

**Earl “Eb” Bright II –
 Innovation in America: How Congress
 can make our patent system STRONGER
 Questions for the Record
 Submitted October 2, 2019**

QUESTIONS FROM SENATOR COONS

1. During the hearing, Mr. Landau testified that venture capital and technology investments have thrived in the years since the Supreme Court’s *eBay* decision and the implementation of the post-grant reviews provided by the America Invents Act. Your testimony painted a different picture. How do you reconcile these conflicting narratives?

Mr. Landau’s claim that “innovation has thrived” since the Leahy-Smith America Invents Act (AIA) was signed into law in 2011 paints an overly-broad picture about the health of our nation’s innovation economy. It may be true, as Landau asserts, that investment in research and development continues to accelerate for certain Computer & Communications Industry Association (CCIA) members who are operating in the Internet and social media fields. However, a closer look at the venture capital (VC) funding streams over the last decade reveals declines in more complex technologies that drive systemic growth in the economy and advance U.S. competitiveness.

The Alliance for U.S. Startups and Inventors for Jobs (USIJ) led a [quantitative study](#) in 2018 to better understand how VC funding streams have shifted over the last decade during monumental changes to the U.S. patent system. USIJ found that while VC investment in lower-risk commercial activities increased between 2004 and 2017, investment in the most advanced technologies decreased disproportionately. The decline in VC funding was especially prominent in the following strategic sectors: core internet networking, wireless communications, internet software, operating system software, semiconductors, pharmaceuticals, drug discovery, surgical devices, and medical supplies. (Please see below for a table summarizing our findings).

Significant Shift in Venture Capital Investments – 2004 to 2017

<ul style="list-style-type: none"> ▪ Exemplary strategic sectors that have declined as a % of total VC funding: ➤ Core internet networking ➤ Wireless communications ➤ Internet software ➤ Operating system software ➤ Semiconductors ➤ Pharmaceuticals ➤ Drug Discovery ➤ Surgical Devices ➤ Medical Supplies ▪ % of total VC funding in 2004: 20.95% ▪ % of total VC funding in 2017: 3.22% 	<ul style="list-style-type: none"> ▪ Exemplary sectors that have increased as a % of total VC funding: ➤ Social network platforms ➤ Software apps ➤ Consumer apparel and accessories ➤ Food products ➤ Restaurants, hotels and leisure ➤ B2C companies in general ➤ Consumer finance ➤ Financial services in general ▪ % of total VC funding in 2004: 11.4% ▪ % of total VC funding in 2017: 36.3%
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I believe that it is no coincidence that investments in the sectors that depend most heavily on patent protection have fallen in our country over the last decade during a time when a number of federal court decisions—such as eBay—and legislative actions have degraded patent rights.

These findings confirm what I have witnessed first-hand on the front lines of the innovation economy as the President of a venture-backed medical device incubator. Without reliable patent protection, even the most cutting-edge startups in these fields cannot amass the incredible investments needed to bring an idea to market. Consider that in the MedTech field, testing a prototype, developing it into a product, conducting clinical studies and obtaining regulatory approval generally takes 8-12 years with about \$75-\$100 million in investments along the way. Investors are unlikely to take this incredible risk if they know that once the company enters the market, large competitors will have the opportunity to challenge the validity of the new product's patent multiple times in court and through a series of challenges at the PTAB.

This might offer some helpful context to why, even though the U.S. is experiencing the longest economic expansion on record, new business formation has [failed](#) to return to normal levels seen before the Great Recession. With an unreliable patent system that benefits entrenched market players, perhaps like CCIA's large [members](#), while stifling inventors and young startups, this "start-up slump" will continue. If the U.S. wants to spur invention and maintain its historic prominence as the world leader in technology and applied science, now is the time for Congress to re-balance the scales of our patent system through measured reforms, such as those included in the STRONGER Patents Act.

2. Some have characterized the STRONGER Patents Act as providing for "automatic" injunctions, rather than rebuttable presumptions on certain factors influencing injunction decisions. Do you agree? Would courts still be free to consider, for example, the public interest and competing hardships when deciding whether to grant equitable relief?

*The actual language of the STRONGER Patents Act does not provide for "automatic" injunctions. The language of the bill establishes, **upon the finding of infringement of a valid patent**, a presumption that further infringement of the patent would cause irreparable injury and remedies available at law (i.e., monetary damages) are inadequate to compensate for that injury. Those two presumptions only apply to the first two factors of the four-factor eBay test. The defendant remains free to overcome the presumptions and the courts are still free to give greater weight to the public interest and competing hardships when deciding whether to grant equitable relief.*

3. During the hearing, Prof. Cotter suggested that injunctive relief is not necessary in most cases of patent infringement, and that monetary damages should instead suffice for patent owners who are not direct competitors to those found to engage in ongoing infringement of valid patent claims. Please explain why the possibility of securing an injunction promotes innovation and efficient dispute resolution, particularly in the context of research companies, startups, universities, and independent inventors.

When an independent inventor, university or young startup company is faced with the increasingly common reality of a larger company selling a product that infringes on its patent, they are basically told that there is no practical and efficient way to remove that infringing product from the market. They are often told that, in lieu of injunctive relief, pursuing monetary damages in district court should be sufficient. But that is not the case. Patent litigation combined with a seemingly endless Inter Partes Review process takes many years – it is not an efficient process for the inventor, university or young startup. In view of the lack of injunctive relief and the disproportionately large burden on the inventor, university or young startup, a larger company has little or no incentive to have an early, efficient dispute resolution. In addition, for the few inventors, startups or universities that can afford to pursue litigation against a large incumbent using its technology, the Federal Circuit has significantly restricted the patentholders' ability to collect a meaningful damages award. This long and expensive process is also never a substitute for a young start-up's true objective, which is to see the product it invented and developed succeed in the market.

The debate in Washington is often about how patents work in the context of litigation, and as a patent attorney, I understand how that grabs the headlines. But as the President of a successful life science incubator and an executive of many companies, I can tell you that how our patent system functions in practice below the surface of litigation is far more important to our economy. Litigation is just the tip of the iceberg. Only about 5% of patent-related activity is litigation. The substantial majority of patent-related activity is the rest of the iceberg. The majority of patent activity is related to the transfer of technology, protecting investment, public disclosure to disseminate information, facilitating design-arounds, and promoting technologic advancement. The changes that have occurred in patent law have eviscerated the ability to enforce a patent at the tip of the iceberg and are magnified on the rest of the iceberg... eroding it away.

4. PTAB trials were created to provide an efficient alternative to district court litigation, but PTAB challenges are adjudicated according to different standards of proof and – until recently – different claim construction standards than those applied in district courts. Furthermore, the lack of a standing requirement at the PTAB has enabled unforeseen abuses by, for example, hedge funds seeking to manipulate stock prices or petitioners seeking to harass competitors. To what extent would the STRONGER Patents Act's harmonization of these proceedings restore confidence in the U.S. patent system?

While we applaud USPTO's action to harmonize the claim construction standard used in district court with that applied in PTAB proceedings, codifying these changes through statutory reform will provide the long-term certainty startups need to amass the huge investments required to bring an idea to market. As I've noted above, in the MedTech field, testing a prototype, developing it into a product, conducting clinical studies and obtaining regulatory approval generally takes 8-12 years, which could easily span the leadership of multiple USPTO Directors with different priorities. Therefore, while the Administrative changes are helpful for protecting inventions currently in the development pipeline, if policymakers want to truly impact investment decisions and spur innovation in strategic sectors, statutory reform is essential.

Furthermore, I think it is manifestly unfair and abusive to apply a lower standard to make a similar invalidity decision simply because an adjudication occurs in an administrative court rather than a district court. I therefore believe the provision in the STRONGER Patents Act that would once again harmonize PTAB procedure with district court standards for the burden of proof necessary to invalidate a patent is also essential to promoting a reliable and effective patent system.

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QUESTIONS FROM SENATOR HIRONO

1. Over the past decade or so, we’ve seen a number of efforts to weaken patent rights in this country from the Supreme Court’s *eBay* decision to the American Invents Act to the growing exceptions to patent eligible subject matter.

a. What has the weakening of patent rights meant to innovative companies like yours?

It impacts us on a number of levels. First, from the standpoint of a medical technology incubator like ExploraMed, the weakening of patent rights in the U.S. imposes an arbitrary factor into our decision-making process about what startup companies and ideas we might choose to support and pursue. Ideally, these decisions should be based on the strength of the science, the skill of the startup team and the opportunities in the marketplace. In an environment where we are forced to essentially expect that a larger competitor is going to fight us every step of the way by using tools such as the Inter Partes Review (IPR) process and leveraging our inability to enjoin them should they infringe on our IP, it is just another set of major obstacles that our young companies have to overcome in addition to the known challenges that always exist, such as making the product work and getting regulatory approval.

As I noted in the hearing, the U.S. is in an extended startup slump, with new business formation down 16% from 2007 to 2019, we should be looking for ways to incentivize new company formation and foundational invention, not burdening entrepreneurs with a patent system that favors incumbents and works against them.

b. What aspects of the STRONGER Patents Act do you see as most important to incentivizing innovation in the United States?

Every piece of the STRONGER Patents Act will incentivize innovation. For example, making modest improvements to the USPTO IPR process to eliminate serial and “pile-on” IPR challenges that have become a standard operating procedure for the largest technology companies (several of them foreign) to attack smaller competitors would have a huge impact. In addition, the STRONGER Patents Act’s common-sense standing provision would simply apply the same requirement used in federal district court for a petitioner to have a business or financial reason for challenging the validity of a valid U.S. patent. The current lack of a standing requirement has been used as a loophole that has led to some of the most outrageous and abusive tactics imaginable at the PTAB.

Overall, I would say that if Congress were to codify the improvements that USPTO Director Iancu has made to the IPR process and institute a sensible standing requirement, we would see a dramatic reduction in the abusive tactics being used by large

corporations, while also maintaining the effectiveness of the IPR process to provide an efficient forum to challenge truly weak patents.

2. Many people may not fully appreciate that a patent does not actually allow an inventor to practice her invention. For example, if someone invents a new drug and gets a patent on it, she may not be able to sell that drug unless it is ultimately approved by the Food and Drug Administration.

What a patent does allow is for the patent owner to prevent others from practicing her invention. But, since the Supreme Court's decision in *eBay*, it has become increasingly difficult for a patent holder to get an injunction and enforce this right.

You are the named inventor on a number of patents. Your company also helps to develop new medical devices and protects those inventions with patents.

Why it is so important to restore the pre-*eBay* presumption that upon a finding of infringement an injunction will issue to stop that infringement?

Restoring the presumption that a permanent injunction will be granted after patent infringement is proven in district court is, perhaps, the single most effective step we could take to address the growing problem of the tactic of efficient infringement that is being openly used by big companies.

*As I noted in my written testimony, the inability to effectively stop a large company from launching a product that infringes our IP to compete with us just as a startup enters the market is perhaps our biggest fear. Based on the implementation of the *eBay* decision, there is no longer a presumption that this type of behavior, which is commonly referred to as efficient infringement, will result in an injunction to protect the innovative startup.*

3. 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.”

a. 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?

I entirely agree with Chief Justice Roberts. Entrepreneurs, inventors and their investors start companies to bring breakthrough technologies to people who will benefit from them. We are trying to make big advances that will help patients, advance technology, build a

profitable company and employ talented workers. I have never seen a business plan that includes “pursuing monetary damages” as part of its revenue model.

It is not nearly enough, as some have suggested, that startups whose patents have been infringed to be satisfied with monetary damages that are extremely difficult and costly to achieve and, when they do come, only happen after years of litigation against large, well-funded competitors. Telling a startup that brought a new product to the market to see it willfully infringed by a competitor that damages many years in the future should be good enough is insulting and reflects a fundamental misunderstanding of the way the market works and how innovation happens.

b. Please describe the difficulty patent owner’s face in trying to get an injunction.

In the aftermath of the Supreme Court’s decision in eBay v. MercExchange it has become virtually impossible to enjoin a competitor who is infringing our patents. So, when a startup company is faced with the increasingly common reality of a larger competitor launching a product that infringes on its intellectual property, we are basically told that there is no practical and efficient way to remove that infringing product from the market. We are often told that, in lieu of injunctive relief, pursuing monetary damages in district court should be sufficient. But that is not the case. Patent litigation combined with a seemingly endless Inter Partes review process takes many years – time few startups can ever afford. And for the rare small company that can pursue litigation against a large incumbent using its technology, the Federal Circuit has significantly restricted patent-holders’ ability to collect a meaningful damages award. This long and expensive process is not a substitute for our true objective, which is to see the product we invented and the company we created succeed in the market.

4. The America Invents Act introduced inter partes reviews, which allow parties to challenge issued patents before the Patent and Trademark Office. These proceedings were billed as a cheaper, faster alternative to district court litigation.

A study published last year in the American Bar Association’s intellectual property law magazine, *Landslide*, found that IPRs have not lived up to their promise. While in isolation an IPR is generally faster and cheaper than district court litigation, IPRs frequently run in parallel to validity challenges in district court. As a result, many patent holders are forced to take on the added expense of defending their patents before the PTO while still defending those same patents in the district court. For some small inventors, this additional expense makes it impossible to enforce their rights.

I know the Patent Office has taken certain steps to minimize the amount of duplicative challenges to issued patents, both before the PTAB and between the PTAB and district courts. The STRONGER Patents Act goes further—by strengthening the estoppel provisions associated with IPRs, among other things.

Do these provisions go far enough to ensure that patent owners are not forced to defend their patents on multiple fronts?

The study published by the ABA last year that you certainly lays out the problem faced by many innovative startups in clear detail. The combined cost and effort of fighting to defend your patents in both IPR and district court is often overwhelming can frequently drive startups out of business.

In addition to the study you cite, I would draw your attention to an even more [recent article](#) in the ABA's Landslide (attached) documents an aggressive and abusive serial IPR campaign by Apple against a North Carolina startup named Valencell. This case study documents in detail the abusive behavior faced by a North Carolina-based startup starting in 2013 as it attempted to work with Apple who wanted to implement its patented biometric sensors into the Apple Watch. Instead of working with Valencell, the company that developed the biometric technology itself, Apple filed at least 11 IPR challenges on Valencell's entire patent portfolio.

The steps that the USPTO has taken under Director Iancu's leadership have certainly been a very good start. From the perspective of an inventor and startup executive, you can't underestimate the value in having a USPTO Director who actually understands the issues and concerns facing innovative startups and wants the patent system to support them. We certainly have that in Director Iancu.

I believe that Director Iancu has done the best that he can under existing statute and case law. The STRONGER Patents Act would go further and would put in place very effective measures to significantly reduce abusive serial IPRs.

5. The Patent Office undertook a study to determine the extent to which patents face multiple IPR petitions. It found that 15% of patents that have been challenged in an IPR face two or more petitions; 16% of multiple petitions are filed after the PTAB already decided to institute the first IPR; and approximately 5% of multiple petitions face multiple rounds of institution. These statistics suggest that a patent is never safe from further review by the Patent Office, no matter how many times it has been upheld.

I see this as a real problem. Those accused of infringing a patent should not be able to avoid liability by undertaking a war of attrition against what oftentimes is a smaller, less well-funded patent owner.

Do you believe that the problem of multiple petitions is a real one? If so, does the STRONGER Patents Acts fix this problem? Why or why not?

Yes. Under the status quo, even the best inventions that are covered by well-written patents are prone to being stripped of their protections at the PTAB, precisely because the most valuable inventions attract repeated and concerted attacks by challengers. The fact that IPR proceedings allow a petitioner (the equivalent to a plaintiff in court) to launch serial challenges against a patent contradicts our court system, which generally does not allow a plaintiff to file multiple lawsuits on the same matter once it has been adjudicated. Those accused of infringing a patent should not be able to avoid liability by undertaking a war of attrition against what oftentimes is a smaller, less well-funded patent owner. I encourage you review an October 2018 [report](#) from the Alliance for U.S. Startups & Inventors for Jobs

(USIJ) that details the degradation of the “one bite at the apple” premise Congress intended to enshrine under the Leahy-Smith America Invents Act.

Fortunately, as you know, the measured reforms to U.S. patent law in the STRONGER Patents Act would help combat serial attacks in PTAB proceedings. In particular, Section F of the bill would help eliminate repetitive proceedings at the PTAB by allowing petitioners to only file one petition to challenge a patent, unless they are later charged with infringement of additional claims.

6. 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 agree that the United States has a patent troll problem?

No.

The concept of a “patent troll” was a clever marketing and lobbying ploy developed by large technology companies to drive an agenda to weaken the enforceability of patents in the U.S. They did this because they largely integrate the IP of others and are constantly seeking to reduce the acquisition costs of this IP. If you convince Congress and the Administration that anyone who seeks to negotiate a license for their IP is a “troll” who is abusing the system, you can advance an agenda to reduce the leverage of patent owners to a point where the large technology integrators can either: a) infringe with impunity unless/until they are found guilty, or b) pay a much smaller licensing fee after dragging the patent owner through serial IPRs and court litigation. This is the reality today. I do not believe that the U.S. has a patent troll problem, but I believe we have a small business creation problem that is largely a result of the lobbying efforts of big technology companies.

b. What is your definition of a patent troll?

With all due respect Senator Hirono, I’d prefer not to even try to construct a definition of this completely made up concept. I would prefer to work with thoughtful leaders such as yourself to move beyond this hypothetical concept and discuss real issues such as small business creation, incentivizing invention and attracting more women and minorities into the invention and startup ecosystem. No matter what the field of law – patents, securities, torts, etc.—there will always be companies and lawyers that try to game the system, and the courts have developed effective ways to deal with this type of abusive behavior. Abuse by a handful

of patent owners does not provide a rational basis for modifying the rights of every user of the patent system. Litigation abuse should be dealt with as litigation abuse.

c. Would universities, businesses, and small inventors that put in the time and effort to invent fit within your definition?

Universities and small businesses are where the vast preponderance of invention and innovation in the U.S. come from. They should in no way be considered “patent trolls.”

7. 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?

Yes, I do. It is the right tool for the right task. It allows for the FTC to focus on the abusive conduct of a few bad actors without harming the many good inventors and startups. No one would disagree that the enforcement of patents that are known to be invalid or inapplicable merely to extract nuisance value royalties from defendants should be dealt with. The STRONGER patents act allows for that. In the same vein, the abusive behavior described above by large incumbent companies should also be a fair target for the FTC to consider as an unfair trade practice.

WEAPONIZIN

Patent reform was heralded as a way to clean out bad patents and fight “patent trolls.” In 2011, Congress passed the America Invents Act (AIA) and thereby created a tribunal within the U.S. Patent and Trademark Office (USPTO) for evaluating challenges to patent validity called the Patent Trial and Appeal Board (PTAB). The PTAB and its proceedings (inter partes reviews, or IPRs, among others) were envisioned as an efficient vehicle for challenging the validity of issued patents. And in many ways, the PTAB has delivered on this promise.

PTAB Standing Rules Open Patent Portfolios to Liability

Petitioning the PTAB has the barest of standing requirements. As long as the petitioner (and its privies and other real parties in interest) divulges its identity, any person other than the patent owner may petition to invalidate a patent. The petitioner can file separate petitions against different claims of a patent. Moreover, the PTAB’s practice has been to allow a single petitioner to file multiple petitions against a single claim (Samsung, for example, has filed six petitions against a single patent claim). The impact of this open standing requirement is that a party that wants to unleash a torrent of actions against a patent owner has the ability to do exactly that.

Unsurprisingly, given the open standing rules in the PTAB, companies have discovered that the PTAB provides potent leverage. Well-funded petitioners have adopted the PTAB as

a favored jurisdiction for putting pressure on smaller patent owners, particularly those that have potentially troublesome intellectual property positions.

Innovative companies with burgeoning patent portfolios may find that their portfolio is as much a liability as an asset. If an innovative company finds that one of the “tech giants” is exploiting the technology that the innovator developed and patented, and dares to confront this infringement, the innovator may be threatened with an onslaught at the PTAB. That is, the tech giant may respond with the prospect of filing petitions, and often multiple petitions, against each and every patent in the innovator’s portfolio. The bigger the portfolio, the bigger the campaign that the tech giant can launch against the innovator.

The harm to the innovator is immense. An innovator with a modest patent portfolio may find itself on the receiving end of dozens of PTAB petitions, regardless if it ever filed suit or threatened to enforce the patents. Defending against this barrage could easily cost several million dollars. The entire patent portfolio would be tied up in the PTAB for 18 months or more. Attempting to countersue in district court would likely result in a stay, meaning there would only be pressure against the tech giant if and when the patents emerge from the PTAB (presuming that the innovator itself is able to survive the dispute, including appeals). Securing funding to weather this war, whether it be funding for the litigation or just basic operations funding, when under a hailstorm of litigation from one of the tech giants is precarious at best, and more likely impossible for a nascent company without a large and established revenue stream.

GIPRS

By Steven C. Carlson

Case Study: Valencell

Weaponizing the IPR process appears to be integral to the playbook of large tech companies. A stunning example of turning patent reform on its head, to use the PTAB to neutralize the patents of an innovator, is the case of Valencell Inc. The following facts are taken exclusively from the public record.

Valencell is an innovative company in North Carolina that developed biometric sensors. These sensors could measure heart rate signals for use in wearable technology. Valencell had already obtained a robust patent portfolio by the time that Apple Inc. assembled a team to develop the Apple Watch. As pleaded in Valencell's eventual complaint, beginning in March 2013, Valencell began noticing that its white papers describing its biosensor technology were being downloaded from its website under fictitious names that, it was subsequently determined, were entered by Apple employees. Discussions ensued, and Apple then met with Valencell's employees to discuss incorporating Valencell's biometric sensors into the Apple Watch. Valencell explained that its technology was patent protected and would require a license. In an attempt to find a mutually beneficial arrangement, Valencell developed a prototype for a potential collaboration with Apple. The parties did not reach an agreement.

Apple proceeded to develop its Apple Watch, incorporating biometric sensors that Valencell concluded infringed its patents. Valencell sued Apple for patent infringement under four patents: U.S. Patent Nos. 8,886,269; 8,923,941; 8,929,965; and 8,989,830. Valencell simultaneously sued Fitbit under the same patents.

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In its first wave of IPRs, Apple filed six IPRs (five of which were joined by Fitbit as a named petitioner following institution). All of these IPRs attacked the patents that Valencell had asserted in district court, with two petitions filed against each of the '830 and '941 patents. All IPRs were instituted except one of Apple's two attacks on the '830 patent. Rather than simply allowing this first wave of six petitions to play out, Apple then piled on. For good measure, Apple (this time not joined by Fitbit) filed a series of attacks comprising seven additional IPR petitions, challenging other patents of Valencell's portfolio that had not been previously asserted, including two petitions filed against U.S. Patent No. 8,562,040, and one each against U.S. Patent Nos. 8,157,730; 8,888,701; 8,942,776; 9,044,180; and 9,289,135.

Several of Valencell's claims survived the IPR attacks. In particular, claims of the '941 patent survived on the merits the multiple petitions challenging that patent, and the PTAB declined to institute an IPR challenging the '701 patent. Despite the survival of these claims, Valencell relinquished in the litigation and settled with Apple in September 2018 (while an IPR filed by Fitbit remains pending).

An additional cost of Valencell's dispute with Apple is that its portfolio has been neutralized until the IPRs fully resolve. Valencell sued another direct competitor, Bragi, for allegedly infringing four patents, including two patents that were not challenged in the above-mentioned IPRs. However, the district court has stayed the entire litigation, despite the fact that two patents are untouched by the IPR dispute. Effectively, Valencell's portfolio has been put on ice until all the IPRs resolve.

Valencell was not a patent troll. According to the publicly available documents, Apple sought out Valencell's technology by downloading its white papers under false pretenses, invited Valencell to build a prototype, and then launched its Apple Watch technology in a manner that Valencell concluded infringed its patents. When Valencell fought back, Apple launched multiple waves of IPR petitions against Valencell's patents, including multiple petitions against each of the '830 and '941 patents,¹ and including seven petitions against patents that Valencell had never asserted. Many of Valencell's claims survived the onslaught. Nonetheless, it appears that Valencell could not afford to maintain the prolonged litigation and Apple won under confidential terms. This "victory" by Apple has turned the patent system on its head.

"Reasonable Apprehension of Suit"

The current statutory structure for the PTAB does not prevent companies like Apple from challenging whatever patent they want, including targeting every patent in an innovator's portfolio. There is no "reasonable apprehension of suit" standard for triggering jurisdiction in the PTAB, like there is in the district courts for establishing "case or controversy" jurisdiction. Companies like Apple do not have to state a reason for wanting to challenge a patent in the PTAB. The fact that the targeted patent exists, and that there is prior art to at least state a credible invalidity challenge, is enough for a real party in interest to establish jurisdiction to proceed. The PTAB of course has discretion to proceed or decline to institute an IPR based on the evidence presented; nonetheless, the PTAB generally does not get involved in the motivations for challenging a patent, insofar

as the prior art standards and the real party in interest requirements are met (albeit with some scrutiny under the *General Plastic* standard for repetitive, serial IPRs, discussed below).

The statutes governing the PTAB do not impose a reasonable apprehension of suit standard, and there may be valid reasons for omitting such a requirement. For example, upstart companies seeking to break into a market may utilize the PTAB for facilitating a "freedom to operate" strategy, to invalidate overreaching patents that block access to implementing a technology. Clearing the pathway can be done at an early stage in a company's life cycle, before product launch, before infringement, and thus before a true case or controversy would be established to allow district court jurisdiction over the dispute. In such an example, the PTAB's open standing rules can be seen as facilitating technological growth.

Nonetheless, the perils of having no case or controversy requirement are on display in the Valencell case. Without a case or controversy requirement, every patent in a portfolio becomes an opportunity to pick a fight and impose cost and leverage. The bigger the patent portfolio, the greater the ability for a company like Apple to impose a burden on an upstart with valuable technology. And while in theory the upstart company could withstand the onslaught with the right team of litigation funders and contingency lawyers, and emerge triumphant with a battle-hardened portfolio, the reality is that funding such a protracted war in the early stages of a company's existence, when it lacks a steady revenue stream to support the litigation campaign, is nearly impossible.

Serial IPRs: "One Bite at the Apple?"

One strategy on display in the Valencell case was the filing of multiple IPRs to challenge a single patent (and often to challenge a single patent claim). For example, Valencell's '941 patent was subjected to two IPR petitions by Apple, followed by two "me too" petitions by Fitbit. That is, challengers can find different combinations of prior art, put each of those combinations in a separate petition, and launch serial waves of attack against a single patent, with the effect of magnifying the cost and burden of PTAB defense.

This serial IPR practice is commonplace in the PTAB. For example, the top five filers of IPR petitions (Apple, Samsung, Google, Microsoft, and LG) routinely file multiple petitions against a single patent claim. One study found that over half of the IPRs filed by Apple overlapped another petition by Apple or one of its privies against at least one common patent claim.² Likewise, over half of Microsoft's IPR petitions overlapped another petition by Microsoft or its privies filed against at least one common patent claim. Similarly, for Google, Samsung, and LG, over a third of their petitions were overlapping in this manner. While there is debate over the motivation for filing these overlapping petitions, the raw tally of overlapping petitions is surprisingly high.

Whether the law allows a party to file multiple petitions targeting the same claim is a matter of dispute. While the statute does not contain an outright prohibition on *filing* overlapping IPR petitions, the statute does prohibit "maintaining" a petition once the PTAB has ruled on a petition challenging a common claim. Section 315(e)(1) provides as follows:

The petitioner in an inter partes review of a claim in a patent under this chapter that results in a final written decision under section 318(a), or the real party in interest or privy of the petitioner, may not request or maintain a proceeding before the Office with respect to that claim on any ground that the petitioner raised or reasonably could have raised during that inter partes review.³

If indeed a petitioner cannot maintain more than a single petition resulting in a final written determination, then a fair question is whether the PTAB should institute IPRs based on petitions with overlapping claims. To date, the PTAB has not drawn a hard prohibition on the filing of multiple, overlapping IPR petitions by a party and its privies. Instead, the PTAB issued an updated Trial Practice Guide in August 2018, addressing the factors it may consider in its discretion as to whether to institute IPRs on overlapping petitions. These “*General Plastic* factors” include the following:

1. Whether the same petitioner previously filed a petition directed to the same claims of the same patent;
2. Whether at the time of filing of the first petition the petitioner knew of the prior art asserted in the second petition or should have known of it;
3. Whether at the time of filing of the second petition the petitioner already received the patent owner’s preliminary response to the first petition or received the PTAB’s decision on whether to institute review in the first petition;
4. The length of time that elapsed between the time the petitioner learned of the prior art asserted in the second petition and the filing of the second petition;
5. Whether the petitioner provides adequate explanation for the time elapsed between the filings of multiple petitions directed to the same claims of the same patent;
6. The finite resources of the PTAB; and
7. The requirement under 35 U.S.C. § 316(a)(11) to issue a final determination not later than one year after the date on which the Director notices institution of review.⁴

The *General Plastic* factors are applied at the PTAB’s discretion. To date, while it does appear that the PTAB is applying the *General Plastic* factors with increasing scrutiny (and the recent *Valve Corp.* ruling shows a continued tightening of this standard⁵), there is no hard and fast rule. It thus remains permissible for the tech giants to file multiple, overlapping IPR petitions against a patent owner’s portfolio. Adopting a “see what sticks” strategy appears to be an acceptable approach for large companies seeking to overwhelm a troublesome patent portfolio.

Congressional Intent: Multiple Petitions

Congress foresaw that PTAB proceedings could burden innovators like Valencell. In the debates concerning the proposed Patent Reform Act of 2007, the comments were directed to the then proposed “first window” and “second window” post-grant review (PGR) proceedings. This “second window” is akin to the now enacted IPR provisions. Congress was concerned about the possibility of serial petitions in the PTAB by “a party bent on harassing a patent holder”:

In addition, the same party who has once filed a PGR petition, whether in the first or the second window, regarding any

claim in a patent, may not file another PGR on the same patent, regardless of the issues raised in the first PGR. This “one bite at the apple” provision was included in Committee to quell concerns that a party bent on harassing a patent holder might file serial PGR petitions.⁶

Congress was concerned that PTAB proceedings could be imposed by large companies as a costly delaying tactic to bankrupt small inventors:

A few words about second window: opening up a second window for administrative challenges to a patent only makes sense if defending a patent in such proceedings is not unduly expensive, and if such proceedings substitute for a phase of district-court litigation. If second-window proceedings are expensive to participate in, a large manufacturer might abuse this system by forcing small holders of important patents into such proceedings and waiting until they run out of money. Defending oneself in these proceedings requires retention of patent lawyers who often charge \$600 an hour, quickly exceeding the means of a brilliant inventor operating out of his garage—or even of a university or small research firm. Second, if estoppel rules are unduly liberalized, second-window proceedings could easily be used as a delaying tactic.⁷

Congress commented that duplicative petitions are “one of the worst evils” of administrative proceedings, and accordingly sought to prohibit them (allowing for repeat proceedings only in extreme cases, such as in cases of collusion between the patent owner and the petitioner):

Subsection (c) of section 327 applies a successive-petition bar of sorts to second or successive petitions for second-period review. It is a rare patent that should be twice subjected to second-window proceedings. . . . Lengthy and duplicative proceedings are one of the worst evils of other systems of administrative review of patents. During the pendency of such proceedings, a patent owner is effectively prevented from enforcing his patent. Subsection (c) should ensure that second or successive second-period proceedings are few and far between.⁸

Congress’s determination to prohibit serial petitions continued through the 2011 debates, with both the Senate and House reiterating the goal of precluding these repetitive challenges. Senator Grassley explained:

In addition, the bill would improve the current inter partes administrative process for challenging the validity of a patent. . . . It also would include a strengthened estoppel standard to prevent petitioners from raising in a subsequent challenge the same patent issues that were raised or reasonably could have been raised in a prior challenge. The bill would significantly reduce the ability to use post-grant procedures for abusive serial challenges to patents.⁹

In enacting the more rigorous “reasonably could have raised” estoppel standard (as opposed to a more lenient “actually raised” standard), Congress sought to ensure that a “party that uses inter

partes review is estopped from raising in a subsequent PTO proceeding (such as an ex parte reexam or inter partes review) any issue that it raised or reasonably could have raised in the inter partes review.”¹⁰ That is, the Congress that ultimately enacted the AIA shared the concerns voiced throughout the patent reform process of the harm posed by duplicative IPR petitions.

Viewing the Valencell case against the backdrop of the legislative history of the AIA, the Valencell case appears to be a poster child of the kind of abuse that Congress sought to guard against.

Outlook

There is reason for concern that the “tech giants” have turned patent reform on its head, and weaponized the IPR process to impose cost and burden on upstart innovators to strip them of their rights. Doing so is legal under the patent laws. There is no “case or controversy” requirement that would limit IPR proceedings to disputes involving a particular patent. Rather, every patent in an innovator’s portfolio is fair game for attack. Furthermore, there is no prohibition under the patent laws on a tech giant’s ability to escalate that burden by filing multiple, overlapping petitions against a single patent claim. While the *General Plastic* standard does attempt to restrain that behavior, applying *General Plastic* is a discretionary exercise, and does not prohibit serial petitions against a patent. Rather, the legal framework generally condones a “see what sticks” strategy, to file duplicative petitions against an innovator’s portfolio, seeking the particular combination of art and the particular panel of judges that will invalidate troublesome patent rights. Defending against this see what sticks approach may impose a crushing burden on smaller upstart innovators.

Valencell is just one example, albeit a public example, of a tech giant’s strategy to use the open jurisdictional standards

of the PTAB to impose a burden on an upstart innovator and muscle its way into using that technology. While the PTAB can indeed claim success in limiting the patent troll problem that was a key motivator for enacting the AIA, Congress has perhaps unwittingly created a vehicle for imposing cost and burden on innovators and stripping them of their rights, thus reinforcing the power of the tech giants. As patent reform continues to unfold, Congress and the USPTO should be aware of the unintended consequences arising from the AIA. ■

Endnotes

1. There were a total of four petitions filed against the ’941 patent, including those filed by Fitbit.
2. See Steven Carlson & Ryan Schultz, *Tallying Repetitive Inter Partes Review Challenges*, LAW360 (Sept. 14, 2018), <https://www.law360.com/articles/1083158/tallying-repetitive-inter-partes-review-challenges>.
3. 35 U.S.C. § 315(e)(1).
4. U.S. PATENT & TRADEMARK OFFICE, TRIAL PRACTICE GUIDE UPDATE 9–10 (Aug. 2018), https://www.uspto.gov/sites/default/files/documents/2018_Revised_Trial_Practice_Guide.pdf; see also *Gen. Plastic Indus. Co. v. Canon Kabushiki Kaisha*, No. IPR2016-01357, Paper No. 19, at 16–17 (P.T.A.B. Sept. 6, 2017).
5. *Valve Corp. v. Elec. Scripting Prods.*, No. IPR2019-00062, Paper No. 13 (P.T.A.B. Apr. 2, 2019).
6. S. REP. NO. 110-259, at 22 (2008) (footnote omitted).
7. *Id.* at 66–67.
8. 154 CONG. REC. S22,626 (daily ed. Sept. 27, 2008) (statement of Sen. Kyl).
9. 157 CONG. REC. S952 (daily ed. Feb. 28, 2011) (statement of Sen. Grassley).
10. H.R. REP. NO. 112-98, at 47 (2011).