Response to U.S. Patent and Trademark Office Request for Comment
09/07/2021

Introduction

Patent Law provides the incentive for companies to commit resources towards making products and devices that help people by, among other things, advancing technology and growing businesses. As you are undoubtedly aware, the U.S. Patent and Trademark Office plays a crucial role in this process, especially in establishing guidance for patent examination. More particularly, the corps of Patent Examiners that are faced with the task of incorporating changes in patent statutes and important legal decisions into their examining processes require clear and concise rules and procedures to generate a robust patent system that incentivizes innovation. Without clear guidance, the task of Patent Examiners becomes increasingly more difficult to complete in the time allotted for each application. Unfortunately, the current state of patent eligibility jurisprudence in the United States, including *Alice* and the numerous decisions that followed, have left a critical void in the direction of the patent process, drawing unbalanced attention to patent eligibility.

Acushnet Company submits this response to the request for comment to provide a unique perspective from a company that has manufactured in the United States for over 80 years. Acushnet does not frequently face issues of subject matter eligibility under 35 U.S.C. § 101 (hereinafter, § 101), but is nonetheless directly affected by the current state of patent eligibility jurisprudence in the United States. Patents allow U.S. manufacturing companies, like Acushnet, to invest in making everyday products better so that consumers can enjoy them more. Acushnet employs about 2,300 people in the U.S. and over the last 20 years, Acushnet has received approximately 2,700 golf equipment patents in the U.S. alone. In recent years, the tilted focus of legal examination toward § 101 and subject matter eligibility, especially in the area of computer-related inventions, has left behind other important patentability issues that also need to be addressed.

In the past 10 years, the USPTO has issued at least 12 memoranda to the Examining Corps providing guidance on § 101 as it pertains to *Alice* and its progeny[1]. In that time, only a handful of Memoranda have been issued on all other aspects of patent law, including 35 U.S.C. §§ 102, 103, and 112 (hereinafter, § 102, §103 and §112, respectively). For example, the last guidance listed for § 112 regarding indefiniteness was issued in 2008.

There is no doubt that § 101 is a critical issue for many technology areas, but the overarching result of the *Alice* decision has been inconsistency and confusion among all parties in the area of subject matter eligibility and a lack of attention in the many other areas of patent law that arise during prosecution and thereafter. As a result, a § 101 resolution is needed not only for the companies that face significant § 101 rejections, but for all companies with patent applications in front of the examining corps.

This submission includes our perspective on the direct effects of the status of patent eligibility jurisprudence on companies in mechanical technology areas, and further details some of the indirect effects that result from the associated uncertainty. In particular, in addition to the confusion around patent eligibility of certain non-mechanical types of inventions that will assuredly be discussed at length in the USPTO report to Congress, we further advocate for the passing of legislation that settles the law around § 101 because:

- Companies that produce primarily mechanical, tangible products are facing allegations of infringement of software and other intangible idea patents without clear guidance for how to use § 101 as a basis for defense.

[1] https://www.uspto.gov/patents/laws/examination-policy/memoranda-examining-corps

- The current patent eligibility jurisprudence is on a spiraling trajectory that now includes[2] § 101 rejection of claims to tangible products and manufacturing processes that could possibly be addressed under other statutory provisions.
- Resolution of the issues surrounding § 101 can free up additional resources, time, and training for the Patent Examining corps to address other important issues that arise in patents.

Section I—Observations and Experiences

1. Please explain how the current state of patent eligibility jurisprudence affects the conduct of business in your technology area(s). Please identify the technology area(s) in your response.

Acushnet's innovations are generally directed toward consumer products, mechanical systems, manufacturing systems and processes, and material science technology. More specifically, Acushnet is a golf equipment and apparel company. While patents and applications to golf balls and golf clubs are generally not *directly* affected by the changing scope of § 101 at the patent office, the confusion in the area has enabled some actors to take advantage of overly broad patents with no clear path to invalidation. As a result, the consumer product technology area and other conventional manufacturing industries have been increasingly targeted for alleged infringement of non-mechanical patents simply for using common business tools, such as printers, computers, software, Wi-Fi and websites, as further discussed below.

There is also a significant indirect consequence of the Patent Office directing so much time and effort to the issue of subject matter eligibility. Resolving the ambiguity of § 101 is important to providing the time and training to the examining corps in the mechanical art units for other important areas of patent law, including § 112. A constant refrain of patent applicants relates to inconsistencies in the examining process and across examining groups. It is crucial that adequate resources are allocated to time and training for Patent Examiners in all aspects of the examination process and helping to establish consistency across the agency and examining corps.

2. Please explain what impacts, if any, you have experienced as a result of the current state of patent eligibility jurisprudence in the United States. Please include impacts on as many of the following areas as you can, identifying concrete examples and supporting facts when possible:

In 2013, Judge Rader gave a speech in Plano Texas about Patent Law and Litigation Abuse.[3] He noted that our nation was experiencing a "CRISIS OF CONFIDENCE" in our proven patent system.[4] Rader stressed that litigation abuse is to blame and not the patent system. He recognized that there are litigants who assert overly broad patents against many companies that often do not even practice the intended technology. The abusive tactic is to assert these questionable patents against many small companies and use the weight of patent litigation to extort a "license fee" that is far less than the expense of litigation defense. These defendants are faced with a Hobson's choice – litigate and be vindicated after spending significant resources or pay the extortion fee in a cost avoidance posture.

Acushnet has seen its fair share of these "non-related" patent cases. In June of 2013, Acushnet was sued by 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

[2] *American Axle & Manufacturing, Inc. v. Neapco Holdings LLC*, 939 F.3d 1355, amended, 967 F.3d 1285 (2019), petition for rehearing en banc denied, 966 F.3d 1347 (Fed. Cir. 2020)
[3] Judge Rader, PATENT LAW AND LITIGATION ABUSE, Nov. 1, 2013 (https://mcsmith.blogs.com/files/rader-2013-ed-tex-bb-speech.pdf).
[4] *Id.*at 2.

information, and providing the authentication in notification communications."[5] 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."[6] 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.

Innovatio IP Ventures LLC was another entity that reached out to many companies and alleged infringement through their use of Wi-Fi. Innovatio alleged that Acushnet had three manufacturing plants in Massachusetts and that those manufacturing plants must have Wi-Fi. Therefore, they alleged, Acushnet infringed its approximately 20 patents. Similarly, Helferich stated that Acushnet infringed its patents by sending tweets to followers. Acushnet was offered a license for $15/1000 tweets. Thus, a tweet to 1,000,000 followers would cost about $15,000. Helferich's intimidation material included a list of approximately 150 licensees.

Obviously, these types of patent matters 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 or employees.

Further, there are signs that the whirlwind of § 101 is beginning to encroach on mechanical systems and processes where subject matter eligibility generally had not be in question. In *American Axle*, for example, the court affirmed the district court's invalidation of an independent claim in American Axle's patent on a method of manufacturing automotive drive shafts – a method that entails the application of a well-known, natural law of physics called Hooke's Law to 'tune' the shaft in order to prevent unwanted vibrations that might otherwise occur in it during the operation of the vehicle. Notwithstanding the subject matter of the claim, manufacturing a drive shaft with an internal liner, as a whole is within one of the textual categories of patent-eligible subject matter (viz., processes), is both new and useful, and neither claims (or even mentions) Hooke's Law itself nor its implementation for other purposes, the courts below held it to be patent-ineligible because it supposedly preempts a law of nature. This is an illustration of two problems mentioned above with respect to § 101: the confusion around subject matter eligibility drawing in more and more technology areas and the resulting lack of attention to other areas of patent law.

In our opinion, the courts correctly identified an issue with the patented claim, but, with an understandable misunderstanding of § 101, applied the wrong statute. The patent in *American Axle* does not provide an enabling description of the claimed process and the claim in question does not particularly point out and distinctly indicate the details required to tune the shaft. In our opinion, the claim in *American Axle* could have been found to be unpatentable for reasons that are found in § 112, a statute that has found itself outcast in the age of *Alice*. Unfortunately, deciding *American Axle* unpatentable under § 112 would have required years of litigation and incredible resources that were avoided by the § 101 finding. The § 112 issue could only realistically have been raised at the initial examination stage – further emphasizing the need for an examining corps that is well trained in *all* aspects of review under the statutes.

If *American Axle* were decided on a § 112 basis, additional guidance could be provided to Examiner's on this topic. Acushnet has dealt directly with the ramifications of unclear guidance on § 112 for Examiners on competitor claims with similar features to those at issue in *American Axle*. For

[5] Eclipse LLC v. Acushnet Company, Complaint, E.D. Tex. (2013).
[6] *Id.*

example, U.S. Patent No. 6,348,015 (the '015 patent") claims a golf club head having a "striking plate composed of a first material, and having a natural frequency of less than 4500 Hz and greater than 2800 Hz." While this claim is directed to a golf club, which in general is clearly within a category of patentable subject matter, the only alleged novel element of the claim is a natural frequency that every article possesses. This patented claim, in our opinion, is clearly not definite as it does not distinctly claim the golf club in any manner whatsoever.[7] It claims a natural property, frequency, that all golf clubs possess. Under current patent eligibility jurisprudence, the best course of action to invalidate this claim may be to argue it is not patent eligible under § 101 based on the decision in *American Axle*. Not only does the claim include a similar "law of nature" feature, but there is great benefit of asserting invalidity under § 101 because an infringement suit can be dismissed early on, saving extraordinary amounts of time and money. This places Acushnet and similarly-situated companies in the undesirable position of arguing that a tangible object – a golf club head – is not patent eligible.

Yet another competitor patent[8] claims a golf ball that "in an impact test carried out by striking the ball with a driver at a head speed of 40 m/s, the sum t1+t2 of the time t1 required from contact initiation between the driver and the ball for deformation of the ball to reach a maximum value and the time t2 required from the state of maximum ball deformation for the ball and driver clubface to separate is at least" a particular value. While this element is similarly a restatement of a law of nature regarding the impact between a driver and a golf ball, it creates significant issues for the examining corps because it has never been discussed in any printed prior art. Thus, the "inventive" feature of the claim is the claim drafting rather than the golf ball. This type of gamesmanship has led to many of the § 101 issues we face today – indistinct, indefinite, and confusing claims for which there is no clear precedent for an Examiner or the Patent Trial and Appeals board to sustain a rejection under anything other than § 101. Even where these types of claims recite features that are well known in the prior art, the invention of a new variable (e.g., a ratio of times that occur after a hypothetical golf club-golf ball impact test) renders it difficult for the Examiner to find anticipating prior art even if it exists in many prior art golf balls because it would require the Examiner to perform extensive golf club testing to determine the corresponding values. Further, this places a heavy burden back on companies, such as Acushnet, to do the expensive, if not impossible, testing themselves in order to demonstrate invalidity.

With clear guidance on all aspects of patent law, including §§ 101 and 112, these issues could be significantly improved. For example, claims like those discussed above could be considered unpatentable as unpatentable subject matter under §101 or under § 112 for failing to *distinctly claim a golf club head and/or golf ball with any particularity*. Further guidance and training on these issues would fundamentally assist Examiners in handling claims that are clearly invalid. Instead, these types of patents tend to issue from the Patent Office and further the confusion surrounding § 101.

a. Patent prosecution strategy and portfolio management;

Acushnet's patent prosecution strategy and portfolio management may be adversely affected if the uncertainty of § 101 continues to drift into other technology areas, such as manufacturing processes and products, as evidenced by the *American Axle* decision. Patent eligibility of claimed subject matter is not generally an issue to consider when drafting claims to an article of manufacture such as a golf club. However, *American Axle* clearly changed that dynamic. This line of cases will likely lead to considerations regarding whether to undertake expensive review processes (appeal, post grant review, litigation) when faced with § 101 issues of patent eligible subject matter.

[7] 35 U.S.C. § 112 requires that "the specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the inventor or a joint inventor regards as the invention."
[8] U.S. Patent No. 10,987,548 ("the '548 patent").

Further, we believe that the patent examining process could be improved in our technology areas if more time and resources were allocated to the issues that mechanical Examiners generally face. Patent Examiners in the golf equipment and apparel art units are increasingly faced with difficult decisions for complicated patent claims for arbitrary variables and inherent properties found in golf clubs and golf balls, such as issues presented by the '548 patent. Clear direction for the examining corps could significantly improve patent quality and significantly increase innovation in the United States.

b. patent enforcement and litigation;

Even where unfounded, stray accusations of infringement and demand letters result in sunk time and cost with no reasonable recourse. It is clear that many patents were granted to inherent steps of doing business using the internet and that these patents were exploited through litigation abuse. Having a well-defined § 101 provides defendants in these cases with a tool to address the infringement allegations without years of litigation expenses.

c. patent counseling and opinions;

The uncertainty regarding § 101 adds to the potential for unrelated lawsuits to be brought against Acushnet, forcing the legal team to spend resources obtaining patent advice and drafting legal opinions. Every allegation of infringement, even when it is directed to using Wi-Fi in a manufacturing plant, requires advice and consultation that detract from advising clients on their actual business objectives.

d. research and development;

See above – the unnecessary § 101 issues result in diverted resources away from research and development activities that improve products for our customers.

e. employment;

f. procurement;

g. marketing;

h. ability to obtain financing from investors or financial institutions;

i. investment strategy;

j. licensing of patents and patent applications;

k. product development;

See (d.) above.

l. sales, including downstream and upstream sales;

m. innovation; and

Poor quality patents also stifle innovation because they create a barrier for companies to create products. Companies like ours often avoid implementing technology because we know that the Clear and Convincing standard for invalidating a patent can mean anything to a jury. 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 and by the USPTO in *Inter Partes* Reexaminations. However, during a mock trial, Acushnet observed a mock jury deliberate to the point that they wanted to give the plaintiff the damages they were requesting because they were unable to give the money to the prior art inventor. The mock jury recognized that the claimed invention had been invented by someone else, but were befuddled about what to do when they couldn't give the damages to the real inventor. Companies are aware of this type of jury confusion, and thus, many technologies and innovations are simply avoided even though it is highly likely that the patent claims are invalid. It is often substantially easier to design around a patent or avoid a technology altogether than to prove its invalidity to a jury.

n. competition.

See (d.) above.

3. Please explain how the current state of patent eligibility jurisprudence in the United States impacts particular technological fields, including investment and innovation in any of the following technological areas:

a. Quantum computing;

b. artificial intelligence;

c. precision medicine;

d. diagnostic methods;

e. pharmaceutical treatments; and

f. other computer-related inventions (e.g., software, business methods, computer security, databases and data structures, computer networking, and graphical user interfaces).

N/A

4. Please explain how your experiences with the application of subject matter eligibility requirements in other jurisdictions, including China, Japan, Korea, and Europe, differ from your experiences in the United States.

Foreign jurisdictions provide evidence of all-around improvements when time and effort is distributed among different aspects of patent law. The problems associated with indefinite and undefined terms have not been encountered as often or at all in other jurisdictions.

5. Please identify instances where you have been denied patent protection for an invention in the United States solely on the basis of patent subject matter ineligibility, but obtained protection for the same invention in a foreign jurisdiction, or vice versa. Please provide specific examples, such as the technology(ies) and jurisdiction(s) involved, and the reason the invention was held ineligible in the United States or other jurisdiction.

N/A

6. Please explain whether the state of patent eligibility jurisprudence in the United States has

caused you to modify or shift investment, research and development activities, or jobs from the United States to other jurisdictions, or to the United States from other jurisdictions. If so, please identify the relevant modifications and their associated impacts.

The current state of patent eligibility jurisprudence, in comparison to the more balanced and settled state that can be found in foreign jurisdictions, produces uncertainty that complicates the shaping of global patent strategies, including those that Acushnet pursues for its IP and products. Significant consideration and review regarding whether an application will be allowed in a foreign jurisdiction has to be applied before the resources are spent on filing fees, foreign associate fees and translation fees. Thus, any unsettlement in the U.S. can provide indirect complications in filing in foreign jurisdictions.

7. Please explain whether the state of patent eligibility jurisprudence in the United States has caused you to change business strategies for protecting your intellectual property (e.g., shifting from patents to trade secrets, or vice versa). If so, please identify the changes and their associated impacts.

N/A

8. Please explain whether you have changed your behavior with regard to filing, purchasing, licensing, selling, or maintaining patent applications and patents in the United States as a result of the current state of patent eligibility jurisprudence in the United States. If so, please describe how you changed your behavior.

We have not altered our behavior with regard to filing, purchasing, licensing, selling, or maintaining patent applications and patents in the United States as a result of the current state of patent eligibility jurisprudence in the United States because this issue wasn't part of our practice until *American Axle.*

9. Please explain how, in your experience, the status of patent eligibility jurisprudence in the United States has affected any litigation for patent infringement in the United States in which you been involved as a party, as legal counsel, or as another participant (e.g., an expert witness). For example, please explain whether this jurisprudence has affected the cost or duration of such litigation, the ability to defend against claims of patent infringement, the certainty/uncertainty of litigation outcomes, or the likelihood of settlement.

As discussed above, the status of patent eligibility jurisprudence has helped enable certain actors to bring suit against Acushnet for patents unrelated to Acushnet's product technology. This stifles Acushnet's ability to innovate and provide the best products for our customers.

The current status of patent eligibility has provided many defendants an ability to address infringement allegations with a significantly less expensive tool. However, it is a matter that would clearly be better addressed in the Patent Office while the claims are pending. All parties involved understand that patent litigation is extremely time consuming and requires significant resources. Thus, many U.S. manufacturing companies will opt for a quick and "inexpensive" license rather than try to defend themselves in litigation.

Section II—Impact of Subject Matter Eligibility on the General Marketplace

10. Please identify how the current state of patent eligibility jurisprudence in the United States impacts the global strength of U.S. intellectual property.

N/A

11. Please identify how the current state of patent eligibility jurisprudence in the United States impacts the U.S. economy as a whole.

12. Please identify how the current state of subject matter eligibility jurisprudence in the United States impacts the global strength of U.S. intellectual property and the U.S. economy in any of the following areas:

a. Quantum computing;

b. artificial intelligence;

c. precision medicine;

d. diagnostic methods;

e. pharmaceutical treatments; and

f. other computer-related inventions (e.g., software, business methods, Start Printed Page 36260computer security, databases and data structures, computer networking, and graphical user interfaces).

N/A

In responding to this question, please provide concrete examples and supporting facts when possible.

13. Please identify how the current state of patent eligibility jurisprudence in the United States affects the public. For example, does the jurisprudence affect, either positively or negatively, the availability, effectiveness, or cost of personalized medicine, diagnostics, pharmaceutical treatments, software, or computer-implemented inventions?

N/A