The Senate Committee on the Judiciary convened on October 30, 2019 with Chairman Thom Tillis (R- NC), presiding along with Ranking Member Christopher A. Coons (D-DE), Richard Blumenthal (D-CT), and Chuck Grassley (R-IA) were present.

Panel 1 was made up of one witness: Drew Hirshfeld, Commissioner of Patents for the United States Patent and Trademark Office (USPTO).

Panel 2 included:

R. Polk Wagner, Michael A. Fitts Professor of Law and Professor at the University of Pennsylvania Law School,

Melissa Feeney Wasserman, Charles Tilford McCormick Professor of Law and Professor at The University of Texas at Austin School of Law,

Teresa “Terry” Stanek Rea, Partner and Vice-Chair of the Intellectual Property Group at Crowell & Moring LLP, and

Colleen V. Chien, Professor of Law at Santa Clara University School of Law

Chairman Tillis explained in his opening statement that the purpose of the hearing was to discuss how Congress can improve patent quality. More specifically, he stressed concern over the grant of patents by the USPTO that are later deemed invalid by the courts. Despite a rigorous examination practice, Chairman Tillis believes that there are nonetheless defects and flaws in the system (specifically, in Sections 101, 102, 103, and 112) that have led to the approval of patents that should have never been granted in the first place. He would like to figure out how these patents are getting through the system and what Congress can do to solve the problem.

Ranking Member Coons in his opening statement noted that he believes that there has been an erosion in patent rights that has handicapped entrepreneurs and innovators and reduced their confidence in the USPTO. According to Ranking Member Coons, the United States must strive
to achieve reliable and high quality patent examination by both rebalancing the amount of time
that examiners spend on applications and managing fees.

*Ranking Member Coons submitted a statement to the record from Ron Katzenelson, an inventor
and pro se patent applicant.*

**Panel 1:**

**Commissioner Hirshfeld** stated that the United States continues to be the world’s gold standard
for patents. The USPTO contributes to this system by employing 83,000 workers to evaluate
hundreds of thousands of patents annually. Each application is distinct and brings its own unique
challenges for the patent examiners. The daily decisions made by patent examiners require
difficult judgment calls based on years of experience. With the advent of the digital information
age, continual improvements must be made to USPTO processes to help examiners keep up with
the dynamic challenges that they face. Current initiatives include: (1) the creation and issuance of
new subject matter eligibility guidance, which incorporates extensive public feedback and
comments, (2) adjustments to examination time in the USPTO production system to improve the
quality of examination, (3) implementation of an updated patent examiner performance appraisal
plan to better align examiner responsibilities with the goals of the agency, (4) development of an
automated patent application docketing system that would more effectively and efficiently assign
patent applications to the examiner best suited to review the application, (5) enhanced
automation tools that will facilitate a more thorough patentability search, (6) increased training
opportunities to keep examiners current and best examination practices more detailed, and (7)
effective use of random quality assurance reviews to check examiners’ work product. Aside from
this non-exhaustive list, Hirshfeld stated that the USPTO will continue to evaluate and examine
its programs and processes to ensure a proper balance between examining time and application
pendency.

**Questions:**

**Chairman Tillis** asked where the United States is in terms of patent application filings.
**Commissioner Hirshfeld** stated that the USPTO is trending upward in new case filings. With
the exception of 2009, there has been an increase in case filings every year for over twenty years.
Additionally, he cited a large increase (4.9%) of applications this year since the previous year.

**Chairman Tillis** asked if the USPTO has certain metrics with respect to what the ideal ratio is
and how that compares to the baseline of 83,000 workers the USPTO has today. **Commissioner**
**Hirshfeld** explained that, with the increase or decrease of different technologies, a critical question is how dockets need to be balanced. In October 2020, the USPTO is hoping to implement a new docketing system that will help the USPTO better navigate the right workload balance.

**Chairman Tillis** acknowledged that the docketing system should make the process easier, but then asked a follow-up question regarding whether Mr. Hirshfeld thinks that the USPTO should have fewer, more, or exactly the 83,000 examiners that the office has today. **Commissioner Hirshfeld** responded that the USPTO is at a good place and is sized to effectively do more work than is coming in. He believes that they certainly need to hire more examiners in the range of six-to-seven-hundred employees per year to handle attrition.

**Chairman Tillis** addressed the amount of technology that is needed for the growing base of prior art. He asked how Commissioner Hirshfeld would rate the internal systems of the USPTO as a tool for examiners and how this compares to large law firms and other organizations. **Commissioner Hirshfeld** explained that the USPTO could always continue to increase its abilities to search for prior art. Furthermore, he stated that the office is actually in the process of rolling out new search tools for examiners that would utilize artificial intelligence to help examiners with the search.

**Panel 2:**

**Professor Wagner** offered several suggestions to consider on the topic of the hearing. (1) First, she asked that they consider the meaning and context of “patent quality” to ensure that patents are meeting statutory definitions and standards. (2) Additionally, she asked that they consider the scale of the issue, as there are many applications each year and reform efforts will need to be considered to increase efficiency. Professor Wagner also stated that Congress should (1) recognize how important incentives are, particularly the incentives on the applicants submitting patent applications, and (2) focus on claim construction, as people often do not understand what a patent means without the investment of a great deal of time and money.

**Professor Wasserman** provided three proposals that she believes should be adopted to increase the quality of patents being issued by the USPTO. (1) First, Wasserman proposed a restructuring of the patent office’s fee schedule and structure to minimize the risk that the agency’s revenues will be insufficient to cover its operational costs and to diminish an agency’s financial incentive to grant more patents when revenues fall short. She believes that examination fees make the
agency heavily dependent on issuance and renewal fees. Doing so, she warns, also creates the risk that the agency’s fees will fail to cover examination expenses, and the back-ended fee structure could create an incentive to grant patents, especially if the agency is facing a budgetary shortfall. She proposed that the agency’s examination fees be raised to cover examination expenses and that the agency abolish issuance fees. (2) Second, Wasserman proposed that the patent office limit repeat applications and requests for continued examinations, as an application can never truly be rejected and can always be refilled, which leads to a growth of backlog in applications that could potentially motivate the agency to grant more patents, even if they are of questionable validity. 

(3) Third, Wasserman proposed an increase in the amount of time allocated to patent examiners to review applications. On average, examiners spend nineteen hours reviewing a patent application. If an examiner cannot find a reason to reject the application in this time, then they must allow the application and may end up allowing patents that they otherwise may have rejected.

Ms. Rea would like to improve the quality of issued patents in order to provide the predictability, consistency, and certainty that is critical for making key business decisions. She does not use the term “bad patents” and does not believe others should without first providing context, as the invalidation of patents is highly unusual and typically caused by a change in the law. She stated that third-party patent challengers should know as soon as possible whether they need to design around patents, which she thinks could in itself result in innovation. She does not believe that the United States should rely exclusively on reviewing the quality of a patent only after it has already been issued. Rather, front end modifications should be focused on during the examination. According to Ms. Rea, a particular area of interest is an international work sharing and search pilot, which would consider rejections from other countries. Additionally, she cited a number of good changes that have been brought about by the AIA, including the ability for third parties to identify potentially relevant prior art, which has encouraged third party submission of prior art.

Professor Chien argued that, rather than focusing on backend measures, more attention should be paid to front-end tools. She stated that many unknowns persist and that these gaps need to be filled by the USPTO in respect to patent quality. Additionally, Prof. Chien asserted that the United States demands bold experimentation and that patent applicants need to be focused on that. Specifically, she noted the cost of obtaining a patent. She explained that inventors may not view every patent as worth the deep investment required. She proposed the creation of a “defensive only patent,” which would allow patent applicants to designate their patents as “defensive only” in exchange for smaller fee costs.
Questions:

**Ranking Member Coons** asked Commissioner Hirshfeld what steps USPTO has taken to leverage tools like artificial intelligence and big data analytics and whether there are plans to continue to expand these tools. Additionally, he asked Prof. Chien whether she had any specific suggestions for how to improve the search tools used by examiners. **Commissioner Hirshfeld** responded that the USPTO is focused on both areas. He stated that there is a desire for Artificial Intelligence, which would help examiners do their work and better classify issues. Additionally, he stated that the USPTO is hoping to expand in the area of big data. **Professor Chien** stated that accountability is the single most important intervention for thinking about prior art. She explained that, as of right now there are no metrics that can be relied upon. She has examined the types of categories being considered and has come to the conclusion that patent examiners are good at looking at patents themselves. She noted, however, that is not their job. Instead, she believes that examiners should have a vision of all of the different forms of prior art that are out there. Furthermore, she stressed that the patent office must start to take seriously the amount of robustness in the search, create a metric around it, see how that correlates with quality, and look at all the cases and consider them robustly. In terms of access to new prior art, Prof. Chien stated that examiners have access through applicants themselves, but that does not mean that they can absorb them. Rather, they need context and cannot be dumped with hundreds of thousands of references.

**Ranking Member Coons** asked whether a clearer test for patent eligibility would free up some of the examiners’ time so that they can spend more time on other statutory criteria. He also asked Ms. Rea how important clear eligibility guidelines would be. **Commissioner Hirshfield** responded that, in recent years, the amount of time that examiners need to spend on subject matter eligibility has been a struggle. While they have come a long way, he states that more clarity is needed in the whole system to free up examiners so that they can focus on other issues and statutes. Before the January guidance, examiners in certain areas needed to be given more time due to the extensive amount of effort needed to go into the 101 analysis. He believes that they are in a much better place than they were prior to this. **Ms. Rea** stated that, early in her career in patent prosecution, it was “very rare” to see a rejection of patent eligibility under 35 U.S.C. §101. Today, it is more common than she had imagined, as technologies are increasing and §101 is being adjusted to the technologies of today, but uncertainty and a lack of predictability still remains. According to Ms. Rea, the correct balance has not yet been achieved.

**Chairman Tillis** addressed Professor Wagner’s concern of the pendulum swing that he had mentioned in his statement and asked for an example of where, if at all, the pendulum goes just
right. He also asked for examples of areas of concern to Professor Wagner. **Professor Wagner** responded that different types of entities need the patent system in different ways. More specifically, he compared the pharmaceutical industry versus the technology industry and their differing needs. Technology, he explained, has much faster product cycles, and the life of a patent does not matter as much to individuals in this industry because they are already on their sixth generation of a product before the patent expires. In comparison, the pharmaceutical industry takes a lot longer due to regulatory hurdles. Professor Wagner suggested that, whenever reforms are made, the effect on both small and large companies alike must be considered. He explained that some of these changes increase burdens on the ability to seek patents, which have incredibly harmful impacts on smaller individuals, firms, start-ups, and universities, who really need the ability to obtain the patent to pursue their business or technological objectives. He also noted that the best source for prior art is often the inventor him or herself, who is typically steeped in knowledge of the subject area.

**Chairman Tillis** cited the research Professor Wasserman has done on fees and the costs associated with the examination process. He asked Professor Wasserman how to create a fee structure that is appropriate for the specific application versus a broad setting of the fee structure that may or may not be necessarily based on the nature of the claim. **Professor Wasserman** explained that small institutions pay half the fees of large institutions and that micro-industries only pay twenty-five percent. She believes that fees should be increased on the front end for large entities in order to absorb costs. Additionally, she stated that issuance fees should be cut. In combination, these changes would result in the overall same amount paid over time.

**Chairman Tillis** asked Professor Chien for a comparison between the U.S. and the European system. **Professor Chien** responded that there is a lot of emphasis in the European Patent Office (EPO) on the search, which is seen as the very fundamental part of how an examination is carried out. The process is bifurcated through a front end search that comes back with an “x” and “y” next to the references. These search reports are then used by applicants to make decisions. As a result, there is a high satisfaction rate for EPO because applicants are in control of what happens. The returned search report serves as a strong signal very early on as to where the application will end up. In contrast, the U.S. process is much more drawn out because the search is completed along the way. As a result, she believes that the quality of patents in the U.S. is undercut in comparison to the amount of respect given to the EPO process.

**Senator Blumenthal** expressed his concern about drug manufacturers and how they use patents to block competition, raise prices, and reap disproportionate profits from minor innovations. He
asked if there is agreement in the panel that pharmaceutical companies sometimes use patents in anti-competitive manners and if it is an issue of quality. Professor Wagner stated that there are a variety of strategic behaviors for the pharmaceutical industry, as well as for others. To some degree, he believes that patents gets a bum rap for some of the behaviors practiced by pharmaceutical companies. Wagner, however, cited the interaction between the patent and the FDA approval process as often creating the hold ups that people object to. He believes that, to address the issue, they would need to look at both the patents themselves, as well as the way the regulatory process works with those patents. Commissioner Hirshfeld agreed that it is a complicated issue with many factors weighing in to the prices of pharmaceuticals. He believes that the statutes and requirements of the USPTO have the ability to prevent extension of patents so that, when it expires, it is in the public domain. Professor Chien believes that it can either be trivial or extremely significant depending on what the matter is. She stated that drastic changes are occurring, but that policymakers are not focused enough on patent quality. She suggested that the FDA and the patent office share information to create more transparency and awareness. Professor Wasserman suggested that more time be allocated to patents of high economic significance. Ms. Rea believes the process is very difficult because, while she wants to encourage innovation, she believes that there is a point where it goes too far.

Chairman Tillis entered into the record two statements, one from United for Patent Reform and another from the High Tech Inventors Alliance.

(Senator Chuck Grassley, while present at times of the hearing, did not pose any questions at the hearing.)

Testimony
Drew Hirshfeld
https://www.judiciary.senate.gov/download/hirshfeld-testimony

R. Polk Wagner
https://www.judiciary.senate.gov/download/wagner-testimony

Melissa Feeney Wasserman
https://www.judiciary.senate.gov/download/wasserman-testimony

Teresa Stanek Rea
https://www.judiciary.senate.gov/download/rea-testimony
Colleen V. Chien
https://www.judiciary.senate.gov/download/chien-testimony

Senate Committee on the Judiciary Hearing -
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