TESTIMONY OF R. POLK WAGNER
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Before the

Senate Committee on the Judiciary, Subcommittee on Intellectual Property

Responses to Questions for the Record

Submitted by Senator Chris Coons on November 6, 2019

Submitted: November 20, 2019

Senator Coons, thank you for your questions and the opportunity to further supplement my testimony. Your questions are set forth below (*in blue italics*), and my responses appear below each.

1. *My STRONGER Patents Act would codify USPTO Director Iancu's administrative decision to adopt the same claim construction standard used in district courts for PTAB trials. Your testimony suggests that this claim construction standard should also replace the broadest reasonable interpretation standard applied by the USPTO in examination proceedings. Would making that change limit the USPTO's ability to identify the full scope of potentially relevant prior art or to enforce statutory clarity requirements?*

I do not believe it would and **I would strongly suggest requiring the USPTO to use the claim construction standard used in district courts for examination purpose**s.

As I testified, the single most important—and correspondingly the most difficult to resolve—factor driving "poor quality patents" is uncertainly about the scope of the patent (or patent application). Indeed, until a comprehensive and binding claim construction is developed, an analysis of patentability is premature. The earlier such a claim construction can be developed and applied to the language of the claims, the better for the entire system:

a. Requiring examiners to use the court-approved claim construction approach would mean that claim language would always be given the same meaning—the ordinary meaning as understood by the PHOSITA—throughout the life of the language, from the applicant's initial drafting to examination, to post grant review, and litigation. This

would avoid confusion, reduce language arbitrage opportunities by the patentee, and dramatically improve the public notice function of patents.[1]

b. Requiring examiners to use the court-approved claim construction approach does not necessarily mean that the scope of the prior art search would be reduced. Examiners could simply be instructed to search for prior art that is "reasonably related" to the scope of the claim language, thus encompassing the same subject matter as would be reviewed under the "broadest reasonable construction" claim interpretation standard. Simply put: there's no logical reason the USPTO must use a contrived and extra-legal claim construction analysis in order to search broadly for prior art.

c. Requiring examiners to use the court-approved claim construction approach would better align incentives in favor of high-quality patents. Patent applicants would draft proposed language knowing the interpretive rules—and knowing that these interpretive rules would be persistent throughout the life of the patent.[2] Examiners and applicants would be able to discuss claim language using interpretive principles that would be binding on the patentee and far more informative for the public. The result would be stronger incentives for both the patentee and the USPTO to ensure that granted patents have clear linguistic boundaries—which, again, would dramatically improve the ability for everyone to evaluate patentability.

d. Finally, requiring examiners to use the court-approved claim construction approach would bring the technical expertise and administrative experience of the USPTO's examiner corps to bear on the claim construction problem. This will only improve our understanding of how PHOSITAs would understand claim language and will have positive knock-on effects throughout the patent system.

[1] The notice function of patents is fundamental to the economic efficiency of the system and has been a core component of patent law and policy for generations. *See, e.g., Grant v. Raymond*, 31 U.S. 218, 247 (1832) ("This is necessary in order to give the public, after the privilege shall expire, the advantage for which the privilege is allowed, and is the foundation of the power to issue the patent.').

[2] The alternative—wherein the meaning of patent claim language varies according time, proceeding, and patentee needs—is often described as the "nose of wax problem," colorfully described in *White v Dunbar*, 119 US 47, 51 (1886): "Some persons seem to suppose that a claim in a patent is like a nose of wax, which may be turned and twisted in any direction."

2. *Your testimony cautions against systemic overcorrections that disadvantage small inventors, startups, and universities. Do you believe that doubling examination time across the board, raising fees to cover the cost of that examiner time, and front-loading issue and maintenance fees as suggested by Prof. Wasserman would be such a counterproductive change?*

I think it could indeed be counterproductive, though it would depend on whether the changes were tailored to avoid the distributional problems I identified in my earlier testimony. Raising fees but maintaining a system whereby small entities, universities, and individuals are not impacted as heavily would reduce my concerns. I would be supportive of raising fees on relatively large entities, recognizing of course that USPTO fees are a relatively small fraction of the total costs of obtaining a patent for many medium to large firms.

However, I would caution against front-loading issue and maintenance fees. Although I agree with Professor Wasserman that back-end fees like these can create marginally increased incentives for the USPTO to grant more patents more quickly, I am more concerned that dramatically raising up-front fees will have disproportionate impacts on individuals, small firms, universities, and the like. More importantly, I am concerned that front-loading fees will discourage inventors from seeking patents on inventions where the market-based return is either highly uncertain or far in the future—or both. In my view, the inventions we most want the patent system to encourage are those wherein the benefit to society is potentially quite large, but development would not likely occur without the (modest) security of a patent grant. My fear is that by requiring patentees to pay more fees up front, we would discourage the investment in the risky inventions in favor of investment in more certain inventions, and thereby undermine a central economic purpose of the patent system.

With respect to increasing per-application examiner time, I have mixed views. Certainly, more examiner time is generally better and should yield higher quality patents. On the other hand, I am dubious that we can meaningfully solve the problem of poor-quality patent grants at sufficient scale through additional examiner time without making systematic changes to redirect the incentives of patentees towards the goal of patent quality.[3] As I noted in my initial testimony, across the legal landscape of patents, incentives drive applicants to do things that result in granted patents that are difficult to understand, obfuscate their relationship to the prior art, and have deeply uncertain scope. In my view, a much more productive approach than an across-the-board increase in time-per-application would be to try to better harness the knowledge of the patent applicant when evaluating the initial application. Offering faster processing for applications containing pro-quality features like claim term glossaries or requiring patentees to choose between prosecution

[3] This was essentially my conclusion when I studied the patent quality outcomes of the Japanese versus the US systems. *See* R. Polk Wagner, *Understanding Patent Quality Mechanisms,* 157 U. PENN L. REV. 1410 (2009).

tracks that vary in proportion to fees paid are just two ways that the USPTO could use the incentives of patentees to learn more about the inventions—and thus achieve a higher quality examination process. In short, I would favor a more tailored, strategic approach to increasing the resources available for examination than a simplistic across-the-board change.

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Thank you again for the opportunity to discuss the patent system, and feel free to reach out if I can be of further assistance.

My papers can be found at: https://ssrn.com/author=26248

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Before the

Senate Committee on the Judiciary, Subcommittee on Intellectual Property

Responses to Questions for the Record
Submitted by Senator Richard Blumenthal on November 6, 2019

Submitted: November 20, 2019

Senator Blumenthal, thank you for your questions and the opportunity to further supplement my testimony. Your questions are set forth below (*in italics*), and my responses appear below each.

1. *As you know, the patent system is complex and technical. Many small inventors lack the knowledge and resources to navigate the system. For that reason, I am a major proponent of the Patent Pro Bono Program, which ensures that the patent system is open to any inventor with a good idea and is not just available for the wealthy and well-connected.*

   The Pro Bono Program is also important to the patent quality debate. First, it gives inventors the help they need to submit clear and precise patents. Second, it ensures that as the PTO cracks down on poorly drafted patents, it does not unintentionally harm inventors with valid inventions but without the resources to hire top-dollar attorneys.

   a. *Does the Pro Bono Program improve the quality of patent applications?*

I think it certainly can, at least indirectly. That inventors with less resources can have legal help to file their patents unquestionably increases the expected quality of those patents.

The question is, of course, the scale of the program. While it clearly helps for the fairly small number of inventors who can take advantage of it, I doubt it will make a substantial dent in the overall project for better patent quality. Ideally, the program would be expanded substantially.

   b. *Do you believe that the Pro Bono Program helps small inventors avoid unintended harms that could be caused by efforts to reduce the issuance of poor quality patents?*

Yes, at least to some extent. Barriers created by additional legal or administrative requirements could be ameliorated via inventor assistance using the Pro Bono Program. Increased fees or other direct costs, however, would not likely be addressed by the Pro Bono Program—unless a system of fee waivers was also incorporated into the Program.

Thank you again for the opportunity to discuss the patent system, and feel free to reach out if I can be of further assistance.

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Before the

Senate Committee on the Judiciary, Subcommittee on Intellectual Property

Responses to Questions for the Record
Submitted by Senator Mazie Hirono on November 6, 2019

Submitted: November 20, 2019

Senator Hirono, thank you for your questions and the opportunity to further supplement my testimony. Your questions are set forth below (*in blue italics*), and my responses appear below each.

1. *In your opening statement you referenced research you performed that suggested the "change . . . from a first-to-invent to a first-to-file system may well have resulted in a significant drop in the share of patents issued to individual inventors and small startups."*

   a. ***What caused the switch to a first-to-file system to result in a drop in the share of patents issued to individual inventors and small startups?***

At the outset I should be clear that the study I was refencing was one that evaluated the switch from a first-to-invent to first-to-file system in Canada in 1989, using an empirical technique that compared changes in patenting patterns to that of the United States.[1] Only recently has enough data become available to make what my co-author and I would consider a robust analysis of the US change as a result of the America Invents Act of 2011.

The short answer is that we do not know for sure, and our empirical testing did not reveal exactly what caused the drop. However, my co-author and I believe that the most likely cause was the widely discussed advantage that a first-to-file system offers to larger firms over smaller firms and individuals. Larger firms, with established patenting processes and often in-house patent counsel,

[1] *See* David S. Abrams and R. Polk Wagner, *Poisoning the Next Apple: How the America Invents Act Harms Inventors* 65 STAN. L. REV. 417 (2013).

are more able to win the "race to the patent office" that a first-to-file system can create. Smaller firms and individuals may take longer to identify patentable inventions and require more time to prepare and file patent applications.

One lesson, I think, of our research is that changes to the patent prosecution system can have substantial distributional consequences across types of inventors. Raising costs or other barriers to filing for patents, I would expect, would similarly disproportionately burden smaller firms and individual inventors, and could result in a drop in patenting by individual inventors.

b. Has the share of patents issued to individual inventors and small startups recovered or does the first-to-file system continue to cause these groups to be underrepresented in the patent system? Why?

Unfortunately, we have not done a full follow-up study to our 2013 paper, though one is in the planning stages. Accordingly, I do not have empirical evidence to provide on this query. However, in our study of Canada, we found no evidence that the share of individual patentees ever recovered to levels before the transition to first-to-file. Our primary mechanistic theory— that the additional resources required to move more quickly to file a patent in a first-to-file system—would suggest that we should not expect this share to recover after the switch.

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Thank you again for the opportunity to discuss the patent system, and feel free to reach out if I can be of further assistance.

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