Questions for the Record for Professor Thomas F. Cotter
Senate Committee on the Judiciary
Subcommittee on Intellectual Property
Hearing on "Innovation in America: How Congress
can make our patent system STRONGER"
September 11, 2019

QUESTIONS 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?

Response

All else being equal, I would expect litigation rates—that is, the number of patent infringement actions filed in federal district court—to increase. To provide a little context, when a patent owner files a patent infringement suit in federal district court, the defendant usually raises invalidity as a defense. Statistics over the years have shown that, in infringement litigation, defendants succeed in invalidating one or more claims of a challenged patent over 40% of the time. See John R. Allison et al., Our Divided Patent System, 82 U. CHI. L. REV. 1073, 1099–1100, 1124–26 (2015); John R. Allison & Mark A. Lemley, Empirical Evidence on the Validity of Litigated Patents, 26 AIPLA Q.J. 185, 205–207 (1998). The inter partes review and postgrant review procedures instituted under the American Invents Act were intended to provide—and have succeeded in providing—a quicker, lower-cost means for challenging patent validity in comparison with district court litigation. According to the most recent statistics I have seen, the median cost of proceeding through trial at the PTAB varies, depending on type of proceeding and technology, from \$300,000 to \$450,000—while the cost of proceeding through trial and (when necessary) appeal for even a small-stakes (under \$1 million) patent infringement action is \$750,000, and in the millions of dollars for higher-stakes litigation. See AM. INTELL. PROP. L. ASS'N, 2019 REPORT OF THE ECONOMIC SURVEY 50-51.

More to the point, when the PTAB invalidates a claim, the patentee cannot assert that claim in litigation, so all other things being equal, I would expect the patent litigation rate to rise if PTAB challenges were to be restricted. To be sure, in the majority of cases accused infringers file petitions for IPR in parallel with related district court infringement litigation—though when this happens, district courts usually stay their proceedings pending the IPR. If the PTAB invalidates one or more claims of the patent in suit, that claim drops out of the infringement litigation; in other instances, if the PTAB rejects the challenge, the challenger may be estopped from reasserting that claim in litigation. Thus, even when IPRs do not entirely substitute for district court litigation, IPRs can succeed in taking some of the claims out of litigation.

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?

Response

I agree. Critics of IPRs note that, in about 80% of cases in which the PTAB institutes review and the matter proceeds all the way through to a final written decision, one or more claims are invalidated. What the critics sometimes overlook is that the PTAB decides not to institute review, as you point out, about 40% of the time. *See* UPSTO TRIAL STATISTICS: IPR, PGR, CBM (July 2019), *available at* https://www.uspto.gov/sites/default/files/documents/Trial_Statistics_2019-07-31.pdf. I therefore agree that there is no need for a major statutory overhaul.

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

Response

I agree. Given the reforms introduced under Director Iancu over the past two years (e.g., making *General Plastic* precedential, modifying the claim construction standard, etc.), in my view it would be more sensible to observe how the current reforms play out, and premature to codify any changes to the statute at this time.

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?

Response

For the reasons stated above, I do not believe that any action by Congress is needed at this time.

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

Response

I do not. For the reasons stated above, I think it would be prudent to see how Director Iancu's initiatives play out—and to trust the USPTO to make further modifications as circumstances warrant—before codifying anything.

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?

Response

Yes. Since eBay, district courts appear to have granted a permanent injunction in about 75% of cases in which the prevailing patent owner sought this relief (not including default and consent judgments). See GENEVA CLARK, LEX MACHINA, PATENT LITIGATION REPORT 2019 24-25 (discussed in Thomas F. Cotter, News on Injunctions, COMPARATIVE PATENT REMEDIES BLOG http://comparativepatentremedies.blogspot.com/2019/03/news-on-(Mar. injunctions.html); Christopher B. Seaman, Permanent Injunctions in Patent Litigation After eBay: An Empirical Study, 101 IOWA L. REV. 1949, 1983 (2016); see also Thomas F. Cotter & John M. Golden, Remedies, in 2 RESEARCH HANDBOOK ON THE ECONOMICS OF INTELLECTUAL PROPERTY LAW 390, 400-01 (Peter Menell et al., eds. 2019) (discussing other empirical studies of this issue; this chapter https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2665680). For a recent example of a district court's granting of an injunction against a competitor, see SIMO Holdings Inc. v. Hong Kong uCloudlink Network Technology Ltd., No. 18-cv-5427 (JSR) (S.D.N.Y. Aug 30, 2019), available https://drive.google.com/file/d/1b6JBb4aB94EzcYaTPmHwbVGjMPCat UoL /view?usp=sharing.

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?

Response

In patent law, the *eBay* decision ended the practice of automatically awarding injunctions to the prevailing patent owner, absent exceptional circumstances. The Court's reasoning was not limited to patent law, however, and federal courts now apply the *eBay* standard in all other types of cases as well. One of the things that troubles me about the STRONGER Patents Act is that it would create a different rule for patent cases than for any other body of law. In other contexts, the Supreme Court has disapproved of so-called "patent exceptionalism," that is, of treating patent law differently from other bodies of law.

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?

Response

Ending the practice of fee diversion and increasing funding for the USPTO could help by enabling examiners to devote more time, when needed, to the examination of individual applications. Further, Professor Colleen Chien presents some thoughtful ideas for improving patent quality—among them, encouraging examiners to devote more time to considering non-patent prior art—in her article *Comparative Patent Quality*, 50 ARIZ. ST. L.J. 1 (2018). *See also* U.S. Gov'T ACCOUNTABILITY OFF., GAO-16-490, INTELLECTUAL PROPERTY: PATENT OFFICE SHOULD DEFINE QUALITY, REASSESS INCENTIVES, AND IMPROVE CLARITY (2016); U.S. Gov'T ACCOUNTABILITY OFF., GAO-16-479, INTELLECTUAL PROPERTY: PATENT OFFICE SHOULD STRENGTHEN SEARCH

CAPABILITIES AND BETTER MONITOR EXAMINERS' WORK (2016). That said, even with additional time and resources at their disposal, examiners (like all of us) are fallible and time-constrained, and it is inevitable that a plurality of issued patents will contain claims that, upon further analysis of the prior art and applicable law, are invalid. It is, therefore, imperative that entities affected by these patents have meaningful opportunities to challenge invalid claims.

QUESTIONS FROM SENATOR 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"?

Response:

Actually, I do not believe that injunctive relief is appropriate only in the context of disputes between competitors (whether large or small). As the Supreme Court itself indicated in eBay, there should be no bright-line rules. All other things being equal, however, a patent owner whose business model relies on exclusion, because it practices the invention or exclusively licenses another to do so, has a more compelling interest in obtaining an injunction than does a nonpracticing entity that is willing to license the patent, nonexclusively, for an appropriate royalty. But there are other considerations as well that courts should take into account in exercising their equitable discretion. If, for example, the defendant deliberately copied the invention, or engaged in "holdout" by delaying good-faith negotiations to obtain a strategic advantage, an injunction (and/or other remedies, such as enhanced damages and attorneys' fees) may be appropriate to discourage bad-faith behavior. More generally, when the defendant is aware of the patent before infringement, the risk of patent "holdup" is reduced, and the public interest may be better served by granting an injunction (which, if nothing else, relieves the court of the need to determine an appropriate ongoing royalty). Finally, on the "right to exclude" point, I would note that the Supreme Court in eBay unanimously rejected the argument that a right to exclude necessarily implies a right to injunctive relief. See eBay Inc. v. MercExchange, L.L.C., 547 U.S. 388, 392 (2006) (stating that "the creation of a right is distinct from the provision of remedies for violations of that right"). Depending on the circumstances, an appropriate ongoing royalty may adequately vindicate the patent owner's statutory rights and preserve the incentive to invent, disclose, and commercialize, without risking holdup or other negative social consequences.

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"?

Response:

I agree with it in part. It is not very surprising that, at a time when (1) patents often covered discrete products (airplanes, incandescent lights, telephones, etc.), (2) products embodied few patented features, (3) the number of patents in force was comparatively small, and (4) software and business method patents did not exist, injunctive relief would have been the norm. In such cases, the risk of holdup may be small, while injunctions relieve the courts of the burden of determining an appropriate ongoing royalty. In the modern world as well, injunctions often are an appropriate remedy for the reasons stated above (and as reflected in the fact that prevailing patent

owners continue to obtain them about 75% of the time). But the modern world also includes products that embody thousands of patented features, many of them pertaining to fields in which patent claims can be numerous and opaque. Moreover, empirical evidence suggests that much patent infringement today is inadvertent—the result of independent invention, not deliberate copying. The risk of patent holdup therefore arguably is greater than it would have been in past decades, and as a result it probably makes sense for courts to deny injunctions and award ongoing royalties in a larger percentage of cases than might have been appropriate fifty or a hundred years ago. See eBay Inc. v. MercExchange, L.L.C., 547 U.S. 388, 396 (2006) (Kennedy, J., concurring) ("In cases now arising 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."). At the same time, as my written testimony states, it is important that when courts deny injunctions they award damages that are fully compensatory, in order to preserve the patent incentive; but I am not aware of any evidence substantiating the claim that the damages courts award are systematically undercompensatory, and thus undermining the patent incentive.

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?

Response:

For reasons stated above, I do not agree that there is a "lack of meaningful access to injunctive relief," or that owners of valid patents have no means of legal redress against bad-faith infringers. I also am not convinced that abusive serial IPR petitions are an overwhelming problem at present, particularly after Director Iancu's recently instituted reform efforts. (For analysis of the scope of the problem, I would respectfully refer the subcommittee to Mr. Landau's April 29, 2019 letter to Director Iancu, *available at* http://www.ccianet.org/wp-content/uploads/2019/04/2019-4-29-FINAL-Letter-to-Director-Iancu-Re-Serial-Petitions.pdf.) Further, the rationale for creating IPRs was to provide a means for challenging *invalid* patents that would be lower in cost, and faster, than district court litigation. Experience demonstrates that a substantial plurality of all issued patents *are* invalid, and the public interest is served when these patents are cancelled.

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?

Response:

For reasons stated in response to question 3, I am not convinced that abusive serial IPR petitions are an overwhelming problem at present, and would refer the subcommittee to Mr. Landau's letter setting out the statistics on serial petitioning. As for efficiency, both due process considerations

and the fact that patents are cloaked with the public interest have long supported the rule that accused infringers can seek to invalidate claims that have previously been found patentable. *See, e.g., Blonder-Tongue Lab., Inc. v. University of Ill. Found.*, 402 U.S. 313 (1971). Of course, those principles do not require that Congress make the PTAB an available forum for such challenges, but the PTAB option is intended to provide a lower-cost, faster process than proceeding in district court.

Further, it is important to recognize that no system is going to be perfect, and that firms will sometimes find ways to exploit and abuse whatever rules are put in place. On balance, however, the current system serves the public interest better than the pre-AIA system; the alternative of providing potential challengers with one, single bite at the IPR "apple" will result in many invalid patents having to be challenged, if at all, only in the more costly patent infringement context. Further, while Director Iancu is to be commended for reining in the abuses of serial petitioning, it is important to preserve the ability of challengers to raise, in good faith, different arguments, sometimes regarding different claims or claim constructions, relating to the same patent. They should not be bound by prior petitions to which they were not parties. Nor should a single petitioner have to abandon good-faith arguments concerning the validity of different claims relating to the same patent, which at present may be presented in multiple petitions due to limitations on the number of words that can be included in a single petition.

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?

Response:

As indicated in my previous responses, IPRs were intended to provide a quicker, lower-cost means for challenging patent validity in comparison with district court litigation. Much of this benefit will be lost if a defendant in an infringement action loses the ability to petition for administrative review.

As for the difference in standards, under Director Iancu the standard of claim construction in IPRs and in district court litigation is now the same. The petitioner bears the burden of proving unpatentability by a preponderance of the evidence, however, rather than by clear and convincing evidence as in district court litigation. How often this affects the outcome is not clear, but arguably the difference makes sense if we view an IPR as a means for correcting a defective examination. See, e.g., Oil States Energy Servs., LLC v. Greene's Energy Group, LLC, 138 S. Ct. 1365, 1373 (2018) (describing IPRs as "simply a reconsideration of" the initial grant). In an examination, the examiner bears the burden of establishing unpatentability by a preponderance of the evidence.

QUESTIONS FROM SENATOR 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?

Response:

Not necessarily. First of all, I am not aware of any evidence substantiating the claim that the ongoing royalties courts award when they deny permanent injunctions are systematically undercompensatory. Second, as I note in my written testimony, injunctions have both advantages and disadvantages. On the one hand, they can conserve on adjudication costs and reduce the risk of judicial error, if any, in calculating ongoing royalties. On the other hand, they also can impose negative social costs, including the higher prices that result when accused infringers subject to patent holdup agree to pay royalties that exceed the contribution of the invention to the state of the art. In general, courts should apply their equitable discretion to grant injunctions when the conditions that are conducive to holdup are not present, but deny them otherwise.

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?

Responses

If I may answer question 2.b. first, I would define a "patent troll" (or, to use a more neutral term, "patent assertion entity" or "PAE") as a business that, in the words of the Federal Trade Commission, "acquire[s] patents from third parties and seek[s] to generate revenue by asserting them against alleged infringers" which "already use . . . the patented technology." FED. TRADE COMM'N, PATENT ASSERTION ENTITY ACTIVITY: AN FTC STUDY 1 (Oct. 2016), available at https://www.ftc.gov/system/files/documents/reports/patent-assertion-entity-activity-ftc-study/p131203_patent_assertion_entity_activity_an_ftc_study_0.pdf.

Second, in my view PAEs still pose challenges to the optimal working of the patent system, though the scope and magnitude of these challenges has diminished over the last few years for a variety of reasons noted below. More specifically, chapter 8 of my book *Patent Wars: How Patents Impacts Our Daily Lives* (Oxford Univ. Press 2018), provides an accessible overview of the debate over PAEs, and I would respectfully refer the subcommittee to it. In brief, however, I will note the following points drawn from pages 209-27 of my book, and which are responsive to questions 2.a and 2.c above:

- 1. Not all non-practicing entities (NPEs) are PAEs. NPEs may include universities, firms, and sole inventors who specialize in inventing and then licensing or otherwise transferring their technology to others who are in better position to commercialize that technology. I would distinguish these entities from PAEs, which typically do not engage in technology transfer, but rather file suit against firms that, as a result of independent invention, allegedly are making, using, or selling subject matter that falls within the scope of the claims. Some but not all PAEs made a practice of suing or threatening to sue small businesses who were allegedly using infringing products, but were not in a favorable position to defend themselves.
- 2. PAEs tend to take advantage of the high cost of defending against a patent infringement suit. The FTC Study noted above reported that 77% of the patent assertions made by responding "Litigation PAEs" settled for less than \$300,000, and that 30% settled for less than \$50,000—numbers that are less than the median cost of defending even a small-stakes patent infringement suit. PAE patents tend to fare worse in litigation, in comparison to other patent owners, in those cases that do not settle but proceed to trial.
- 3. Empirical studies report that PAEs frequently target start-ups and firms that have recently undergone initial public offerings (IPOs)—and that these firms are less likely to innovate after being sued.
- 4. PAEs were able to engage in this sort of behavior—a species of what economists refer to as "rent seeking"—as a result of several features of the U.S. patent system, including (1) the asymmetric costs of defending, as opposed to filing, a patent infringement suit; (2) the fact that PAEs generally are not susceptible to

counterclaims for infringement, since they do not make or sell products themselves, and thus can be less concerned than practicing entities might be about potential retaliatory infringement claims; (3) the U.S., unlike most other countries, does not routinely award the prevailing party its attorneys' fees; and (4) until recent modifications to the patent system, PAEs could (a) threaten holdup due to the automatic granting of injunctive relief to prevailing patent owners, (b) assert weak patents, often software-related, that would be costly and time consuming to invalidate in district court litigation or by means of patent reexamination, and (c) could routinely file suit in venues that were viewed as disproportionately favorable to patent owners.

- 5. All that said, it is important not to inhibit the potentially efficient division of labor that can result from NPEs being able to license and enforce their patents. Nor does it make a great deal of sense to focus on the identity of the patent owner, as opposed to its conduct. The better strategy for dealing with the negative effects of PAE conduct is to keep in place the existing reforms of the patent system that have reduced the ability of patent owners, whether PAEs or not, to engage in socially costly rent-seeking.
- 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?

Response:

I support granting the Federal Trade Commission (FTC) the authority to proceed against bad-faith assertions of patent rights—subject, however, to the following qualifications.

First, I would resist the characterization that current law unduly weakens patent rights, for reasons I have provided in my written and oral testimony and in my responses to the subcommittee's written questions.

Second, and relatedly, I do not view the proposed grant of authority to the FTC to target bad-faith patent assertions as an adequate substitute for IPRs and the *eBay* standard, if the goal is to attain a balanced patent system that promotes the public interest. As I describe at page 225 of *Patent Wars*,

since 2013 most of the states have enacted laws forbidding the bad-faith assertion of patent rights, but to my knowledge they have rarely used these laws. This may be due in part to the fact that, under applicable precedent, the act of filing or threatening to file a lawsuit is (up to a point) constitutionally protected activity, and thus can be sustained only if the party asserting such a claim can prove by clear and convincing evidence that the defendant's conduct is a "sham," that is, both objectively and subjectively baseless. Further, as I also note at page 225, even in the absence of the pending legislation and aside from the state laws enacted since 2013, the FTC and the states have been able to exercise their authority to proceed against bad-faith patent assertion under preexisting law that authorizes them to take action against unfair and deceptive business practices.

Third, section 204 of the bill would appear to preempt the state laws that have been enacted since 2013—a step that, if it were to have any effect at all, could actually reduce overall enforcement efforts rather than enhance them.