Dataset*, 21 Stan. Tech. L. Rev. 234, 258 (2018) (showing product company lawsuits maintaining a steady rate since 2000), *available at* https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3216095.

² AIPLA Report of the Economic Survey 2019.

³ For purposes of this study, a PAE was defined as an entity which acquires and asserts patents, which was formerly an operating company and has shifted to a pure licensing strategy, or which was inventor-founded and operates purely as a licensing entity. Failed startups, universities, pre-product startups, individuals, or industry consortia such as patent pools do not fall within the PAE category regardless of whether they practice their patent.

⁴ See Miller, *Who's Suing Us?* at 258, Fig. 3, *supra* n. 1.

⁵ Written Testimony of Joshua Landau before the U.S. Senate Judiciary Committee Subcommittee on Intellectual Property re: Sept. 11, 2019, Hearing on "Innovation in America" (Sept. 11, 2019).

2. *The PTO has released a lot of data about how IPR is working. When I look at the data, I see a pretty balanced system. 40% of the time last year, the PTO did not even pursue the request to look at the patent by instituting the petition. And when it does take a closer look, a lot of times the patent survives. How can that data be squared with allegations that IPR needs a major statutory overhaul?*

The data cannot be squared with the allegations that IPR needs a major statutory overhaul. As the question correctly notes, 40% of petitions did not meet the threshold requirements to justify institution of an IPR. Given that the vast majority of patents face only 1 or 2 petitions, the institution rate by patent is only slightly higher.

Further, when the PTAB does decide to review a patent, it conducts a fair review and only invalidates patents that do not meet the statutory criteria. Examining only the PTAB's decisions—*i.e.*, excluding petitions that were settled, remain open, were joined to another petition, or where the patent owner admitted the claim was not valid and requested adverse judgment—approximately 61% of PTAB decisions do not modify a single challenged claim.⁶ Again, per-patent rates are slightly higher; a rough estimate of the number of challenged patents that remain untouched by the PTAB's decisions is 53.5%.⁷ Because IPR petitioners select whether or not to bring a challenge, these numbers exhibit a selection bias. That selection bias predicts that the challenger success rate would be better than even in front of a fair decision-maker like the PTAB, a prediction borne out by the evidence.

Given the evidence showing that the PTAB conducts a fair procedure to determine the validity of patents, there is no reason to pursue a major statutory overhaul of the America Invents Act. While certain technical corrections could be useful (for example, clarifying that estoppel does not apply to a prevailing party in other fora⁸), the bulk of the AIA is working well and does not require changes.

CCIA would also note that the USPTO's commitment to releasing both high-quality bulk data and its own analysis of that data in order to enable the patent community to better understand its activities has proven extremely useful in analyzing the

⁶ See Joshua Landau, "A Little More Than Forty Percent", *Patent Progress* (May 1, 2018), available at <https://www.patentprogress.org/2018/05/01/a-little-more-than-forty-percent/>.

⁷ *Id.*

⁸ This situation has recently come up in a number of cases. Generally speaking, a petitioner succeeds in invalidating a patent at the PTAB, but while the PTAB decision is being appealed, the patent owner argues that they are estopped from asserting invalidity in co-pending cases in district courts or the International Trade Commission. See, e.g., Joshua Landau, "Losing by Winning: BTG v. Amneal", *Patent Progress* (Mar. 14, 2019), available at <https://www.patentprogress.org/2019/03/14/losing-by-winning-btg-v-amneal/>. The appeal was ultimately decided on other grounds, leaving the question of estoppel open.

behaviors and outcomes of the AIA trial system. The USPTO's transparency should be commended and may be considered as a useful model for other areas of government which would benefit from increased data transparency.

3. Shouldn't we take time to understand the cumulative impact of those changes before considering others?

There have been major recent changes to the PTAB's internal regulations and procedures, including:

- Changing the standard of claim construction away from the standard employed by the PTAB in all other proceedings. (Nov. 13, 2018)
- Providing additional opportunities for patent owners to amend. (Mar. 15, 2019).
- Allocating the burden of persuasion on newly added or amended patent claims to petitioners, rather than the proponent of the motion to amend. (June 1, 2018).

Other non-rulemaking changes, such as the provision of additional guidance on when the PTAB will use its discretionary authority to deny petitions, also create the potential for significant changes to the overall AIA trial system.

While CCIA remains concerned that some of these changes go too far, the changes should be given some time in order to determine if they improve or harm the PTAB's ability to fulfill its Congressionally-created mission of providing an efficient and accurate way to review the USPTO's work, and to provide a more efficient alternative to litigation. Imposing additional changes, or making existing changes permanent, before determining the impact of these changes risks creating an even more prolonged period of uncertainty as well as reversing the positive benefits on litigation frequency and cost that the existing system has created.

4. The PTO Director has significant discretion in setting guidelines for the institution of IPR petitions and he has certainly used it to the benefit of patent owners. Why is any action by Congress needed here?

There is no need for action by Congress on this topic. As addressed with respect to Question 3, to the extent any changes might prove necessary over time, it is far too early to know what those changes should be.

5. *Do any of the panelists believe Congress should consider codifying the Director's administrative actions as a starting point?*

Codification would be premature. If the administrative actions pursued by the Director are successful in improving the AIA trial system, codification might be worthwhile; however, a period of time to generate the necessary evidence to show that the changes are successful is required. And if the administrative actions are harmful, as CCIA believes some are, then Congress should consider codifying their reversal.

6. *For a company, a competitor using your technology could end up in lost market share and a real harm to your business. Prior to eBay, injunctions were granted at a very high rate. How does the post-eBay grant rate compare? Can companies still protect against competitors taking their technology?*

eBay's primary impact was to remove the incorrect presumption of irreparable harm that justified the issuance of automatic injunction. As a result of this change, injunctions remain widely available when a harm not compensable by money damages is suffered. Lost market share and harm to business are among the most frequently found types of irreparable harm and they can easily justify an injunction.⁹

Where operating companies, startups, independent inventors, or universities suffer irreparable harm, they should—and can—obtain injunctions. Competition between the litigants is not a requirement for a plaintiff to obtain an injunction, though irreparable harms are more likely to exist when a competitive injury exists.¹⁰

This is precisely the situation that exists after *eBay*. Where an irreparable harm is shown, injunctions generally issue. Where an irreparable harm does not exist, injunctions do not. Prior to *eBay*, permanent injunction requests in cases resolved on the merits were granted 89.1% of the time. After *eBay*, examining the same class of cases, permanent injunction requests were granted 85.2% of the time.¹¹

⁹ See Chris Seaman, *Permanent Injunctions in Patent Litigation After eBay: An Empirical Study*, 101 Iowa L. Rev. 1949, 1993 (2016) (showing that non-competitors still obtain injunctions post-*eBay*).

¹⁰ *Id.* at 1990.

¹¹ See Joshua Landau, “Much Ado About Injunctions”, *Patent Progress* (Aug. 1, 2019), available at <https://www.patentprogress.org/2019/08/01/much-ado-about-injunctions/>. This rate is comparable to other rates in a variety of studies. *Cf.* Colleen Chien & Mark Lemley, *Patent Holdup, the ITC, and the Public Interest*, 98 Cornell L. Rev. 1, 9-10 (2012) (estimating a 75% post-*eBay* grant rate); Kirti Gupta & Jay Kesan, *Studying the Impact of eBay on Injunctive Relief in Patent Cases*, Univ. of Ill.

Another assessment of post-*eBay* injunction rates suggests that competing companies succeed approximately 80% of the time, while non-competing companies experience lower rates of success.¹²

An independent inventor without the means to commercialize their invention may show irreparable harm by showing that infringement deprives them of a business opportunity to commercialize their invention.¹³ A startup facing barriers to entry may obtain an injunction by showing loss of potential market share, loss of the opportunity to obtain further investment, or loss of market share if they're in the market.¹⁴ And a university that does not itself commercialize can rely on the losses suffered by an exclusive licensee who competes with the alleged infringer (as may an independent inventor.) All of these situations fall within the equitable jurisdiction of "irreparable harm," and can result in an injunction, as evidenced by the fact that non-competitors still obtain injunctions after *eBay* where they can show a harm that cannot be compensated with money damages.¹⁵

Finally, as discussed above with respect to Question 1, rates of litigation for operating companies have not been impacted by *eBay*. This suggests that operating companies feel that post-*eBay*, injunctions are sufficiently available to protect their technology.

Col. Of L. Legal Studies Research Paper No. 17-03 at 9 (2015), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2629399.

¹² Seaman, *Permanent Injunctions* at 1990, *supra* n. 9.

¹³ *Id.* at 1993.

¹⁴ *Id.* at 1990.

¹⁵ *Id.*

7. *I understand that the eBay decision returned patent law to an equitable test for injunctions. How does that compare to other areas of law?*

After *eBay*, the same basic equitable principles that guide the issuance of injunctions in all areas of law apply to patent law as well.

The *eBay* decision overturned the Federal Circuit’s ahistorical rule, incompatible with the principles of equity, that an injunction should presumptively be issued on any finding of infringement. In fact, the original patent statutes did not even permit a grant of injunctive relief.¹⁶ Injunctive relief was first permitted nearly 30 years after the first Patent Act and was permitted only “according to the course and principles of courts of equity.”¹⁷ That formulation—that injunctions would issue only in accordance with the principles of equity—remains in the modern patent statute, which states that a court “may grant injunctions in accordance with the principles of equity” as a remedy for infringement.¹⁸

In its place, the Supreme Court’s *eBay* decision returned the test to the ordinary equitable principles of favoring legal remedies, such as damages, unless irreparable harm and inadequacy of legal remedies is proven.¹⁹ Equitable injunctions have never been an automatic remedy in any area of law.²⁰ In other areas of intellectual property, injunctions issue only subject to the traditional equitable test.²¹ The same is true in real property.²²

In fact, there’s limited evidence for the notion that historically, patent injunctions automatically issued. The actual historical practice of 19th century courts matches the equitable principles applied in other areas of law, not the Federal Circuit’s presumption. 19th century courts regularly denied injunctions based on such factors as licensing of patents to others or non-working of the patent.²³ In fact, they may have been more aggressive than modern courts, which permit injunctions based on

¹⁶ See Patent Act of 1790, 1 Stat. 109; Patent Act of 1793, 1 Stat. 318; Patent Act of 1800, 2 Stat. 37.

¹⁷ 3 Stat. 481 (1819).

¹⁸ 35 U.S.C. § 283.

¹⁹ *eBay*, 547 U.S. at 391.

²⁰ See *Harrisonville v. W.S. Dickey Clay Mfg. Co.*, 289 U.S. 334, 338 (1933) (“an injunction is not a remedy which issues as of course”).

²¹ See, e.g., *Campbell v. Acuff-Rose*, 510 U.S. 569, 578 n. 10 (1994) (the “goals of copyright law ... are not always best served by automatically granting injunctive relief”).

²² See, e.g., *Mechanics Foundry v. Ryall*, 62 Cal. 416 (Cal. 1882) (“even repeated trespasses are not of themselves sufficient to justify the interference of a court of equity by injunction ... annoying it may be, but [a case], nevertheless, for which the ordinary remedies of the law are ample.”).

²³ See *Howe v. Morton*, 12 F. Cas. 663, 670 (No. 6769) (C.C.D. Mass. 1860); *Colgate v. Gold & Stock Tel. Co.*, 6 F. Cas. 76, 81 (No. 2991) (C.C.S.D.N.Y. 1879); *Hodge v. Hudson R.R.*, 12 F. Cas. 276, 278 (No. 6560) (C.C.S.D.N.Y. 1868); *How v. Boston Daily Advertiser Corp.*, 14 F. 914 (C.C.D. Mass. 1883); *Hoe v. Knap*, 27 F. 204, 212 (C.C.N.D. Ill. 1886); *Dorsey Harvester Revolving Rake Co. v. Marsh*, 7 F. Cas. 939, 945 (No. 4014) (C.C.E.D. Pa. 1873).

assertion of a patent that is not being worked or is being licensed so long as the patent owner can show a competitive harm. After *eBay*, the same equitable principles are applied across all areas of law, including patent law and other areas of intellectual property as well as in real property.

8. *The number of petitions that are ultimately successful, in whole or in part, during PTAB proceedings suggests that a number of “bad patents” that should never have been issued in the first place **are issued** by the USPTO. That suggests to me that we should explore ways to improve the patent examination process. What suggestions do you have for how Congress can make the patent examination process stronger? Absent congressional action, are there any administrative changes Director Iancu can take to improve the patent examination process?*

CCIA strongly supports the goal of improving patent examination in order to ensure that the patents that issue from the USPTO fully deserve their statutory presumption of validity. While a perfect system in which invalid patents are never issued is impossible, it appears very likely that the present system could be significantly improved.²⁴

One of the best proposals is also the simplest—the USPTO should provide examiners with more time to conduct examination. There is empirical evidence that the time constraints placed on examiners result in the allowance of marginal patents.²⁵ This proposal does not require additional statutory authorities. In fact, the USPTO has proposed a review of examiner time allocations into its 2018-2022 Strategic Plan²⁶ and could easily increase examiner allocations as part of this process. This would likely decrease the issuance of marginal patents.

²⁴ See Melissa Wasserman & Michael Frakes, *Irrational Ignorance at the Patent Office*, 72 Vand. L. Rev. 975 (2019), available at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3284109; Melissa Wasserman & Michael Frakes, *Decreasing the Patent Office’s Incentives to Grant Invalid Patents*, Hamilton Project Policy Proposal 2017-17 (Dec. 2017), available at https://www.hamiltonproject.org/assets/files/decreasing_patent_office_incentives_grant_invalid_patents.pdf.

²⁵ See Melissa Wasserman & Michael Frakes, *Is the Time Allocated to Review Patent Applications Inducing Examiners to Grant Invalid Patents?: Evidence from Micro-Level Application Data*, 99 Rev. of Econ. & Stats. 550 (2017), available at <https://www.nber.org/papers/w20337>.

²⁶ See USPTO Strategic Plan 2018-2022 at 6 (2018) (“By comprehensively studying examination time goals, we will evaluate the appropriate amount of examination time and align production goals with quality expectations”), available at https://www.uspto.gov/sites/default/files/documents/USPTO_2018-2022_Strategic_Plan.pdf.

Another simple proposal is also within existing statutory authorities. The USPTO's current fee structure likely contributes to the issuance of marginal patents. In particular, the USPTO does not recover the full cost of examination using its examination fees, but instead relies on issue fees and maintenance fees to cover the full cost. Because of this, if an insufficient number of patents issue in a given timeframe, the USPTO will not receive enough fees to cover its cost of operations. Empirical evidence suggests that this may contribute to the issuance of marginal patents.²⁷ The SUCCESS Act renewed the USPTO's authority to set and adjust its patent fees. Modifying the USPTO fee structure to recover more of the cost of examination at the time of examination, rather than after issue, would be within the scope of this statutory authority, and would be likely to decrease the issuance of marginal patents.

The USPTO Director is actively investigating ways in which machine learning and artificial intelligence might be employed to increase examination efficiency. CCIA supports this investigation, but it is unclear within what time frame this may provide serious impact and it cannot be relied upon as a sole method of increasing examination quality.

Finally, CCIA again commends the USPTO on its transparency and commitment to making available data. That commitment has enabled much of the empirical research which has suggested these avenues for improvement. Maintaining the access it has historically provided will help ensure that the next generation of research into examination quality and USPTO operations can provide useful policy recommendations founded on empirical evidence.

²⁷ See Melissa Wasserman & Michael Frakes, *The Failed Promise of User Fees: Empirical Evidence from the United States Patent and Trademark Office*, 11 J. of Empirical Legal Studies 602 (2014), available at https://scholarship.law.duke.edu/faculty_scholarship/3642/.

Joshua Landau Responses
Questions for the Record From Ranking Member Coons

1. *Your testimony suggests that injunctive relief is appropriate only in the context of disputes between large competitors. I am concerned, however, about independent inventors without the means to commercialize their inventions, job-creating startups who already face significant barriers to entry against established market players, and universities who rarely commercialize their own inventions. Why should they be denied the possibility of injunctive relief, particularly in the context of patent claims that include a statutory “right to exclude”?*

My testimony focused on the presence of irreparable harm, a long-standing requirement for the issuance of an injunction.¹ Where startups, independent inventors, or universities suffer irreparable harm (*i.e.*, a harm not recompensable via money damages), they should—and can—obtain injunctions. Competition between the litigants is not a requirement for a plaintiff to obtain an injunction, though irreparable harms are more likely to exist when a competitive injury exists, leading to my use of competition as an example of when an injunction is appropriate.²

This is precisely the situation that exists after *eBay*. Where an irreparable harm is shown, injunctions generally issue. Where an irreparable harm does not exist, injunctions do not. An independent inventor without the means to commercialize their invention may show irreparable harm by showing that infringement deprives them of a business opportunity to commercialize their invention.³ A startup facing barriers to entry may obtain an injunction by showing loss of potential market share, loss of the opportunity to obtain further investment, or loss of market share if they’re in the market.⁴ And a university that does not itself commercialize can rely on the losses suffered by an exclusive licensee who competes with the alleged infringer (as may an independent inventor.) All of these situations fall within the equitable jurisdiction of “irreparable harm,” and can result in an injunction, as evidenced by the fact that non-competitors still obtain injunctions after *eBay* where they can show a harm that cannot be compensated with money damages.⁵

Further, while the patent statute describes the content of a patent as including a grant of a right to exclude,⁶ the patent law does not provide that remedy as of right. Instead, U.S. patent law has

¹ See, e.g., *Root v. Railway Co.*, 105 U.S. 189, 207 (1882) (“[i]t is the fundamental characteristic and limit of the jurisdiction in equity that it cannot give relief when there is a plain and adequate and complete remedy at law”); *Merriam v. Smith*, 11 F. 588 (1882) (“a court of equity is to proceed under the patent law just as it does in any other case of a violated legal right, and to grant relief only when the remedy at law is inadequate”); cf. Pomeroy, *Equity Jurisprudence and Equitable Remedies*, Vol. 1 § 173 (1905) (“the essential principle to which every instance of its exercise must finally be referred, is therefore the inadequacy, incompleteness, or insufficiency of the legal remedies which can be granted by courts of law to the litigant parties.”).

² See Chris Seaman, *Permanent Injunctions in Patent Litigation After eBay: An Empirical Study*, 101 Iowa L. Rev. 1949, 1990 (2016) (showing that non-competitors still obtain injunctions post-*eBay*).

³ *Id.* at 1993.

⁴ *Id.*

⁵ Seaman, *Permanent Injunctions*, *supra* n. 2.

⁶ 35 U.S.C. § 154.

provided that courts “may grant injunctions in accordance with the principles of equity”⁷ since 1836.⁸ This statutory text limits injunctive relief to the equitable jurisdiction traditionally possessed by the courts, a jurisdiction that only exists where remedies at law are inadequate.⁹

Injunctive relief is appropriate in situations where an irreparable harm to the patent owner exists; providing it in situations where an irreparable harm to the patent owner does not exist risks over-compensating patent owners, violating the fundamental principle of remedies—that a plaintiff be compensated for the injury they actually suffered. The post-*eBay* patent law thus returned to the historical principle of remedies, compensating inventors for the harms they actually suffer. An injunction provides leverage for patent owners to seek to obtain not just the value contributed by the patent, but the value contributed by the defendants’ independent activities, a harm well-recognized more than a hundred and fifty years ago.¹⁰

In summary, independent inventors, startups, and universities are not presently denied the possibility of injunctive relief. They are only limited in their ability to use injunctions to obtain more than the value of their technology in license negotiations.

2. *Do you agree with Chief Justice Roberts’ observation that our country’s “long tradition [of granting injunctions for ongoing infringement of valid patents] is not surprising, given the difficulty of protecting a right to exclude through monetary remedies that allow an infringer to use an invention against the patentee’s wishes”?*

Chief Justice Roberts’ *eBay* concurrence completes this observation by stating that this “does not entitle a patentee to a permanent injunction or justify a general rule that such injunctions should issue,”¹¹ the likely outcomes if the STRONGER Patents Act were to pass.

The characterization of many present-day patent plaintiffs as seeking to prevent an infringer from using their invention is simply inaccurate—the majority of modern-day plaintiffs seek to

⁷ 35 U.S.C. § 283; *cf.* Patent Act of 1870 § 55 (“the court shall have power, upon bill in equity filed by any party aggrieved, to grant injunctions according to the course and principles of courts of equity”); Patent Act of 1836 § 17 (“courts shall have power, upon bill in equity filed by any party aggrieved, in any such case, to grant injunctions, according to the course and principles of courts of equity”).

⁸ Prior to 1836, the availability of injunctions in patent cases was more limited. Prior to 1819, there was no provision for injunctive relief in patent suits, and between 1819 and 1836, while equity jurisdiction existed, it was difficult to access and relatively uncommonly used. *See* James Ryan, *A Short History of Patent Remedies*, 6 *Cybaris* 151 (2015).

⁹ *Root v. Railway* at 207.

¹⁰ *See Seymour v. McCormick*, 57 U.S. 480, 489-90 (1854) (“one who invents some improvement in the machinery of a mill could not claim that the profits of the whole mill should be the measure of damages for the use of his improvement ... [i]t was the interest of the patentee that all railroads should use his invention, provided they paid him the price of his license. ... The only actual damage which the patentee has suffered in such a case is the non-payment of the price which he has put on his license, with interest, and no more.”).

¹¹ *eBay v. MercExchange*, 547 U.S. 388, 395 (2006) (Roberts, C.J., concurring).

obtain a monetary remedy for that use.¹² Where a patent owner, prior to litigation, offers to license for a fee, there is no irreparable harm that cannot be compensated by monetary damages.¹³ Where a patent owner’s entire business model is licensing for money, there is no irreparable harm and the injury suffered due to the infringement can be completely compensated by monetary damages.¹⁴

Justice Kennedy’s concurrence addresses these concerns. Justice Kennedy notes that “trial courts should bear in mind that in many instances the nature of the patent being enforced and the economic function of the patent holder present considerations quite unlike earlier cases.”¹⁵ This is most relevant in the situation faced by the majority of litigants—a patent owner who, rather than seeking to prevent an alleged infringer from using their invention, in fact seeks to force them to take a license at a rate higher than the value of the technology. And denial of an injunction in these circumstances comports with the principles of equity, historical practice, and sound economic policy, while evidence suggests that it has not negatively impacted innovation. As Justice Kennedy correctly reflects, the principles of equity allow “courts to adapt to technological and legal developments in the patent system” and thus to provide appropriate compensation, rather than over-compensation.¹⁶

As a basic principle of remedies, U.S. law does not generally provide restrictions on action such as an injunction or specific performance where a monetary remedy suffices. This is a general principle of remedies that is not limited to patent law. The Judiciary Act of 1789—one of the first bills to pass through Congress—noted that “suits in equity shall not be sustained in either of the courts of the United States, in any case where plain, adequate and complete remedy may be had at law.”¹⁷ This was itself the adoption of “the principles of the system of judicial remedies which had been devised and was being administered by the English Court of Chancery at the time of the separation of the two countries.”¹⁸

The actual historical practice of 19th century courts bears out the application of this principle. 19th century courts regularly denied injunctions based on such factors as licensing of patents to others or non-working of the patent.¹⁹ In fact, they may have been more aggressive than modern

¹² Miller *et al.*, *Who’s Suing Us? Decoding Patent Plaintiffs since 2000 with the Stanford NPE Litigation Dataset*, 21 Stan. Tech. L. Rev. 234, 257 (2018) (illustrating that the plurality of lawsuits, both by absolute number and number of defendant/lawsuit pairs, are attributable to non-university patent assertion entities).

¹³ See, e.g., *Seymour* at 489-90 (“The only actual damage which the patentee has suffered in such a case is the non-payment of the price which he has put on his license, with interest, and no more”).

¹⁴ *Id.*

¹⁵ *eBay* at 396 (Kennedy, J., concurring).

¹⁶ *Id.* at 397.

¹⁷ Judiciary Act of 1789, 1 Stat. 73, 82 (1789).

¹⁸ *Grupo Mexicano de Desarrollo, S.A. v. Alliance Bond Fund, Inc.*, 527 U.S. 308, 318 (1999).

¹⁹ See *Howe v. Morton*, 12 F. Cas. 663, 670 (No. 6769) (C.C.D. Mass. 1860); *Colgate v. Gold & Stock Tel. Co.*, 6 F. Cas. 76, 81 (No. 2991) (C.C.S.D.N.Y. 1879); *Hodge v. Hudson R.R.*, 12 F. Cas. 276, 278 (No. 6560) (C.C.S.D.N.Y. 1868); *Huntington Dry-Pulverizer Co. v. Alpha Portland Cement Co.*, 91 F. 534 (1899); *Hoe v. Boston Daily Advertiser Corp.*, 14 F. 914 (C.C.D. Mass. 1883); *Hoe v. Knap*, 27 F. 204, 212 (C.C.N.D. Ill. 1886); *Dorsey Harvester Revolving Rake Co. v. Marsh*, 7 F. Cas. 939, 945 (No. 4014) (C.C.E.D. Pa. 1873).

courts, which permit injunctions based on assertion of a patent that is not being worked or is being licensed so long as the patent owner can show a competitive harm.

Finally, as a matter of economic policy, the over-compensatory effect of injunctions can diminish overall social welfare. A patent owner is entitled to a fair remedy for the loss they have actually suffered, not for the windfall profits enabled by an injunction. A loss fully compensable with money does not require an injunction to remedy that loss, nor should one issue. Creating a right to the windfall remedy of an injunction in situations where it is not required to obtain compensation disincentivizes productive activity and incentivizes additional patent litigation seeking to obtain such windfall profits.²⁰ Further, excessive availability of injunctions can threaten cumulative innovations, resulting in an overall decrease in innovation.²¹

Evidence also suggests that the overall impact of the *eBay* decision has been positive and that innovators continue to innovate. There is empirical evidence that the *eBay* decision led directly to increases in corporate R&D spending in the information and communications industry. In one study, evidence based on differential exposure to patent litigation suggested that the reduction in litigation risk from *eBay* resulted in significant increases in innovative activity. The study concluded that firms that had a higher pre-*eBay* exposure were more innovative in comparison to the less-exposed firms after *eBay*, creating more patents, creating patents that were more likely to be cited by others, and shifting more money into R&D.²² A later, broader study found that, overall, *eBay* had only limited impact—positive or negative—on overall American innovative output.²³ The *eBay* test also favors innovation by productive entities and competitors over innovation by non-competing entities by disfavoring injunctions on patents that are not being used to compete.²⁴ Finally, *eBay* incentivized invention by entities that actually bring that invention to fruition via a product, rather than entities that file for a patent and wait for someone else to independently invent that same technology, at which time they can benefit from the investment the manufacturer made in creating a product. *eBay* has thus been more faithful to the Constitutional mandate of “promot[ing] progress in the [] useful arts”²⁵ than the rule proposed in STRONGER.

²⁰ See Filippo Mezzanotti & Timothy Simcoe, *Patent Policy and American Innovation After eBay: An Empirical Examination*, 48 *Research Policy* 1271 (2018), available at <https://www.kellogg.northwestern.edu/faculty/mezzanotti/documents/eBayInnovation.pdf>.

²¹ Suzanne Scotchmer, *Standing on the Shoulders of Giants: Cumulative Research and the Patent Law*, 5 *J. of Econ. Perspectives* 29 (1991).

²² Filippo Mezzanotti, *Roadblock to Innovation: The Role of Patent Litigation in Corporate R&D*, Working Paper 343911, Harvard University OpenScholar (2015), available at <https://www.kellogg.northwestern.edu/faculty/mezzanotti/documents/innovation.pdf>.

²³ Mezzanotti & Simcoe, *supra* n. 20.

²⁴ See Chris Seaman, *Permanent Injunctions in Patent Litigation After eBay: An Empirical Study*, 101 *Iowa L. Rev.* 1949, 1990 (2016), available at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2632834.

²⁵ U.S. Const., Art. 1, § 8 cl. 8.

3. *Do you agree that the lack of meaningful access to injunctive relief and the cost of defending patent claims against abusive serial inter partes review petitions have weakened patent owners' ability to enforce valid patent claims against infringers, particularly when infringers can afford the risk of future royalty liability and meanwhile continue to infringe, erode patent owners' market share, and divert patent owner resources to expensive litigation?*

Patent owners currently have meaningful access to injunctive relief, especially in the situation described in the question. As described above, where a patent owner faces harm to market share, courts grant injunctions at a high rate and the patent owner may also be able to recover its lost profits.²⁶ Reduced access to injunctive relief where irreparable harm does not exist does not mean that patent owners do not have meaningful access to injunctions; it means that they have exactly the same access to injunctive relief as all other intellectual property owners and even owners of physical property.²⁷

Further, given that patent litigation continues at rates higher than seen at any point in time prior to the late 2000s²⁸ and patent filings continue at record rates, the actual actions of patent owners suggest that they do not feel that the present situation has weakened their ability to enforce. Venture capital investment also supports this assertion, with overall venture capital investment steadily increasing post-*eBay* and post-AIA. And allegations that *eBay* and the AIA have negatively impacted or distorted VC investment do not match the facts or even the simple principle of cause and effect. VC investment has continued to rise sharply subsequent to both *eBay* and the AIA, and the shifts in VC allocation either began prior to the alleged triggering change in law or are explained by exogenous factors such as the rise of contract semiconductor foundries.²⁹

In fact, patent assertion rates continued to sharply increase in the time after *eBay*, suggesting that reduced access to injunctions was not viewed as detrimental to patent owners' ability to enforce. Instead, reduced access may, at most, have reduced patent owners' ability to extract revenue that they are not entitled to via the threat of an injunction. And because IPR generally substitutes for assertions of invalidity in district court cases, the overall impact of IPR has been to reduce, rather than raise, the total combined cost of asserting patents for both patent owners and defendants.

IPR has also provided smaller defendants with the ability to fight abusive patent litigation assertions. Defendants do not litigate for fun—patent litigation is extremely expensive for defendants and where a patent owner proposes a reasonable license, defendants are likely to

²⁶ *Waite v. U.S.*, 282 U.S. 508 (1931) (“Neither is there any dispute that the profits that the plaintiff would have made are a proper measure of the damages suffered.”)

²⁷ See, e.g., *Campbell v. Acuff-Rose Music Inc.*, 510 U.S. 569, 578 n. 10 (1994) (the “goals of copyright law ... are not always best served by automatically granting injunctive relief”); *Mechanics Foundry v. Ryall*, 62 Cal. 416 (Cal. 1882) (“even repeated trespasses are not of themselves sufficient to justify the interference of a court of equity by injunction ... annoying it may be, but [a case], nevertheless, for which the ordinary remedies of the law are ample.”).

²⁸ See Miller, *Who's Suing Us*, *supra* n. 12.

²⁹ See Letter for the Record from CCIA to U.S. House of Representatives Small Business Committee re: July 11, 2018, Innovation Nation Hearing (Jul. 17, 2018), *attached as Appendix A*.

accept. In fact, an estimated 70% of all assertion demands are resolved without litigation.³⁰ By reducing the cost of defense, defendants without deep pockets now have an option other than settling with the owner of an invalid patent. Small and medium defendants ranging from realtors to water treatment companies to metropolitan transit systems have used IPR to defend against baseless patent assertions. And by lowering the overall cost of litigation, IPR has also served to reduce the cost of litigation for patent owners, meaning that they are better able to enforce their patents—if the patent is valid and infringed.³¹

And as a previous letter from CCIA to the Senator explained,³² there is simply no meaningful serial petition problem. Where a patent owner is faced with multiple petitions, it is due to factors under the patent owner’s own control—the number of lawsuits they have filed, the number of asserted claims and patents, and their willingness to identify asserted claims early in a case. When a patent owner sues 10 defendants, it is perfectly reasonable for each defendant to file an IPR—especially since they are commonly similar or identical and joined together into a single case, meaning that the patent owner really only defends one case even if a set of 10 IPRs were filed. Where a patent owner files a lawsuit charging infringement of multiple patents, the statute requires that each patent be individually petitioned—there is no provision for challenging multiple patents within a single petition. And when a patent owner asserts a large number of claims, “filing of multiple petitions challenging the same patent may be appropriate where, as here, Petitioner has reasonable justification for multiple filings due to the multiplicity of claims to be challenged.”³³

While IPR provides an alternative process for the resolution of validity inquiries, it typically remains part of overall litigation conduct, and it is meaningless to consider the cost of IPR without considering whether it reduces the overall cost of litigation. All evidence suggests that it has—a patent owner assertion against a given defendant post-AIA is less expensive, even when the cost of defending an IPR is incorporated into the total estimate, than the cost of assertion pre-AIA.

Finally, characterization of the situation as diverting patent owner resources to litigation ignores the diversion of defendant’s resources. The typical patent lawsuit defendant is an innovative manufacturer who invents new technology and produces innovative products; the most common patent lawsuit plaintiff³⁴ is a patent assertion entity whose assertion activity “almost never result[s] in technology transfer or new innovation”³⁵ and who is more likely than other plaintiffs

³⁰ Mark Lemley, Kent Richardson, & Erik Oliver, *The Patent Enforcement Iceberg*, 97 *Tex. L. Rev.* 801, 807 (2019).

³¹ See, e.g., AIPLA Report of the Economic Survey 2017 at 41-43 (2017) (illustrating post-AIA decline in litigation cost to be greater than the cost of a post-grant proceeding).

³² Letter for the Record from CCIA to Senators Thom Tillis and Chris Coons Regarding Mar. 13, 2019, Senate Judiciary Committee IP Subcommittee Hearing on Oversight of the U.S. Patent and Trademark Office (Mar. 20, 2019), available at <https://www.patentprogress.org/wp-content/uploads/2019/03/2019-03-20-Senate-IP-Subcommittee-Letter-Re-Referenced-Studies.pdf>.

³³ IPR2019-00358, *Apple, Inc. v. UUSI, LLC*, Paper No. 12 (Institution Decision) at 19 (Aug. 5, 2019).

³⁴ Miller *et al.*, *Who’s Suing Us* at 259 (showing non-university PAEs taking over as the plurality of asserting entities, with NPEs forming a majority), *supra* n. 12.

³⁵ Robin Feldman & Mark Lemley, *The Sound and Fury of Patent Activity*, 103 *Minn. L. Rev.* 1793, 1796 (2019).

to assert meritless claims.³⁶ And patent assertion entities do not appear to incentivize small and independent inventors to produce inventions the public would not otherwise obtain. Asserted patents rarely bear much resemblance to the actual technology,³⁷ the disclosure function of patents is questionable in practice,³⁸ and inventors are estimated to receive at most 20% of the payments NPEs extract.³⁹ Further, the extremely high incidence of independent invention, made without any access to the patentee's disclosure,⁴⁰ illustrates that the technology in question in most NPE infringement suits would have been invented even had the patent holder not invented it.⁴¹ The reality is that if diversion of resources is the concern, the overall reduction in diverted resources is most likely to have produced significantly more innovation by enabling defendants to engage in more productive activity and less defensive activity.⁴²

³⁶ Miller *et al.*, *Who's Suing Us* at 266 (showing non-university PAE success rates are significantly lower than average or operating company success rates), *supra* n. 12.

³⁷ Feldman & Lemley, *Sound and Fury* at 1803 (“the patent is often on a technology that bears little resemblance to the defendant’s product . . . the patent troll asserts that the patent covers any means of solving a problem, even if the defendant’s implementation looks nothing like the patentee’s original idea.”), *supra* n. 35.

³⁸ Lisa Larrimore Ouellette, *Who Reads Patents?*, 35 *Nature Biotechnology* 421, 423 (May 2017) (“Only about 40% of patent readers thought they could ‘definitely’ or ‘probably’ recreate the invention in the most recent patent they read”; the majority of respondents to the survey were Ph.D. scientists, suggesting a higher than ordinary level of skill in arts such as software where a Ph.D. is relatively uncommon); Feldman & Lemley, *Sound and Fury* at 1804 (“hypothesis also assumes a level of quality in patents and adequacy of patent disclosure that is generally not attributed to the modern patent system.”).

³⁹ See Fiona M. Scott Morton & Carl Shapiro, *Strategic Patent Acquisitions*, 79 *Antitrust L.J.* 463, 482-83 (2014).

⁴⁰ Contrary to Mr. Bright’s testimony during the hearing, the vast majority of allegedly infringing inventions are developed independently without any form of access to the patent’s content, whether via the patent itself or via another avenue. See *infra* n. 41; cf. Mark Lemley, *The Myth of the Sole Inventor*, 110 *Mich. L. Rev.* 709 (2012) (“surveys of hundreds of significant new technologies show that almost all of them are invented simultaneously or nearly simultaneously by two or more teams working independently of each other.”).

⁴¹ Christopher A. Cotropia & Mark Lemley, *Copying in Patent Law*, 87 *N.C. L. Rev.* 1421, 1424 (2009) (allegations of copying are quite rare in patent cases); Feldman & Lemley, *Sound and Fury* at 1804 (“overwhelming majority of patent cases do not involve alleged copying, but rather independent invention”).

⁴² See Mezzanotti, *Roadblock to Innovation*, *supra* n. 22; cf. Sridhar Srinivasan, *Do Weaker Patents Induce Greater Research Investments?* (2018), available at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3185148.

4. *PTAB trials were created to provide an efficient second look at patentability, but I continue to hear disturbing stories of patent owners subject to costly repeated attacks on the same patent claims, even after those claims have survived validity challenges in district courts and prior PTAB trials. How is it efficient for the PTAB to repeatedly reevaluate patent claims, even after an examiner, courts, and PTAB panels have found them patentable? Do you at least agree that each petitioner should include all patentability arguments in a single petition?*

In order to minimize repetition and promote efficiency, CCIA would support a requirement that district courts automatically stay litigation after filing of a petition in order to allow the PTAB to complete its work. This would promote efficiency by shifting the vast majority of the task of validity determination in any given case to the less expensive PTAB forum, while ensuring that patent owners do not need to participate in expensive district court litigation only to have their patent determined invalid midway through the process. This would also avoid repetition, as the estoppel provision would operate to ensure that a petitioner could not make a § 102 or § 103 invalidity argument in the district court. Extension of IPR to include § 101 and § 112 invalidity determinations would further promote this efficiency and avoidance of repetition, and CCIA would support this as well.

It is also unclear what is referred to by “repeated attacks” when a patent is “found [to be] patentable.” Colloquial speech notwithstanding, patents are *never* found to be valid. Instead, they are found not to be invalid over a *particular set* of prior art and particular arguments. The PTAB rarely evaluates a patent under the same set of prior art as a previous court or PTAB panel reviewed. Instead, the PTAB is typically faced with distinct art and arguments, brought by a distinct party. And with respect to examiner-reviewed art, one purpose of the PTAB was to provide review of patents that were issued when an examiner misunderstood the prior art, so re-review of validity over a set of prior art is intentionally part of the PTAB’s role. Given this, additional evaluations of patent validity are neither efficiency-promoting or efficiency-reducing, as the actual issue being determined—validity over a particular set of prior art—was never previously addressed. In the unusual circumstance in which the PTAB is revisiting a prior determination over the same art, CCIA would support the application of the ordinary legal principles of issue preclusion with respect to determinations that address the same issue—*i.e.*, the same art and arguments—and where the previous parties have sufficient mutuality of interest to bind the petitioner. However, existing statutes and authorities appear to be sufficient to address this concern, particularly privity-based estoppel and the PTAB’s discretion to deny petitions where the arguments have previously been reviewed.

With respect to inclusion of all patentability arguments in a single petition, this would only be possible if the strict word limit placed on IPRs were to be removed. As noted in my written testimony, some patents simply cannot be completely addressed within a single petition.⁴³ A petitioner must include all of the evidence they wish to rely upon in their petition,⁴⁴ which can be

⁴³ Written Testimony of Joshua Landau before the U.S. Senate Judiciary Committee Subcommittee on Intellectual Property Regarding the Hearing on “Innovation in America” at 5-6 (Sept. 11, 2019).

⁴⁴ See 37 C.F.R. § 42.104.

difficult given the 14,000 word limit for IPR petitions.⁴⁵ For example, U.S. Patent Number 8,144,182 has 86 claims totaling 4,314 words; merely writing out the claims of the patent a single time would consume 31% of the petitioner's word limit. U.S. Patent Number 7,237,634 is even longer, containing 306 claims totaling 18,545 words. It would literally be impossible to file a single petition that even included all of the claims of the '634 patent, much less one that explained the evidence showing the claims are invalid. Failure to do so would doom the IPR, as all arguments to be relied upon must be contained within the petition. Absent a change to word limits, it would be unfair to petitioners to prevent them from addressing the entire scope of their argument due to an arbitrary limit on word count. Doing so would incentivize patent owner abuse and inefficiency.

First, patent owners would be incentivized to delay identification of asserted claims as long as possible in order to force petitioners to either guess which claims would be asserted or present a weak case. This problem already occurs—in one instance, a patent owner asserting a patent containing more than 100 claims refused to identify which claims would be asserted until a week before the IPR deadline.⁴⁶ If the petitioner could only file a single petition, limited in word count, then patent owners would be encouraged to engage in this type of gamesmanship, resulting in either unfairness to petitioners or added burden placed on the PTAB to review claims ultimately determined to be irrelevant.

Second, a single petition rule would encourage patent applicants to draft patent applications with a multiplicity of claims in order to better enable them to raise the costs on defendants, placing additional burdens on the USPTO in reviewing patentability and on the public in understanding what they are and are not permitted to do without infringing patents. This additionally disincentivizes innovation by increasing the cost of innovating without infringing and makes patents even less useful as a form of disclosing and disseminating knowledge.

Finally, if a petitioner were limited to a single petition, it would not be reasonable to assume they could have raised all grounds of invalidity of which they were aware. This, in turn, would render the estoppel provision of 35 U.S.C. § 315(e) essentially meaningless—a petitioner would always be able to assert that they could not reasonably have included a ground due to petition length limits. This, in turn, would enable petitioners to argue invalidity in a district court even after the resolution of an IPR, reducing the efficiency benefits of IPR. Far from preventing unfairness or inefficiency, a single petition provision would incentivize it.

However, much of the issue with a single petition requirement follows from the strict word limit imposed on petitions. So long as the word limit is removed and so long as a petitioner would be permitted to file an additional petition for cause, such as if the patent owner changes litigation strategy by asserting new claims or an alternative construction not previously identified, a requirement that a petitioner include all arguments in a single petition would be reasonable. This

⁴⁵ 37 C.F.R. § 42.24(a)(1)(i).

⁴⁶ *UUSI, LLC v. Apple, Inc.*, Plaintiff's Opposition To Apple's Motion For An Order Requiring Plaintiff To Identify Asserted Claims Pursuant To Patent Local Rule 3-1(A) And Renewed Motion To Stay, Case No. 4:18-cv-04637-JD, Docket No. 61 (Oct. 4, 2018) (opposing Apple's request that Nartron affirmatively narrow the claims it would assert prior to the 1 year IPR bar date).

change could incorporate a requirement that a petitioner pay for excess words in an amount similar to the amount additional petitions currently require in order to maintain the fee-supported nature of the USPTO.

5. *PTAB trials were also created as an alternative to district court litigation, but nothing prevents patent challengers from pursuing attacks in both forums, and these challenges are adjudicated according to different standards of proof and – until recently – different claim construction standards. Furthermore, the lack of a standing requirement at the PTAB has enabled unforeseen abuses by, for example, hedge funds seeking to manipulate stock prices of petitions seeking to harass competitors. Why should infringers be permitted to attack issued patent claims in both forums, and why should the PTAB not apply the same standards as district courts for evaluating challenges to issued patent claims?*

CCIA supports a stronger IPR stay provision that would minimize parallel challenges, as discussed above in response to Question 4. Further, CCIA supports harmonizing district court and PTAB litigation standards by requiring both district courts and the PTAB to employ a preponderance of the evidence standard for validity challenges. The rationale provided for the use of clear and convincing evidence in the district courts—deference to the judgment of the agency⁴⁷—is a poor match to the realities of the patent system, where patent examiners often have less than 20 hours⁴⁸ to review an application and have rarely reviewed the prior art asserted in the district court. And application of the clear and convincing evidence standard at the PTAB is illogical, requiring a panel of legally and technically trained judges to defer to the judgment of a single examiner, a situation at odds with logic and the goals of the AIA trial system. A preponderance of the evidence standard in both the PTAB and district courts would better match the realities of the patent system.

As a matter of policy, a standing requirement would eliminate a significant benefit of *inter partes* review. Imposition of a standing requirement would require a potential petitioner to invest the money to develop and launch a product and wait to be sued before they could test the validity of a patent, which is both wasteful and likely to disincentivize investment in new products and follow-on research. As the Federal Circuit recently noted in *Acorda Therapeutics v. Roxane*,⁴⁹ the existence of a patent may cause other innovators to avoid further innovation in that area because they would be unable to access the fruits of their labors. Where the patent blocking

⁴⁷ *KSR Int'l Co. v. Teleflex Inc.*, 127 S. Ct. 1727, 1745 (2007) (“the rationale underlying the presumption — that the PTO, in its expertise, has approved the claim — seems much diminished here”); *Microsoft Corp. v. i4i Ltd. Partnership*, 131 S. Ct. 2238, 2251 (2011) (“Simply put, if the PTO did not have all material facts before it, its considered judgment may lose significant force.”).

⁴⁸ Melissa Wasserman & Michael Frakes, *Is The Time Allocated To Review Patent Applications Inducing Examiners To Grant Invalid Patents?: Evidence From Micro-Level Application Data*, 99 Rev. of Econs. & Stats. 550 (2017).

⁴⁹ *Acorda Therapeutics v. Roxane Labs.*, 903 F.3d 1310, 1337 (2018) (“The existence of such a blocking patent may deter non-owners and non-licensees from investing the resources needed to make, develop, and market such a later, ‘blocked’ invention, because of the risk of infringement liability and associated monetary or injunctive remedies”).

further research is invalid, this disincentivizes innovation. Without a standing requirement, an innovator has the option to test the validity of the patent before investing in research and development, and guide their investment based on the outcome. Especially in areas where research is particularly expensive, such as semiconductors or biotechnology, a standing requirement for IPR would disincentivize innovative activity. As just one example of this problem, in the “fiercely competitive market” for aircraft engines, General Electric sought to address the validity of a patent that could potentially have subjected it to liability in the event it designed a particular type of engine.⁵⁰ Rather than pursue “significant up-front investment years before any profits can be realized,” with the investment subject to the “competitive deterrent” of a competitor’s patent, GE sought to address the validity of the patent before investing resources into design, design-around, or licensing.⁵¹ Imposition of a standing requirement would have forced GE to either launch at risk of infringement or invest significant resources in developing an alternative in order to avoid an invalid patent. Neither is an efficient or desirable outcome in comparison to a relatively inexpensive procedure to ascertain validity prior to development.

Further, as a matter of principle, there is no reason for a standing requirement to exist. A patent that should not have been issued injures every member of the public—they experience the inability to practice what the incorrectly issued patent covers. That alone creates a sufficient interest, although not Article III standing,⁵² to justify the ability to file a petition. There is simply no reason to maintain an invalid patent purely because the patent owner has not yet sued over it.

Finally, the oft-mentioned hedge fund manipulation was attempted and failed—few of the IPRs were successful and the tactic was abandoned as unprofitable.⁵³ In the instituted IPRs, while the motive may have been profit-driven, the outcome was to eliminate a patent that should never have been issued, enabling the creation of generic drugs that are a net social good. Much like the overblown claims of serial petitions, to the extent hedge fund petitions were ever a problem, they do not appear to be a problem that justifies any change in policy.

⁵⁰ See *General Electric Corp. v. United Techs. Corp.*, Case No. 2017-2497, Hughes, J., concurring, slip op. at 7 (July 10, 2019).

⁵¹ *Id.* at 7, 8.

⁵² See, e.g., *General Electric Corp. v. United Techs. Corp.*, Case No. 2017-2497, slip op. at 5 (July 10, 2019) (“Not every party to an IPR will have Article III standing to appeal a final written decision of the Board.”)

⁵³ Paul Barrett, *How Patent Trolls Sparked a Failed Assault on High Drug Prices*, Bloomberg Businessweek (Apr. 10, 2017), available at <https://www.bloomberg.com/news/articles/2017-04-10/how-patent-trolls-sparked-a-failed-assault-on-high-drug-prices>.

Joshua Landau Responses
Questions for the Record From Senator Mazie Hirono

1. *In eBay*, Chief Justice John Roberts drafted a concurring opinion noting “the difficulty of protecting a right to exclude through monetary remedies that allow an infringer to use an invention against the patentee’s wishes.” While he ultimately supported the Court’s decision to do away with the presumption of injunctive relief, he advised courts to follow the “long tradition” of issuing injunctions in patent cases rather than “writing on an entirely clean slate.”

Data suggests that courts have not followed the Chief Justice’s suggestion. A 2017 study issued by the Hoover Institution Working Group on Intellectual Property, Innovation, and Prosperity found that “the eBay decision has reduced, rather dramatically, both the level at which injunctive relief is sought in patent cases and the rate at which they are granted.”

Do you agree with Chief Justice Roberts’s statement that monetary damages do not necessarily adequately protect a patent owner’s right to exclude? Why or why not?

Chief Justice Roberts’ *eBay* concurrence completes this observation by stating that this “does not entitle a patentee to a permanent injunction or justify a general rule that such injunctions should issue,”¹ the likely outcomes if the STRONGER Patents Act were to pass.

Justice Kennedy’s concurrence is particularly relevant in understanding both the historical and current status of injunctions. Justice Kennedy notes that “trial courts should bear in mind that in many instances the nature of the patent being enforced and the economic function of the patent holder present considerations quite unlike earlier cases.”² This is most relevant in the situation faced by the majority of modern litigants and explains the difference between historical practice and modern practice.

The majority of modern-day plaintiffs seek to obtain a monetary remedy for use of their patent by others.³ Instead of a patent owner who seeks to prevent a competitor from using their invention, defendants face patent owners who seek to force them to take a license to the patent at a rate higher than the value contributed by the patented technology. An injunction is only a route to an increased monetary remedy for these plaintiffs.

In contrast, where a patent owner suffers an irreparable harm (*i.e.*, a harm not compensable via money damages), they should—and can—obtain injunctions. Competition between the litigants is not a requirement for a plaintiff to obtain an injunction, though irreparable harms are more likely to exist when a competitive injury exists.⁴ In contrast, where a patent owner offers to

¹ *eBay v. MercExchange*, 547 U.S. 388, 395 (2006) (Roberts, C.J., concurring).

² *eBay* at 396 (Kennedy, J., concurring).

³ Miller *et al.*, *Who’s Suing Us? Decoding Patent Plaintiffs since 2000 with the Stanford NPE Litigation Dataset*, 21 *Stan. Tech. L. Rev.* 234, 257 (2018) (illustrating that the plurality of lawsuits, both by absolute number and number of defendant/lawsuit pairs, are attributable to non-university patent assertion entities).

⁴ See Chris Seaman, *Permanent Injunctions in Patent Litigation After eBay: An Empirical Study*, 101 *Iowa L. Rev.* 1949, 1990 (2016) (showing that non-competitors still obtain injunctions post-*eBay*).

license for a fee, there is no irreparable harm that cannot be compensated by monetary damages.⁵ Where a patent owner's entire business model is licensing for money, there is no irreparable harm that cannot be compensated by monetary damages.⁶

This is precisely the situation that *eBay* restored. Where an irreparable harm is shown, injunctions generally issue. Where an irreparable harm does not exist, injunctions do not.

As a basic principle of remedies, U.S. law does not generally provide restrictions on action such as an injunction or specific performance where a monetary remedy suffices. This is a general principle of remedies that is not limited to patent law. The Judiciary Act of 1789—one of the first bills to pass through Congress—noted that “suits in equity shall not be sustained in either of the courts of the United States, in any case where plain, adequate and complete remedy may be had at law.”⁷ This was itself the adoption of “the principles of the system of judicial remedies which had been devised and was being administered by the English Court of Chancery at the time of the separation of the two countries.”⁸

The actual historical practice of 19th century courts bears out the application of this principle. 19th century courts regularly denied injunctions based on such factors as licensing of patents to others or non-working of the patent.⁹ In fact, they may have been more aggressive than modern courts, which permit injunctions based on assertion of a patent that is not being worked or is being licensed so long as the patent owner can show a competitive or otherwise irreparable harm.

And as a matter of economic policy, the over-compensatory effect of injunctions can diminish overall social welfare. A patent owner is entitled to a fair remedy for the loss they have actually suffered, not for the windfall profits enabled by an injunction. A loss fully compensable with money does not require an injunction to remedy that loss, nor should one issue. Creating a right to the windfall remedy of an injunction in situations where it is not required to obtain compensation disincentivizes productive activity and incentivizes additional patent litigation seeking to obtain such windfall profits.¹⁰ Further, excessive availability of injunctions can threaten cumulative innovations, resulting in an overall decrease in innovation.¹¹

Evidence also suggests that the overall impact of the *eBay* decision has been positive and that innovators continue to innovate. There is empirical evidence that the *eBay* decision led directly

⁵ See, e.g., *Seymour* at 489-90 (“The only actual damage which the patentee has suffered in such a case is the non-payment of the price which he has put on his license, with interest, and no more”).

⁶ *Id.*

⁷ Judiciary Act of 1789, 1 Stat. 73, 82 (1789).

⁸ *Grupo Mexicano de Desarrollo, S.A. v. Alliance Bond Fund, Inc.*, 527 U.S. 308, 318 (1999).

⁹ See, e.g., *Howe v. Morton*, 12 F. Cas. 663, 670 (No. 6769) (C.C.D. Mass. 1860); *Colgate v. Gold & Stock Tel. Co.*, 6 F. Cas. 76, 81 (No. 2991) (C.C.S.D.N.Y. 1879); *Hodge v. Hudson R.R.*, 12 F. Cas. 276, 278 (No. 6560) (C.C.S.D.N.Y. 1868); *Huntington Dry-Pulverizer Co. v. Alpha Portland Cement Co.*, 91 F. 534 (1899); *Hoe v. Boston Daily Advertiser Corp.*, 14 F. 914 (C.C.D. Mass. 1883); *Hoe v. Knap*, 27 F. 204, 212 (C.C.N.D. Ill. 1886); *Dorsey Harvester Revolving Rake Co. v. Marsh*, 7 F. Cas. 939, 945 (No. 4014) (C.C.E.D. Pa. 1873).

¹⁰ See Filippo Mezzanotti & Timothy Simcoe, *Patent Policy and American Innovation After eBay: An Empirical Examination*, 48 Research Policy 1271 (2018), available at <https://www.kellogg.northwestern.edu/faculty/mezzanotti/documents/eBayInnovation.pdf>.

¹¹ Suzanne Scotchmer, *Standing on the Shoulders of Giants: Cumulative Research and the Patent Law*, 5 J. of Econ. Perspectives 29 (1991).

to increases in corporate R&D spending in the information and communications industry. In one study, evidence based on differential exposure to patent litigation suggested that the reduction in litigation risk from *eBay* resulted in significant increases in innovative activity. The study concluded that firms that had a higher pre-*eBay* exposure were more innovative in comparison to the less-exposed firms after *eBay*, creating more patents, creating patents that were more likely to be cited by others, and shifting more money into R&D.¹² A later, broader study found that, overall, *eBay* had only limited impact—positive or negative—on overall American innovative output.¹³ The *eBay* test also favors innovation by productive entities and competitors over innovation by non-competing entities by disfavoring injunctions on patents that are not being used to compete.¹⁴ Finally, *eBay* incentivized invention by entities that actually bring that invention to fruition via a product, rather than patent assertion entities (PAEs) that acquire or file for a patent and wait for someone else to independently invent that same technology, at which time the PAE can use litigation to benefit from the investment the manufacturer made in creating a product. *eBay* has thus been more faithful to the Constitutional mandate of “promot[ing] progress in the [] useful arts”¹⁵ than the rule proposed in STRONGER.

While not identified in the question, the referenced Hoover Institution study appears to be a study conducted by Kirti Gupta, a Director of Economic Strategy at Qualcomm, Inc., and law professor Jay Kesan.¹⁶ The study has several flaws. The most significant such flaw is that it identifies *eBay* as the cause for the decline in plaintiffs seeking injunctions.¹⁷

However, the decline—particularly in the rate at which preliminary injunctions are sought—quite clearly predates the *eBay* decision by a number of years.¹⁸ It is illogical to attribute an event as the cause of a decline that predates that event. Instead, the data suggests that the decline in the rate of seeking injunctions is due to factors unrelated to *eBay*, such as the increasing prevalence of lawsuits by PAEs or other non-competitors over the period studied (2000-2012).¹⁹ Even pre-*eBay*, PAEs were seen as less likely to receive an injunction. Post-*eBay*, PAEs are well-understood to be less likely to receive injunctions due to their general inability to show irreparable harm. This change is reflected in Gupta and Kesan’s data, which illustrates a significantly higher decline in injunction motion rate for NPEs than for operating companies.²⁰ The shift in litigant mix to a higher proportion of PAEs explains most of the overall decline in the rate at which injunctions are sought, not *eBay*. Further, Gupta and Kesan define the rate at which plaintiffs seek injunctions as a percentage of the total number of cases. This means that

¹² Filippo Mezzanotti, *Roadblock to Innovation: The Role of Patent Litigation in Corporate R&D*, Working Paper 343911, Harvard University OpenScholar (2015), available at <https://www.kellogg.northwestern.edu/faculty/mezzanotti/documents/innovation.pdf>.

¹³ Mezzanotti & Simcoe, *supra* n. 10.

¹⁴ See Chris Seaman, *Permanent Injunctions in Patent Litigation After eBay: An Empirical Study*, 101 Iowa L. Rev. 1949, 90 (2016), available at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2632834.

¹⁵ U.S. Const., Art. 1, § 8 cl. 8.

¹⁶ Kirti Gupta & Jay Kesan, *Studying the Impact of eBay on Injunctive Relief in Patent Cases*, Hoover Inst. Working Paper No. 17004 (Jan. 10, 2017), available at <https://hooverip2.org/wp-content/uploads/ip2-wp17004-paper.pdf>.

¹⁷ *Id.* at 14.

¹⁸ *Id.* at Fig. 2, Fig. 7.

¹⁹ Miller *et al.*, *Who’s Suing Us* at Fig. 2, Fig. 3, *supra* n. 3.

²⁰ Gupta & Kesan, *Studying the Impact* at Fig. 7, *supra* n. 16..

changes which impact success rates will be reflected in the rate of seeking injunctions. Given significant changes which occurred in the same timeframe as *eBay*, such as the 2007 *KSR v. Teleflex* case which made it easier to prove a patent to be obvious, the decline in rate at which injunctions are sought appears to be likely due to changes in the overall composition and conduct of patent litigation rather than changes in litigant behavior derived from *eBay*.

Even given these flaws, the Gupta/Kesan paper correctly notes that the grant rate when an injunction is requested has not been significantly reduced post-*eBay*.²¹ This conclusion meshes with conclusions drawn by a number of other researchers, as well as my own review of injunctive relief rates.²² The most reasonable conclusion is that, rather than plaintiffs in meritorious cases not seeking injunctions, the plaintiffs in meritorious cases continue to seek injunctions at roughly the same rate. The decline in overall rate is explained by the increase in cases where the harm suffered can be recompensed via damages, leading the plaintiff not to seek an injunction.

This suggests that courts continue to be able to “grant injunctions in accordance with the principles of equity” as provided for by nearly 200 years of statutory patent law.²³ Denial of an injunction in these circumstances comports with the principles of equity, historical practice, and sound economic policy, while evidence suggests that it has not negatively impacted innovation. As Justice Kennedy correctly reflects, the principles of equity allow “courts to adapt to technological and legal developments in the patent system” and thus to provide appropriate compensation, rather than over-compensation.²⁴ Injunctive relief is appropriate in situations where an irreparable harm to the patent owner exists; providing it in situations where an irreparable harm to the patent owner does not exist risks over-compensating patent owners, violating the fundamental principle of remedies—that a plaintiff be compensated for the injury they actually suffered. The post-*eBay* patent law thus returned to the historical principle of remedies, compensating inventors for the harms they actually suffer. An injunction provides leverage for patent owners to seek to obtain not just the value contributed by the patent, but the value contributed by the defendants’ independent activities, a harm well-recognized more than a hundred and fifty years ago.²⁵

²¹ Gupta & Kesan, *Studying the Impact* at 14, *supra* n. 16.

²² See Joshua Landau, “Much Ado About Injunctions”, *Patent Progress* (Aug. 1, 2019) (establishing an 85% grant rate post-*eBay* in merits determinations), available at <https://www.patentprogress.org/2019/08/01/much-ado-about-injunctions/>. This rate is comparable to rates in a variety of similar studies. *Cf.* Seaman, *Permanent Injunctions* *supra* n. 4 (estimating an 80% grant rate); Colleen Chien & Mark Lemley, *Patent Holdup, the ITC, and the Public Interest*, 98 *Cornell L. Rev.* 1, 9-10 (2012) (estimating a 75% post-*eBay* grant rate).

²³ 35 U.S.C. § 283; *cf.* Patent Act of 1870 § 55 (“the court shall have power, upon bill in equity filed by any party aggrieved, to grant injunctions according to the course and principles of courts of equity”); Patent Act of 1836 § 17 (“courts shall have power, upon bill in equity filed by any party aggrieved, in any such case, to grant injunctions, according to the course and principles of courts of equity”).

²⁴ *eBay* at 397.

²⁵ See *Seymour v. McCormick*, 57 U.S. 480, 489-90 (1854) (“one who invents some improvement in the machinery of a mill could not claim that the profits of the whole mill should be the measure of damages for the use of his improvement . . . [i]t was the interest of the patentee that all railroads should use his invention, provided they paid him the price of his license. . . . The only actual damage which the patentee has suffered in such a case is the non-payment of the price which he has put on his license, with interest, and no more.”).

2. *A big driver behind the America Invents Act was a narrative that American businesses were under attack by so-called “patent trolls.” What exactly falls within the definition of “patent troll” seems to have evolved over time. The term is frequently applied to entities that buy supposedly “bad patents” and extort money from small businesses by threatening them with litigation. But it’s also been applied to universities that seek to enforce patents covering the inventions their researchers and big companies that invented the subject matter covered by their patents and sell products that embody those inventions.*

We should not be disparaging the universities, companies, and small inventors that are doing the hard work of innovation. We should be encouraging them and incentivizing them to continue this work.

- a. *Do you believe that the United States has a patent troll problem?*
- b. *What is your definition of a patent troll?*
- c. *Would universities, businesses, and small inventors that put in the time and effort to invent fit within your definition?*

Patent trolls continue to form a large proportion of U.S. patent litigation. In fact, the number of lawsuits attributable to patent trolls is just as high now as it was in the late 2000s—the AIA has stemmed its growth but has not eliminated the problem.

The most detailed available data is the dataset provided by the Stanford NPE Litigation Database.²⁶ Defining a patent assertion entity as an entity which acquires and assert patents, which was formerly an operating company and has shifted to a pure licensing strategy, or which was inventor-founded and operates purely as a licensing entity, the plurality of lawsuit-defendant pairs filed in each year from 2011-2019 were filed by patent assertion entities.²⁷ In fact, the number of lawsuits filed by acquisition entities—i.e., entities which solely exist to acquire and assert patents—has been roughly equal to the number of lawsuits filed by operating companies, and the number filed by PAEs is roughly equal to those filed by operating companies, individuals, startups, universities, and industry consortia such as patent pools combined.

The PAE categorization used in this dataset explicitly excludes universities, inventor-started businesses, startups, and individual inventors unless they exhibit characteristics that would instead place them into one of the PAE categories.

For example, a university, business, or small inventor can exhibit the behavior of a patent troll and it is fair to characterize them in that way when they do so. For example, the University of New Mexico’s technology transfer office recently began a litigation campaign in which it acquired patents from a Taiwanese government research entity and began to assert them in

²⁶ Stanford NPE Litigation Database, available at <https://npe.law.stanford.edu/>.

²⁷ Miller, *Who’s Suing Us* at Fig. 3, *supra* n. 3. Miller describes lawsuit-defendant pairs in order to normalize between operating company litigation, which typically names a single defendant, and NPE litigation, which often targets multiple defendants in a single suit, as well as between pre- and post-AIA joinder regimes which reduced the ability to name multiple defendants in a single suit.

litigation.²⁸ These patents bore no tie to the University of New Mexico and were acquired purely for litigation purposes. Characterization of the University of New Mexico as a patent troll in this circumstance is reasonable.²⁹

Further, it is unclear if university assertion efforts are actually beneficial to the universities that engage in patent assertion and there is significant reason to believe they do not incentivize more innovation than we would otherwise have. While we should encourage universities to innovate, most university tech transfer offices do not appear to actually transfer knowledge in the course of much of their activity.³⁰ In fact, 84% of university tech transfer offices are unprofitable.³¹ It might encourage more innovation and knowledge transfer if patent policy discouraged university assertion against independent inventors. Instead, changes in patent policy could encourage making research freely available or incentivize behaviors that actually result in knowledge transfer such as *ex ante* partnerships or encouragement of inventor involvement with licensees.³² As one non-academic example of such a possibility, Toyota recently announced that it would provide royalty-free licensing of its hybrid vehicle patents, with the intention of providing consulting services to those who wished to benefit from Toyota's expertise.³³ An equivalent academic model would be open publication of knowledge, combined with incentivization of professorial or institutional involvement in corporate application of the university research. This would enhance knowledge distribution, provide a pathway for knowledge transfer from basic to applied research, promote the traditional academic purpose of open sharing of knowledge, and conserve scarce university resources by limiting non-innovation promoting expenditures.

²⁸ Joshua Landau, "Troll U: When Tech Transfer Stops Being About The Transfer", *Patent Progress* (July 24, 2019), available at <https://www.patentprogress.org/2019/07/24/troll-u-when-tech-transfer-stops-being-about-the-transfer/>.

²⁹ See also Robin Feldman & Mark Lemley, *The Sound and Fury of Patent Activity*, 103 Minn. L. Rev. 1793, 1796 (2019) ("at other times universities act as patent trolls, not disseminating new inventions but merely suing those who develop those inventions independently.").

³⁰ *Id.* at 1795 ("very few patent licensing demands seemed to be associated with any indicia of innovation or legitimate technology transfer"); see also Ajay Agrawal & Rebecca Henderson, *Putting Patents in Context: Exploring Knowledge Transfer from MIT*, 48 Mgmt. Sci. 44 (2002) (patents accounted for less than 10% of knowledge transfer from professors); Bhaven N. Sampat, *Patenting and US Academic Research in the 20th Century: The World Before and After Bayh-Dole*, 35 Res. Pol'y 772, 773 (2006) ("in most industries patents are a relatively unimportant channel" for knowledge transfer).

³¹ See, e.g., Walter Valdivia, *University Start-Ups: Critical for Improving Technology Transfer*, Center for Technology Innovation at Brookings (Nov. 2013) ("84% [of] universities operating technology transfer in the red"), available at https://www.brookings.edu/wp-content/uploads/2016/06/Valdivia_Tech-Transfer_v29_No-Embargo.pdf.

³² See, e.g., Lisa Larrimore Ouellette & Rebecca Weires, *University Patenting: Is Private Law Serving Public Values?*, Mich. St. L. Rev. (forthcoming 2019), available at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3443692. Ouellette and Weires establish that there is insufficient evidence to justify the costs university patenting creates and suggest various approaches to reduce the societal costs of university assertion while maintaining the innovation benefits.

³³ Ethan Wham, "New Patent Paradigm? Emerging Licensing Practices", *Disruptive Competition Project* (June 28, 2019), available at <http://www.project-disco.org/intellectual-property/062819-new-patent-paradigm-emerging-licensing-practices/>.

3. *In a blog post last year, Cisco General Counsel Mark Chandler praised inter partes reviews, saying “[t]he new tool has been a boon for the victims of shake down tactics to extract value from weak patents.”*

It seems as though if there are entities misusing patents to “shake down” businesses, we should be going after that bad conduct, not weakening the patent system.

That is exactly what the STRONGER Patents Act does. It treats the sending of abusive demand letters as an unfair and deceptive practice and gives the Federal Trade Commission the authority to crack down on these practices.

Do you agree that it is better to give the Federal Trade Commission the authority to stop abuses of the patent system rather than weakening patent rights across the board by subjecting them to repeated review by the Patent Office? Why or why not?

There is no reason to pick between the two. Both serve distinct and important roles. That said, it is far more important to provide the ability to review patents that should not have been granted than it is to provide the FTC with authority to address the narrow issue of demand letter abuse, which represents only a single form of patent abuse.

In fact, far more common than demand letter abuse is the situation in which a patent owner asserts one or more patents where the claims cover an invention that the public has a right to use because it was known before the patent owner invented or filed their patent. These patents—often referred to as “bad” or “weak” patents—may be asserted without a bad faith demand letter, but their impact is far larger. Assertion of invalid patents disincentivizes follow-on innovation and frequently transfers resources from productive entities that create well-paying jobs for Americans in research, development, and manufacturing to unproductive entities who primarily benefit undisclosed investors,³⁴ with a minimal percentage of litigation proceeds—if any—going to the original inventor.³⁵

Inter partes reviews are also rarely repetitive. Instead, as a previous letter from CCIA to the Subcommittee explained,³⁶ there is simply no meaningful serial petition problem. Where a patent owner is faced with multiple petitions, it is due to factors under the patent owner’s own control—the number of lawsuits they have filed, the number of asserted claims and patents, and their willingness to identify asserted claims early in a case. When a patent owner sues 10 defendants, it is perfectly reasonable for each defendant to file an IPR—especially since they are commonly similar or identical and joined together into a single case, meaning that the patent

³⁴ Mary Ellen Egan, “Other People’s Money: Rise of litigation finance companies raises legal and ethical concerns”, *ABA Journal* (Dec. 1, 2018) (discussing the recent increase in litigation financing arrangements, the possibility litigation financing increases litigation rates and costs, the lack of any requirement to disclose litigation finance arrangements, and potential ethical issues).

³⁵ Robin Feldman & Mark Lemley, *Do Patent Licensing Demands Mean Innovation*, 101 *Iowa L. Rev.* 137, 143 (2015) (estimating less than 20% of total payments to NPEs are used to fund additional research or to pay original inventors).

³⁶ Letter for the Record from CCIA to Senators Thom Tillis and Chris Coons Regarding Mar. 13, 2019, Senate Judiciary Committee IP Subcommittee Hearing on Oversight of the U.S. Patent and Trademark Office (Mar. 20, 2019), available at <https://www.patentprogress.org/wp-content/uploads/2019/03/2019-03-20-Senate-IP-Subcommittee-Letter-Re-Referenced-Studies.pdf>.

owner really only defends one case even if a set of 10 IPRs were filed. Where a patent owner files a lawsuit charging infringement of multiple patents, the statute requires that each patent be individually petitioned—there is no provision for challenging multiple patents within a single petition. And when a patent owner asserts a large number of claims, “filing of multiple petitions challenging the same patent may be appropriate where, as here, Petitioner has reasonable justification for multiple filings due to the multiplicity of claims to be challenged.”³⁷ Repetitive petitions of the type described in the question are also rare, with more than 88% of patents only ever facing 1 or 2 IPR petitions.³⁸ Harming the vast majority of petitioners in order to address a “problem” that is at best rare would be bad for both the patent system and the larger innovation economy. This is particularly true as multiple petitions are almost always triggered by large-scale patent owner campaigns against multiple defendants asserting patents with large numbers of claims.

Finally, the provision granting the FTC authority to investigate demand letters in the STRONGER Patents Act is fatally flawed. It only allows the FTC to investigate demand letter abuse. While this is a real problem, it is only one small aspect of litigation abuses and even of bad faith patent assertion in general. In fact, the FTC sued MPHJ,³⁹ the poster child example of bad faith demand letter abuse, under existing FTC authorities. MPHJ’s final defeat took another 2 years and came when MPHJ’s patents were invalidated in *inter partes* review.⁴⁰ This alone suggests that the STRONGER Patents Act demand letter provision is insufficient to control litigation abuse by assertion entities.

The STRONGER Patents Act would also override existing state laws that provide the recipients of demand letters with the ability to obtain attorney’s fees when faced with bad faith assertion. Those laws also allow state Attorneys General to defend the productive companies in their home states. The STRONGER Patents Act would force defendants faced with bad faith patent assertion campaigns to expend significant resources on negotiation or litigation of a patent lawsuit while hoping for the FTC to step in in their particular case. Bad faith assertion laws exist in the vast majority of states.⁴¹ And even in states like California which lack patent-specific demand letter abuse provisions, general unfair competition law can be used by the state or private litigants against abusive demand letter campaigns. In one case, this actually resulted in a prolific PAE agreeing not to sue any California resident on its patents.⁴² These laws provide small businesses with the ability to defend themselves against abusive assertion without waiting for agency intervention.

³⁷ IPR2019-00358, *Apple, Inc. v. UUSI, LLC*, Paper No. 12 (Institution Decision) at 19 (Aug. 5, 2019).

³⁸ USPTO, “Chat With The Chief: An Analysis of Multiple Petitions in AIA Trials” (Oct. 24, 2017), available at https://www.uspto.gov/sites/default/files/documents/Chat_with_the_Chief_Boardside_Chat_Multiple_Petition_Study_20171024.pdf.

³⁹ FTC, “FTC Approves Final Order Barring Patent Assertion Entity From Using Deceptive Tactics”, FTC.gov (Mar. 17, 2015), available at <https://www.ftc.gov/news-events/press-releases/2015/03/ftc-approves-final-order-barring-patent-assertion-entity-using>.

⁴⁰ Joshua Landau, “IPR Successes: Scan-To-Email Defeated By Scanner Makers”, *Patent Progress* (Oct. 4, 2017), available at <https://www.patentprogress.org/2017/10/04/ipr-successes-scan-to-email-defeated-by-scanner-makers/>.

⁴¹ See “Patent Progress Guide to State Patent Legislation”, *Patent Progress* (last updated May 1, 2019), available at <https://www.patentprogress.org/patent-progress-legislation-guides/patent-progresss-guide-state-patent-legislation/>.

⁴² See Joshua Landau, “Sunshine: Eclipse Promises Not To Sue Californians”, *Patent Progress* (May 29, 2019), available at <https://www.patentprogress.org/2019/05/29/sunshine-eclipse-promises-not-to-sue-californians/>.

Because of this, the net impact of the STRONGER Patents Act on demand letter abuse would actually be negative, leaving the kinds of small businesses and startups that are most vulnerable to demand letter abuse with less protection than they currently have. While provision of the FTC with authority to address demand letter abuse would be beneficial, doing so by eliminating existing protections that have already aided small entities would be counter-productive.