## PROTECTING INNOVATION BY IMPROVING PATENT QUALITY

## **Troy R. Lester**

Thank you Chairman Leahy, Ranking Member Tillis, and members of the Intellectual Property Subcommittee for allowing me to discuss the importance of improving the quality of patents. Patent law is extremely important to our economy, and I am grateful for this opportunity to evaluate the intellectual property ecosystem. We need to ensure that patents foster innovation, and not, in contrast, create inefficiencies and significant transaction costs.

I am providing my testimony on behalf of my employer, Acushnet Company, where I have been for over 20 years, and where I am the Vice President Patents. Acushnet Company makes Titleist and FootJoy golf equipment. The company's culture is rooted in golf principles: integrity of the game, constant improvement in our products, and a commitment to good relationships. With less than \$2 billion in annual revenue, we are a company that is neither large nor small. However, we have three golf ball manufacturing plants in Massachusetts, and are, by far, the largest employer in our area. We also have a manufacturing and assembly plant in Carlsbad, CA. In total, we employ about 2300 associates in the United States. Over the last 20 years, Acushnet has received more patents than any other sporting goods company, totaling approximately 2700 golf equipment patents in the United States over that time. We clearly understand the value in possessing good patents and appreciate the patent system. During that same period, however, we also have been subjected to claims based on what, in my view, are very bad patents and have had to navigate around bad patents. The company and I have seen both ends of the patent spectrum.

Acushnet Company has manufactured golf balls in the United States since 1935. Titleist golf balls have been the most played ball at the U.S. Open since 1949. We are extremely proud to manufacture in the United States and doing so allows us to control our manufacturing processes for continuous improvements. However, as discussed below, manufacturing in the United States also subjects us to litigation over bad patents.

The purpose of my testimony is to review two over-arching principles: (1) that bad, overly broad patents, are harmful to U.S. manufacturing companies like Acushnet, and (2) that high quality patents achieve their intended purpose of fostering and protecting innovation. Simply stated, bad patents have a substantially greater effect on manufacturers than the technology industry or pharmaceutical industry. Poor quality patents disincentivize U.S. manufacturing and strain good paying manufacturing jobs.

In that context, I will discuss some potential procedural changes that likely would improve the quality of issued patents to help achieve the essential goals of patent protection without creating unintended economic inefficiencies.

The patent laws allow companies large and small to invest in research and development by protecting the novel ideas that result from that investment, which can improve every aspect of our lives. The patent laws provide the incentive for pharmaceutical and medical device companies to spend significant amounts of their resources towards making better medical drugs and devices to help people

live longer and more fruitful lives. It similarly allows manufacturing companies, like Acushnet, to invest in making everyday products better, so that consumers can enjoy them more.

More particularly, patents foster innovation through the quid pro quo system. In exchange for a full disclosure of new technology, a patentee is granted the right to exclude others from utilizing the technology for a period of time. The logic is that patents disclose and teach new innovations. They provide a roadmap from which others can learn, which in turn results in new and better improvements and innovations. While the patentee can exclude others from using a claimed invention, the patent itself also provides an opportunity for others to innovate, thus sparking competition and continuous improvement.

However, because patents provide the right to exclude and a vast majority of patents are never actually used by the patentee, substantial roadblocks to innovation also can result. In those instances, a patent may stop the widespread use of an idea that benefits the population. That phenomenon is most problematic where bad, overly broad patents that claim beyond what was invented, have been allowed. These patents do not claim a new technology or claim a result without teaching how to achieve the result, and thus, they do not teach anything to people in the field. Worse, these patents are often used by non-practicing entities to extort payments from manufacturing companies, which can either stifle manufacturing improvements or add significantly to the cost of doing business.

In 2013, then Chief Judge Randall Rader of the U.S. Court of Appeals for the Federal Circuit, gave a speech in Plano Texas about Patent Law and Litigation Abuse.<sup>1</sup> He noted that our nation was experiencing a "CRISIS OF CONFIDENCE" in our patent system.<sup>2</sup> In explaining the situation, Chief Judge Rader stressed that litigation abuse is to blame for our problems, not the patent system itself. He recognized that there were litigants who assert overly broad patents against many companies that often do not even practice the intended technology. In many instances, the patents were being asserted against smaller companies with limited means, and the patent owners demanded a "license fee" that was far less than the expense of litigation defense. The defendants were faced with a Hobson's choice – litigate and be vindicated after spending significant resources or pay the extortion fee to avoid the costs of litigation.

Acushnet has seen its fair share of "non-related" patent cases involving bad patents. In June of 2013, Acushnet was sued by the non-practicing entity Eclipse IP LLC in the Eastern District of Texas for allegedly infringing U.S. Patent Nos. 7,876,239 and 7,119,716. Eclipse alleged that Acushnet infringed the '239 patent by "enabling customers to provide and/or select, authentication information regarding online orders, storing the authentication information, and providing the authentication in notification communications."<sup>3</sup> The complaint also alleged that Acushnet infringed the '716 patent by "storing customers' contact data in memory and providing notification communications to the customers which enabled them to change the contact data."<sup>4</sup> In reality, Eclipse ordered a golf club from one of Acushnet's websites and alleged that the website stored their shipping address and provided access for them to change their shipping address. Through this interaction with Acushnet, Eclipse claimed that its patents were infringed.

<sup>&</sup>lt;sup>1</sup> Chief Judge Rader, PATENT LAW AND LITIGATION ABUSE, Nov. 1, 2013 (https://mcsmith.blogs.com/files/rader-2013-ed-tex-bb-speech.pdf).

<sup>&</sup>lt;sup>2</sup> Id.at 2.

<sup>&</sup>lt;sup>3</sup> Eclipse LLC v. Acushnet Company, Complaint, E.D. Tex. (2013).

<sup>&</sup>lt;sup>4</sup> Id.

Innovatio IP Ventures LLC was another entity that reached out to many companies and alleged infringement through the use of Wi-Fi. Innovatio alleged that Acushnet had three manufacturing plants in Massachusetts and that those manufacturing plants must have Wi-Fi. Therefore, it alleged, Acushnet infringed its approximately 20 patents.

Similarly, Helferich stated that Acushnet infringed its patents by sending tweets to Titleist followers. Acushnet was offered a license of \$15/1000 tweets. Thus, a tweet to 1,000,000 followers would cost about \$15,000. Helferich's demand letter materials included a list of approximately 150 licensees.

Obviously, these types of patent cases have nothing to do with Acushnet's core business of making the best golf equipment that we can. More importantly though, these cases are a distraction and require significant resources to resolve. Thus, these types of patent assertions take resources that could otherwise be better allocated towards research and development, improving manufacturing facilities, or employee bases.

This issue is not just an Acushnet problem. Last year, 1563 patent litigations were filed against U.S. manufacturing companies.<sup>5</sup> In the first quarter of 2021, 507 patent litigations were filed against U.S. manufacturing companies, which represents about 52% of all patent litigations.<sup>6</sup> Litigation against manufacturing companies is not trivial. For example, Landmark Technology was recently sued by the state of Washington, which alleged that Landmark had improperly sent over 1,800 letters to various companies demanding \$65,000 for a license.<sup>7</sup> Although the Landmark patent is directed toward loan processing, the demand letters target log-in pages on company websites.<sup>8</sup>

Acushnet has also faced litigation involving poor quality patents that are golf related. Acushnet litigated accusations of infringement from Nassau Precision in the Eastern District of New York.<sup>9</sup> During oral argument on appeal, Judge Michel, referring to the asserted patent, asked, "So it's a product claim written in method language that doesn't even require the performance of a method. What kind of claim is that?" The Plaintiff's counsel noted that he did not draft the patent claims. Even though this dispute was resolved on summary judgment, the case took two years to litigate and cost Acushnet approximately \$2,000,000. That is a significant proportion of our research and development budget.

Another example of a poor-quality patent litigation was finally resolved in February of this year. Nike received a Federal Circuit decision upholding the district court's summary judgement decision that a golf club patent was invalid.<sup>10</sup> The case was filed in 2008. Thus, the case took almost 13 years to be resolved. To add salt to the injury, Nike stopped making and selling golf clubs in 2016.

Litigation abuse, as Chief Judge Rader called it, certainly hurts U.S. manufacturers. Companies that manufacture and sell products are clearly the targets for many entities that want to sue and settle for less than the cost of litigation. These entities take resources that cannot be invested in innovation and

<sup>&</sup>lt;sup>5</sup> RPX Insight (https://insight.rpxcorp.com).

<sup>&</sup>lt;sup>6</sup> Id.

<sup>&</sup>lt;sup>7</sup> https://www.mondaq.com/unitedstates/patent/1079176/washington-state-sues-the-new-landmark-technology-over-predatory-patent-troll39-practices-targeting-small-businesses?type=related

<sup>&</sup>lt;sup>8</sup> Id.

<sup>&</sup>lt;sup>9</sup> Nassau Precision Casting Co. v. Acushnet Company, Inc., No. 10-4226 (E.D.N.Y.).

<sup>&</sup>lt;sup>10</sup> Saso Golf, Inc. v. Nike, Inc., No. 20-1456 (Fed. Cir. Feb. 10, 2021).

job creation. Smaller companies are often forced to capitulate or cease to exist. While this practice is particularly detrimental to U.S. manufacturers, the issue only addresses half of the problems of overly broad patents.

What Chief Judge Rader missed is that bad patents often stifle innovation without ever being asserted because they create barriers for companies to create products. Companies like Acushnet often avoid implementing technology in the presence of a weak patent because we know that juries can be completely unpredictable when faced with a claim of invalidity. For example, the most expensive and protracted litigation Acushnet faced involved the very successful Pro V1 golf balls. Acushnet was sued for infringement of four patents that were found to be invalid by a jury in the District of Delaware<sup>11</sup> and by the USPTO in Inter Partes Reexaminations.<sup>12</sup> However, during a mock trial, Acushnet observed a mock jury deliberate the point that they wanted to give the plaintiff the damages they were requesting because the jury was unable to give the money to the prior art inventor. The mock jury recognized that the claimed invention had been disclosed by someone else, but they were befuddled about what to do when they could not give the damages to the inventor of the prior art. Companies are well aware of this type of jury confusion, and thus, simply avoid many technologies and innovations even though it is highly likely that the patent claims are invalid. It is often substantially easier and less expensive to avoid a technology altogether than to prove patent claim invalidity to a jury.

On the other hand, Acushnet has experienced the benefits of valid patents. During a freedom-tooperate search, Acushnet found a patent assigned to an individual, Larry Miller, that covered the technology of interest. Acushnet reached out to the inventor and was able to license Patent No. 5,676,603. Similarly, Acushnet purchased U.S. Patent No. 5,730,662 from another individual, Peter Rens.

Recently, Acushnet was involved in a litigation with Costco when they sourced a golf ball from Asia. Acushnet asserted 11 patents and Costco stopped selling the golf ball in question. Costco's replacement ball utilized older technology and was not as well received by the golfing community. These are examples of how the patent system should and does work when valid patents are involved.

Acushnet believes strongly in the patent system. We believe that valid patents are important to economic growth in our country, but that invalid, overly broad patents, are extremely detrimental and dangerous for U.S. manufacturing companies. The patent office issued almost 770,000 patents in the 1980s, compared to almost 3,140,000 in the 2010s, *i.e.*, over four times as many patents. It is inevitable that there will be bad patents with such significant growth, and no system can eliminate all bad patents. However, there are several recommendations that I would like to propose for improving the patent system and reducing the number of overly broad patents.

As a starting point, I would recommend that resources be set aside for additional examiner review. An additional examiner within the art unit that has extensive experience with the art can review each case with the assigned examiner prior to an initial search for prior art and continue to review the case during prosecution. Approximately 10 years ago, the Patent Office was faced with a significant backlog of applications. In response, the Patent Office expanded and hired significantly more examiners. However, that came with increased pressure on the examiners to increase the number of cases being

<sup>&</sup>lt;sup>11</sup> Callaway Golf Company v. Acushnet Company, No. 06-91, verdict (D. Del. March 29, 2010).

<sup>&</sup>lt;sup>12</sup> Inter Partes Reexam Control Nos. 95/000,120; 95/000,121; 95/000,122 and 95/000,123.

examined, and training of new examiners decreased from six months to six weeks. As a result, that increase in staff resulted in an increase in quantity but did not result in an improvement in quality.

It is my opinion that the examining process also could be significantly improved by spending more time at the outset of the case determining what the invention is directed to, and thereafter, setting better search parameters for prior art. That would, in my view, result in more pertinent prior art being located. Too often, patents issue with significantly better, more pertinent prior art not being located by the examiner. I am aware that there are many instances when the best prior art is only available through industry publications and is not available to the Patent Office, but when the Patent Office has the best available prior art, it is disappointing when the examiner misses it.

More importantly, I believe that improvements to 35 U.S.C. §112 are imperative. §112 states that the patent shall have claims "particularly pointing out and distinctly claiming the subject matter which the inventor or a joint inventor regards as the invention."<sup>13</sup> The law should require the patent office to make applicants use specific language in their specifications to better define and describe the claimed invention. For example, the Eclipse patents claimed communications involving a "mobile thing."<sup>14</sup> While the patents were intended to cover communications relating to the arrival of a bus or taxi, Eclipse alleged that a golf club in our warehouse was a "mobile thing." Thus, the language in the claim could refer to anything that is moveable.

Similarly, §112 should prevent applicants from claiming basic properties that result from their experimentation. For example, Acushnet was involved in a litigation involving U.S. Patent No. 6,348,015, where the claim was directed to the frequency of a club face being in the range of 2800-4500 Hz.<sup>15</sup> In this case, the inventor had invented a new golf club that had the claimed frequency property, but the claims were not directed to the club construction itself. Every golf club has a natural frequency, and during litigation, it was discovered that the inventor identified the desired frequency range by testing prior art clubs in the claimed range. The inventor was trying to identify a different way to simulate the performance of the prior art clubs. However, the asserted claim was void of any actual construction and material limitations and the claim could have been rejected in the Patent Office for failing to distinctly claim the invented subject matter under §112.

Yet another problem that leads to claims that are not directed to the inventor's invention is the abuse of the continuation practice. This practice allows patent applicants to leave open a case with the patent office, even after claims have been allowed, so that more related claims can be filed later. The *Hyatt v. Hirshfeld*<sup>16</sup> case is an extreme example of the abuse of this practice. That applicant has 1,592 claims still pending in four applications dating back to 1970s and 1980s.<sup>17</sup> However, continuation abuse happens all the time, and much less dramatically. Horstemeyer, the inventor and patent attorney for the Eclipse patents, received multiple patents in 2015 that dated back to 2003, even after some of the earlier patents were invalidated in the Central District of California in 2014.

<sup>&</sup>lt;sup>13</sup> 35 U.S.C. §112 (b)

<sup>&</sup>lt;sup>14</sup> Patent No. 7,119,716.

<sup>&</sup>lt;sup>15</sup> A golf club head comprising: a body; a striking plate connected to the body, the striking plate composed of a first material, and having a natural frequency of less than 4500 Hz and greater than 2800 Hz.

<sup>&</sup>lt;sup>16</sup> Hyatt v. Hirshfeld, No. 18-2390 (Fed. Cir. June 1, 2021).

<sup>&</sup>lt;sup>17</sup> *Id.*, at 5.

In other examples, U.S. Patent Application 14/498,603, GOLF CLUB HEADS AND METHODS TO MANUFACTURE GOLF CLUB HEADS, has 99 priority claims and U.S. Patent Application No. 14/615,505, GOLF CLUB HEADS AND METHODS TO MANUFACTURE GOLF CLUB HEADS, has 128 priority claims.

The fundamental problem with continuations is that, after an original application is filed, the inventor is often not involved with the continuing prosecution. Thus, the claims can be manipulated into any invention the patent attorney can conjure up from the application. For example, Hyatt argued that his applications were not being unduly delayed because he delayed only seven to 11 years to file the four applications at issue and between 10 and 19 years before presenting the pending claims.<sup>18</sup> Thus, after about 20 years, Hyatt proposed entirely new claims to keep the applications alive. This practice creates significant roadblocks because manufacturing companies cannot design around claims that they have not seen. The practice of relying on a patent's prosecution for claim scope and definition becomes meaningless when the applicant has claims pending for 10 years and longer.

In closing, strong patents encourage and protect innovation, and are critical to our overall economy. Overly broad patents, in contrast, are detrimental to U.S. manufacturing companies, often stifling innovation. Litigation abuse is clearly the most visible way that bad patents harm U.S. manufacturers, but bad patents also create roadblocks that prevent prudent companies from innovating and making products that would be appealing to and appreciated by consumers. While the overly broad patent problem will never be completely solved, there are solutions to reduce the problem. Supporting strong patents and reducing bad patents is critical to our economy and in incentivizing innovation, and we need to get it right.