### USPTO Responses to Questions for the Record – Chairman Johnson U.S. House Committee on the Judiciary Subcommittee on Courts, Intellectual Property and the Internet

"Oversight of the U.S. Patent and Trademark Office" – May 9, 2019 Witness: The Honorable Andrei Iancu, Undersecretary of Commerce for Intellectual Property and Director of the U.S. Patent and Trademark Office Submitted: November 26, 2019

### PATENT ELIGIBLE SUBJECT MATTER

## Is the USPTO aware of evidence that the Supreme Court's recent jurisprudence on Section 101 is having a detrimental impact on innovation? If so, please provide it. Has there been an impact on patent application filings or patent grants in specific technology centers?

**Response:** We have heard reports from some in industry, including the life-sciences and some computer sectors, that recent jurisprudence on Section 101 may be having a detrimental impact on innovation. In addition, USPTO is aware of some emerging research that is starting to suggest a connection between Section 101 jurisprudence and investment decisions, where some venture capital and private equity investors who are knowledgeable about this jurisprudence have indicated that those decisions have had a somewhat negative or very negative effect on their investment firm's existing investments.<sup>1</sup>

After the USPTO issued its January 2019 patent eligibility guidance, subject matter eligibility rejections in artificial intelligence have fallen from about 75% shortly prior to the guidance to about 30% shortly after the guidance. Impacts to total filings or grants (including any computer-related technology or medical diagnostic methods) are difficult to assess as growth rates may have varied under other circumstances. Section 101 jurisprudence has had other impacts, including creating confusion in the analysis of eligible subject matter during patent examination, requiring more rounds of examination, and more appeals. The Office continues to study this issue.

# Would you agree that the Federal Circuit's decisions on Section 101 can sometimes be hard to reconcile? If so, since the USPTO is bound to follow the Federal Circuit, how do you handle such inconsistencies?

**Response:** Properly applying the *Alice/Mayo* framework in a consistent manner has proven to be difficult and has created uncertainty in drawing clear lines between patent eligible subject matter and subject matter that is ineligible. Thus, the USPTO developed the January 2019 patent eligibility guidance that synthesizes the holdings and principles of precedential court decisions to allow for more reliable and consistent subject matter eligibility determination.

## Do you agree with those who argue that Section 101 has proven to be a useful tool for accused infringers to quickly challenge and invalidate low-quality patents that arguably should not have issued? Why or why not?

**Response**: The ability of accused infringers to challenge the validity of patents is important, but it should be done pursuant to the appropriate statutes relevant to each particular case. Recent jurisprudence on Section 101 has significantly impacted patent eligibility law and has resulted in confusion between patent

<sup>&</sup>lt;sup>1</sup> <u>https://patentlyo.com/patent/2019/03/patent-eligibility-investment.html.</u>

statutes, including 35 U.S.C. §§ 101, 102, 103 and 112. Furthermore, recent jurisprudence continues to generate substantial public discussion as well as uncertainty in certain areas of technology and in the examination of patents. While patent litigants can attempt to use Section 101 to invalidate patents early in litigation, *i.e.*, at the motion to dismiss stage, those decisions are subject to appeal and potential remand that could lead to further litigation. Moreover, in *Berkheimer v. HP Inc.*, the Federal Circuit held that patent eligibility contains underlying questions of fact which, if in dispute, may prevent early resolution. A petition for writ of certiorari is currently pending before the Supreme Court in that case and the views of the Solicitor General have been requested. However, the overarching concern remains that recent jurisprudence surrounding Section 101 has created significant uncertainty which needs to be resolved.

# The January 2019 patent subject matter eligibility guidance explicitly applies to PTAB judges, who, unlike many patent examiners, are attorneys. If a PTAB judge believes that binding Federal Circuit precedent conflicts with the USPTO's guidance, what are they supposed to do?

**Response:** The 2019 Revised Subject Matter Eligibility Guidance ("2019 Guidance") was developed in accordance with judicial precedent, including Federal Circuit precedent. All USPTO personnel, including judges, are expected to follow the guidance. The 2019 Guidance provides for enumerated categories of abstract ideas. The 2019 Guidance also provides for eligibility exceptions that do not fall within one of the enumerated categories of abstract ideas (*i.e.*, tentative abstract ideas). In the rare circumstance in which a panel of administrative patent judges believes that a claim reciting a tentative abstract idea should be treated as reciting an abstract idea, the matter is brought to the attention of PTAB leadership by a written request. For example, the panel can use this procedure if it believes the claim does not fit in one of the enumerated categories, but contains subject matter that invokes eligibility concerns in accordance with a Federal Circuit decision. The matter will be brought to the attention of Agency leadership for consideration in improving the 2019 Guidance.

### PATENT TRIAL AND APPEALS BOARD

Under your direction, the USPTO has made a number of changes to the PTAB. Do you anticipate additional changes being made over the remainder of your tenure? If yes, what other aspects of PTAB still need reform?

**Response:** The USPTO has instituted a number of changes to America Invents Act (AIA) procedures during the past year with the intent of increasing predictability, certainty, balance, and transparency. These changes are now taking effect and are in the early stages of use by the parties. We are monitoring closely to ensure proper implementation and balance. We may consider other changes if necessary to strike the appropriate balance.

# In light of the fact that some of the changes you have made at the USPTO could be overturned by a future USPTO Director, do you support efforts to codify your PTAB changes? Are there any other aspects of the PTAB that you think require Congressional action?

**Response:** We will continue to monitor the effects of the recent changes at PTAB, and determine whether additional changes are needed, in our effort to provide a balanced approach to AIA proceedings. As we study the effects of recent changes and make adjustments, we welcome the opportunity to provide technical assistance if Congress considers legislation in this area.

The post-grant review (PGR) program is a very seldom used PTAB proceeding. Do you see this as a problem? Have you considered taking steps to make this program more useful to petitioners?

**Response:** Patents filed before the first-inventor-to-file provisions of the AIA became effective (on March 16, 2013) are not eligible for post-grant review. As the number of patents issuing from eligible applications, *i.e.*, those issuing from applications subject to the first-inventor-to-file provisions, has increased, we have seen a year-over-year increase in the number of PGR petitions. Additionally, PGRs are only available for the first nine months after an eligible patent issues, and thus the timing window for parties to file a PGR is much shorter compared to IPRs, which are available after the PGR window closes for the remaining life of the patent. Steps to make the program meaningfully more useful would likely require legislation, and we are happy to provide technical assistance if Congress considers legislation in this area.

# Has the USPTO explored ways to provide legal representation to inventors with limited financial means whose patent is challenged at the Patent Trial and Appeal Board (PTAB)? Has the USPTO explored any other means of helping under- resourced parties before the PTAB?

**Response:** The USPTO is developing educational materials to educate under-resourced inventors with limited financial means about PTAB proceedings, including the process, timing, and best practices for effective advocacy. The USPTO plans to make these materials available on its website and will distribute them to not-for-profit regional patent pro bono programs across the country. The USPTO also conducted two webinars for those new to PTAB proceedings to share the basics and answer questions, and posted recordings of these webinars on the PTAB website. Additionally, we are planning to meet with inventor organizations to share information about PTAB, answer questions, and identify other ways that PTAB can assist inventors with limited financial means. Finally, PTAB is investigating ways to simplify proceedings for under-resourced parties, such as by easing certain procedural requirements to make them less costly and easier for parties to navigate. For instance, we are considering how to streamline the requirements for appealing from an adverse decision made by an examiner by creating a template appeal brief that inventors can complete without expending unnecessary resources. We are also looking at increasing tools for inventors to participate in hearings remotely from the USPTO regional offices, and reducing the formalities of hearings to make the proceedings more accessible and less daunting for inventors with limited financial means.

# Has the USPTO considered any ways to address duplication that currently may occur between PTAB proceedings and parallel district court litigation? If so, please provide an explanation of what the USPTO has considered.

**Response:** Yes, the USPTO has considered the duplication of efforts between parallel tribunals and is taking steps to address this issue. In PTAB's November 2019 Consolidated Trial Practice Guide, we explained that events in other proceedings, including "in district courts, or the ITC," are a factor to be considered in whether to exercise discretion to deny institution of a PTAB proceeding. In addition, in November 2018, we issued a new final rule that requires PTAB to use the same claim construction standard as the district courts, and to consider the effect of prior district court claim construction rulings in later AIA proceedings. We have also issued precedential decisions in *Proppant Express Investments, LLC v. Oren Technologies, LLC*, Case IPR2018-00914 (PTAB Mar. 13, 2019) (Paper 38) (designated as precedential on Mar. 13, 2019) (Precedential Opinion Panel decision); *NHK Spring Co., Ltd. v. Intri-Plex Techs., Inc.*, Case IPR2018-00752 (PTAB Sept. 12, 2018) (Paper 8) (designated as precedential on May 7, 2019), and *Valve Corp. v. Elec. Scripting Prods., Inc.*, Case IPR2019-00062, -00063, -00084 (PTAB Apr. 2, 2019) (Paper 11) (designated May 7, 2019), and several others, all of which address how

the PTAB may respond to events in parallel district court proceedings. We continue to study whether stakeholders would benefit from additional guidance in the form of precedential or informative decisions on this issue.

# The USPTO recently changed the claim construction standard through rulemaking. If the USPTO believes that this change is the appropriate policy, why did the USPTO decide not to make this change apply to ongoing proceedings?

**Response:** After careful consideration of all comments received, the USPTO determined the changes to the claim construction standard would apply to all AIA proceedings where a petition is filed on or after the effective date of the final rule, which was November 13, 2018. Specifically, the USPTO received comments that opposed retroactive application of the rule and requested the proposed changes only apply to new proceedings filed some time period after announcement of the final rule. Concerns were raised that the retroactive application of the rule would be disruptive and may unfairly prejudice petitioners who already filed petitions. A few comments also raised concerns as to whether the USPTO has the authority to apply the new standard retroactively under the principles articulated by the Supreme Court in *Bowmen v. Georgetown Univ. Hosp.*, 109 S. Ct. 468 (1988), and *Landgraf v. USI Film Prods.*, 114 S. Ct. 1483 (1994).

### PATENT EXAMINATION

You have recently started to adjust the time examiners need to examine patents-- for example, raising the minimum allotted time and providing more time for more complex applications.

• What factors are you taking into account when making these adjustments?

**Response:** When determining how to adjust the allotment of time for examination of patent applications, we took an analytical approach and considered various factors, including the goals and mission of the agency, stakeholder feedback, and the significant changes in patent prosecution that have occurred over the past several decades, including new and converging technologies of increasing complexity, growth of available prior art, and changes to the legal landscape.

Under the new method, time will be assigned to an application based on factors including its classification picture, which represents the full scope of technology recited in an application and accounts for multi-disciplinary inventions, as well as the particular attributes of the application, such as the number of claims and the size of the specification. As a result, these changes will help ensure that sufficient time is provided to conduct a thorough examination based on the specific attributes of an application, while enabling optimal pendency, cost, and quality levels.

## • How will you know when you have arrived at the right levels of time needed to ensure quality patents?

**Response:** The adjustment to examination time is one part of a collective package of changes. In addition to adjusting examination time, we are changing the process for assigning applications to examiners (application routing) and the evaluation of examiner performance via the performance appraisal plan (PAP). The totality of the changes will bring the examination process in better alignment with overall agency goals and will better enable the USPTO to accomplish the portion of its mission focused on conducting high quality and timely patent examination in order to produce reliable and predictable intellectual property rights. Further, as the new method is more transparent

and flexible, the method of allocating time can be adjusted as the patent examination job or prosecution conditions change to maintain the right levels of time needed for examination (e.g., assigning time to an application based on application-specific attributes, changes in the legal landscape, etc.).

## At a recent PPAC meeting, you mentioned that the USPTO is working with a top consulting group in its IT modernization efforts.

• Do you expect to solicit public input as part of this process?

**Response:** The USPTO does not have plans at this time to solicit public input regarding its specific discussions with consulting groups. However, the USPTO provides regular public updates and receives public input on its IT modernization efforts through its Patent Public Advisory Committee (PPAC) and Trademark Public Advisory Committee (TPAC).

## • Do you anticipate that any part of this consulting group's findings or recommendations will be made public? If not, why not?

**Response:** The USPTO will continue to provide regular public updates on its IT modernization efforts, at least through PPAC and TPAC, and can provide similar updates to the Committee upon request.

## • Does the USPTO have adequate financial resources to implement any needed IT system upgrades, or do you anticipate that the USPTO will have to raise its fees?

**Response:** The USPTO has successfully factored the costs of its IT modernization efforts into its fee structure. In consultation with PPAC and TPAC, the USPTO is recommending fee increases to cover the USPTO's updated revenue and non-IT spending projections. That proposed fee increase will also continue to provide needed continuing investments in IT stabilization and modernization. Without the proposed fee increase, there is risk that resources originally planned for IT stabilization and modernization and modernization could be reprioritized to non-IT needs.

Your testimony speaks about a task force on integrating artificial intelligence (AI) in the patent examination process:

- When was the task force created, and what has it done so far?
- Are you planning on involving the public in development of how AI should be used in examination?

**Response:** The USPTO Strategic Plan 2018-2022 describes specific objectives and initiatives being undertaken to leverage artificial intelligence (AI) for improving examination processes to ensure that quality patents and trademarks are issued and that the customer experience is being enhanced. The USPTO established a task force in April 2018 to consider and explore solutions from both a policy perspective for the United States and a technology perspective for USPTO operations. We are also seeking public input on these issues.

## Has the USPTO considered removing the first name of the patent applicant to ensure that examiners are not inadvertently introducing bias into the examination process?

**Response:** The USPTO has considered the legal and operational implications of removing or otherwise anonymizing the first names of patent applicants. Under current patent law and prosecution practice, examiners require access to an applicant's name to ensure, for example, that the application does not warrant a double patenting rejection, *i.e.*, a patent to the same inventive entity on the "same invention" or a patent on an obvious variation of a previous patent granted to the same inventive entity. To conduct a double patenting search, examiners search pending applications and granted patents by both inventor and applicant names. Removing or anonymizing inventor or applicant names would severely limit examiners ability to conduct such searches.

Additionally, it is unclear that removing or otherwise anonymizing the first names of patent applicants would be effective. Our internal analysis shows no systematic evidence of bias by examiners based on the names of inventors.

# How can Congress, the USPTO, other agencies in the Administration, and the private sector work together to increase patenting among women, low-income inventors, inventors of color, and veteran inventors to help them patent and commercialize their innovations?

**Response:** Broadening the innovation ecosphere to include women, low-income inventors, inventors of color and veteran inventors is critical to inspiring more inventions, driving economic growth, and maintaining America's global competitiveness. The USPTO has undertaken a proactive approach to encourage these groups to innovate and secure patents to protect their innovations including through its inventor assistance resources and building pro se resources in patents to make navigating the patent process more accessible, especially to first time applicants. As I noted in my opening statement, the USPTO recently updated its website to better serve new inventors and entrepreneurs. Now, with one click, visitors are directed to a map of the United States, where they can find a multitude of free resources in their state to better help them navigate the patent and trademark system and protect their intellectual property. Additionally, the USPTO hosts an annual Women's Entrepreneurship Symposium, supports patent pro bono networks around the country through public outreach and by helping to establish additional local pro bono programs in states with sufficient inventor and practitioner populations to meet the needs of the inventors and small businesses in those states. The USPTO's Patent and Trademark Resource Centers are located in more than 80 public, state and academic libraries - many in minority and underserved communities – providing a direct link to the community through regular programming, virtual offices hours with USPTO subject matter experts, and librarians trained to assist with IP searching and information. On October 31, the USPTO issued the SUCCESS Act Report that outlines these and additional initiatives it is taking to increase patenting among these underrepresented groups.

The USPTO supports many STEM-related programs and events to provide education to young women and other underrepresented groups about intellectual property such as the Girl Scout IP patch, which is administered to Girl Scout troops across the nation, and Camp Invention in school districts in every state and many other programs.

Earlier this year, I held a roundtable with Rep. Zoe Lofgren in the USPTO's Silicon Valley Regional Office to facilitate discussions across the IP community on this important topic, and I have also held roundtables in New York and Austin. Leaders from the USPTO will continue to meet with stakeholders in private industry, academia, and government agencies to identify ways to increase inventor diversity in all facets of the economy. There is untapped potential in the community and the USPTO wants to do everything possible to encourage diversity in innovation, create equal opportunities for every inventor, and ensure that all voices are heard. The USPTO will continue to advance the national dialogue around this issue and engage with industry, academia, and other government agencies to drive real change. The hearings that this subcommittee held on this issue are also helping in continuing this dialogue, and the USPTO stands ready to work with Congress in ensuring that these underrepresented groups have access

to and can utilize our patent and trademark systems to bring their inventions and creativity into the innovation ecosphere.

### **TRADEMARKS**

### What steps has the USPTO taken so far to address the rise in fraudulent trademark applications? What additional steps does the USPTO plan on taking?

**Response:** The USPTO has taken several steps to address fraudulent applications and inaccurate use claims and has plans to do more using our existing authority.

In August, and after considering public comments on the proposed rule, the USPTO implemented its final rule to require foreign trademark applicants and registrants to be represented by a U.S. licensed attorney (84 FR 31498; July 2, 2019). The USPTO believes that this rule will increase the accuracy of the submissions to the USPTO and will decrease the incidence of foreign trademark attorneys and agents engaging in the unauthorized practice of law before the USPTO. Additionally, in October, we started requiring users to have login credentials to file trademark documents using the USPTO's electronic trademark system.

Before this rule, the USPTO had already taken a number of steps to address the growing problem of trademark applicants submitting suspicious or fake specimens of use, including: establishing a streamlined version of our informal letter of protest procedure, whereby third parties may bring to the attention of the USPTO evidence that a particular specimen submitted in an application is mocked up or doctored by submitting it to our Specimen Protest email box; investigating software that would allow fake specimens of use to be more easily detected as well as considering options in the pre-examination phase, so that fake specimens can be flagged for further handling; and training our examining attorneys on identifying digitally created or altered specimens and on how to ask applicants for information and proof of actual use. Recently, the USPTO updated its examination guidance to now require that examining attorneys issue a refusal in such circumstances and request additional information about and evidence of the mark's use in commerce. The guide is publicly available on the USPTO's website at: https://www.uspto.gov/sites/default/files/documents/Exam%20Guide%2003-19.pdf.

Regarding registrations, since 2012 the USPTO randomly audits post-registration maintenance filings and requests the registrant to provide proof of use for additional goods or services in the registration. If the registrant cannot provide proof that the mark is in use for the queried goods or services, those goods or services are deleted from the registration. The audit program has been successful at helping improve the accuracy of the federal trademark register and we have increased, and plan to increase even more, the number of maintenance filings that are audited.

The TTAB also has implemented a pilot program to expedite resolution of cancellation proceedings involving a claim of non-use or abandonment of the registered mark. The USPTO is considering creating incentives for registrants to ensure that their registrations are and remain accurate regarding the goods or services for which the mark is in use, without waiting until the maintenance filing to do so. For example, the USPTO is considering charging a "zero fee" to file a request to delete unused goods/services outside of the audit or a TTAB proceeding, but charging a fee to amend a registration when goods or services are deleted from a registration as a result of an audit.

The USPTO's audit program has demonstrated that approximately 79% of those audited were represented by counsel and, of those audited who had a lawyer, approximately 52% have been required to delete goods or services for which they previously swore the mark was in use. These statistics are troubling to say the least and suggest a lack of care, knowledge of what the law requires, or both, by mark owners and

their counsel. In egregious cases, the USPTO may refer attorneys to the USPTO's Office of Enrollment and Discipline (OED) for investigation of misconduct. But, to ensure that mark owners and their counsel understand U.S. use requirements and their mutual obligations under the USPTO's rules to confirm that the submissions they make to the USPTO are accurate and that claims of use have evidentiary support, we are developing educational materials for our website and will be adding information to our notices. We are hopeful that providing materials that explain what use in commerce is, the importance of use in commerce to having trademark rights and a valid registration, the steps lawyers and clients should be taking to confirm the facts of use, combined with the U.S. counsel requirement, will help improve the accuracy of submissions to the USPTO.

### USPTO Responses to Questions for the Record – Representative Lofgren U.S. House Committee on the Judiciary Subcommittee on Courts, Intellectual Property and the Internet

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# Theranos was granted nearly 100 patents based on an "invention" that did not work. How could the patent application for an invention that did not work either: (a) enable one skilled in the art to practice the invention; or (b) objectively demonstrate that the applicant actually invented what is claimed? How did this pass the 112 review process?

**Response:** The USPTO is fully committed to ensuring that patent applications fully comply with the written description and enablement requirements. However, the USPTO's examiners do not undertake testing to prove an invention's operability. Rather, examiners are required to analyze patent applications for 112 compliance with respect to the written description, which ensures that the applicant was actually in possession of the claimed invention at the time of filing, and enablement, which ensures that the disclosure provides adequate teaching to a person having ordinary skill in the art to practice the invention without undue experimentation. To satisfy the written description requirement, the specification must describe the claimed invention in sufficient detail that one skilled in the art can reasonably conclude that the inventor had possession of the invention. To satisfy the enablement requirement, a multi-factor analysis is conducted evaluating, among other factors, the nature of the invention, the state of the art, the level of predictability in the art, and the quantity of experimentation needed to make or use the invention. The burden is on the patent examiner to establish, with supporting evidence and/or explanation, why the filed patent application fails either or both of these requirements, which depends largely on what the applicant has disclosed in the application.

### What are the USPTO's plans to strengthen the 112 review for other art areas, particularly in life sciences?

**Response:** In January 2019, the USPTO published guidance on the examination of computerimplemented functional claim limitations for compliance with 35 U.S.C. §112, specifically the written description and enablement requirements. Following publication of the January 2019 guidance, the USPTO provided training to examiners on applying this guidance, and we are currently developing additional training and examples to supplement the guidance. The USPTO has also prepared new training on written description that contains examples that cover a variety of technologies, including medical devices and chemical/biological inventions, which focus on evaluating the adequacy of written description under section 112. The technology center that handles life sciences has also begun refresher training on issues of double patenting and obviousness under section 103 and new training on issues of written description under section 112.

### What percentage of time do examiners spend on 112 analysis?

**Response:** Examiners are currently allotted examination time for an application based on their technology area and grade level. That time is largely spent evaluating the claims for compliance with sections 101, 102, 103, and 112, in addition to ensuring the application complies with formal matters and other statutes that may be applicable. Disclosure and claim clarity issues under section 112 are addressed

as they arise in the particular application under examination. In instances where section 112 issues do arise, the time spent on these issues varies depending on the particulars of the application.

# Software inventions are unique in that the invention itself is a written description that meets all section 112 requirements. Why doesn't the USPTO just require the invention's source code be disclosed to meet the enablement recruitment and --more importantly--prove the applicant actually invented what she is claiming?

**Response:** The USPTO applies the requirements of section 112 as those requirements have been interpreted by the federal courts. The Federal Circuit and its predecessor have held as a general rule that computer source code is unnecessary to meet the disclosure requirement of section 112. *See, e.g., Aristocrat Techs. Australia PTY Ltd. V. Intl. Game Tech.*, 521 F.3d 1328 (Fed. Cir. 2008); *Fonar Corp. v. General Electric Co.*, 107 F.3d 1543 (Fed. Cir. 1997); *Robotic Vision Sys. v. View Eng'g., Inc.*, 112 F.3d 1163 (Fed. Cir. 1997); *N. Telecom, Inc. v Datapoint Corp.*, 908 F.2d 931 (Fed. Cir. 1990); and *In re Sherwood*, 613 F.2d 809 (CCPA 1980).

- As part of your update to section 101 guidance, did you review the existing examiner training examples to see if they were still valid? If not, why not?
- A process that was identical (in all but the name of the protein) to the one found in example 29 of the patent examiners training materials (the Life Sciences Examples) was found unpatentable two years ago in *CLEVELAND CLINIC v. TRUE HEALTH DIAGNOSTICS*. And just last month the court found another patent on this same technique unpatentable in an unpublished decision, meaning that the courts didn't even bother publishing it because the decision added nothing new. When will the USPTO remove this example from the examiner training materials?
- Is the USPTO going to review past examples to see if they have been found unpatentable as well?
- In the new examiner training examples, added as part of the new 101 guidance, example 39 deals with training a Neural Network for Facial Recognition. In that analysis the USPTO states that the claim

"does not recite any of the judicial exceptions ... For instance, the claim does not recite any mathematical relationships, formulas, or calculations ...the mathematical concepts are not recited in the claims."

However, "mirroring, rotating and smoothing" are well defined mathematical operations, as well defined as addition or subtraction. The mathematical transformations are the only thing that makes this claimed invention more than just "train AI with pictures using standard techniques," which would be an abstract idea.

Does the USPTO agree that mirroring, rotating and smoothing are well known mathematical operations? If not, why not. If so, how does this claim not recite any mathematical relationships, formulas, or calculations?

Does a claim that simply adds the number 5 to the vertical coordinate of every pixel in an image recite any mathematical relationships, formulas, or calculations?

**Response to the previous four bulleted questions:** In developing the 2019 Patent Eligibility Guidance, the USPTO reevaluated previously issued examples 1 through 36 to determine whether the claims indicated as patent ineligible were still patent ineligible and whether the claims indicated as patent eligible. While the USPTO determined that the eligibility/ineligibility conclusions in previously issued examples 1 through 36 remain the same under the 2019 Guidance, the analysis reaching those conclusions may be different and examiners have been advised to use caution when relying upon the analyses presented in these earlier examples.

The Federal Circuit has held claims to certain diagnostic methods patent ineligible in *Cleveland Clinic Foundation v. True Health Diagnostics, LLC*, 859 F.3d 1352 (Fed. Cir. 2017) ("*Cleveland Clinic I*") and in *Cleveland Clinic Foundation v. True Health Diagnostics LLC*, Docket No. 2018-1218, 2019 U.S. App. LEXIS 9451, \*17-18 (April 1, 2019) ("*Cleveland Clinic II*"), and *Cleveland Clinic II* (a non-precedential decision) contains a discussion of claim 1 of the USPTO's example 29 (Julitis). The USPTO's example 29 itself was not being litigated in either *Cleveland Clinic* case, which were patent infringement litigations. Rather, the patentee attempted to analogize its claims to claim 1 of example 29 in arguing for patent eligibility. The Federal Circuit stated, in pertinent part, that to the extent claim 1 of example 29 is analogous to the prior *Ariosa* decision, then *Ariosa* must control. The USPTO is reviewing this earlier example in light of the Federal Circuit's ruling.

New training example 39 (Neural Network) distinguishes between claims directed to mathematical relationships, formulae, or calculations *per se*, and claims directed to inventions that use or are based on mathematical relationships, formulae, or calculations. The computer-implemented functions of "mirroring," "rotating," and "smoothing"— like all functions performed by a computer— arguably involve the use, at some level, of certain mathematical relationships, formulae, or calculations. The claims of example 39, however, do not recite these mathematical relationships, formulae, or calculations, and thus do not seek to patent any particular mathematical relationship, formula, or calculation. A claim that recited adding the number 5 to some predetermined value, however, would likely recite a mathematical calculation.

### USPTO Responses to Questions for the Record – Representative Jackson Lee U.S. House Committee on the Judiciary Subcommittee on Courts, Intellectual Property and the Internet

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As required by the 2018 Study of Underrepresented Classes Chasing Engineering and Science (SUCCESS) Act, the USPTO is to prepare a study on the participation of women, minorities, and veterans in entrepreneurship activities and the patent system. Section 3 of the SUCCESS Act requires the study to provide legislative recommendations for how to increase the number of women, minorities, and veterans who apply for and obtain patents. To assist in gathering information prior to compiling the report, the USPTO has invited the public to provide written comments and also oral testimony at one of three hearings.

1. Have stakeholders who have provided testimony believe that the underrepresented classes only consist of those who are considered women, minorities, or veterans, or have any of the stakeholders identified any other people(s) as being underrepresented? In the case of the latter; who else, or what other group(s) of people, have the stakeholders identified as being underrepresented?

**Response**: The USPTO strongly agrees that it is critical to encourage greater participation in the patent ecosystem by all underrepresented groups and has taken a proactive approach to doing so. With regard to the SUCCESS Act, the USPTO gathered, through live testimony and written comments, information for the study required by the SUCCESS Act. We provided a summary of public comments and legislative recommendations received in Appendix A of the formal report that was submitted to Congress on October 31, 2019. The USPTO also provided a URL<sup>2</sup> in the report that links to a webpage on the USPTO's website where individuals can read all comments and recommendations submitted. For your convenience, we sent an electronic copy of the final SUCCESS Act report to your office, and we hand delivered a hard copy of the report to your office as well.

# 2. Have stakeholders expressed concern regarding the underrepresented classes' financial ability to enforce their rights once they do obtain patents? What legislative recommendations has the USPTO received from stakeholders that would increase the incentive for underrepresented classes to apply for and obtain more patents, and does equal outcome with respect to a patent holder's financial ability to enforce their rights against well-funded companies play a part?

**Response:** As noted above, the USPTO gathered information for the study required in the SUCCESS Act, including any concerns regarding inventors' financial ability to obtain and enforce their patents. We shared summaries of legislative recommendations we received in Appendix A of the SUCCESS Act report. The report also included a URL link to the website referenced above where individuals can read all comments and recommendations submitted. For your convenience, we sent an electronic copy of the final SUCCESS Act report to your office, and we hand delivered a hard copy of the report to your office as well.

<sup>&</sup>lt;sup>2</sup> https://www.uspto.gov/successact

3. The PTAB/IPRs are purported to being a cheaper and faster alternative than district court litigation in achieving the end result of determining patent validity/eligibility. Given that contingency law firms rely on damages to recoup their investment, and in the case of the PTAB, there is no monetary compensation for prevailing patent holders, have stakeholders expressed concern whether the underrepresented classes have the financial means to receive legal representation? What legislative recommendations has the USPTO received from stakeholders that would help the underrepresented classes avoid such a financial burden while still achieving the end result of determining patent validity/ eligibility?

**Response:** As noted above, the USPTO gathered information for the study required in the SUCCESS Act, including concerns regarding inventors' financial ability to obtain and enforce their patents before PTAB. We shared summaries of legislative recommendations we received in Appendix A of the SUCCESS Act report. The report also included a URL link to the website referenced above where individuals can read all comments and recommendations submitted. For your convenience, we sent an electronic copy of the final SUCCESS Act report to your office, and we hand delivered a hard copy of the report to your office as well.

We note, however, that the USPTO has received feedback on PTAB proceedings and making them more accessible outside the context of the SUCCESS Act, as outlined above in response to Chairman Johnson's similar question.

## 4. What legislative recommendations has the USPTO received from stakeholders that would help underrepresented classes apply for and obtain more patents in lieu of patent eligibility?

**Response:** As noted above, the USPTO gathered information for the study required in the SUCCESS Act, including recommendations for helping underrepresented classes apply for and obtain patents. We shared summaries of legislative recommendations we received in Appendix A of the SUCCESS Act report. The report also included a URL link to the website referenced above where individuals can read all comments and recommendations submitted. For your convenience, we sent an electronic copy of the final SUCCESS Act report to your office, and we hand delivered a hard copy of the report to your office as well.

#### USPTO Responses to Questions for the Record – Representative Mike Johnson

#### U.S. House Committee on the Judiciary Subcommittee on Courts, Intellectual Property and the Internet

"Oversight of the U.S. Patent and Trademark Office" – May 9, 2019 Witness: The Honorable Andrei Iancu, Undersecretary of Commerce for Intellectual Property and Director of the U.S. Patent and Trademark Office Submitted: November 26, 2019

As you know, a Patent Trial and Appeals Board (PTAB) decision invalidating a patent often halts further proceedings in a District Court. However, that is apparently not true for proceedings at the U.S. International Trade Commission (ITC). For example, the ITC has proceeded with Section 337 investigations and imposed remedies in cases even after the PTAB had found a patent to be invalid. Based upon your understanding of patent infringement cases in District Courts, the ITC, and the PTAB, please answer the following questions:

## 1. Do you think the ITC should be required to suspend its 337 investigations upon the PTAB determination that a patent is invalid, and ultimately terminate such a proceeding once the PTAB decision has been made final and all avenues for appeal exhausted?

**Response:** After a PTAB final determination of unpatentability on some or all claims of a patent issues, and once appeals are exhausted, the USPTO will enter a certificate of unpatentability and effectively cancel those claims from the patent. Such cancelled claims would likely not form the basis for initiating or maintaining an action in district court or a 337 investigation in the ITC. Whether the ITC should be required to suspend its investigation upon the PTAB's determination and until appeals are exhausted or terminate the investigation is a determination for the ITC to make in light of relevant statutory provisions.

# 2. Alternatively, should the PTAB suspend its proceedings when a district court or the ITC has decided to conduct a full-blown trial that will include a determination of the validity of the same patents and, if so, at what point in its proceeding would such a suspension by the PTAB be appropriate?

**Response:** Under the current statutory provisions, PTAB has little flexibility to suspend ongoing AIA trials. Once instituted, PTAB trials must proceed to a final written decision within 12 months, unless extended for up to 6 months for good cause or unless subject to joinder. Additionally, we do not believe that an automatic suspension of PTAB proceedings based solely on the existence of a parallel district court or ITC trial would serve to bring balance to the system. Instead, as explained in our November 2019 Consolidated Trial Practice Guide, events in other proceedings, including "in district courts, or the ITC," are factors to be considered when determining whether to exercise the USPTO's statutory discretion on institution of a PTAB proceeding. We believe that the goals of quality, efficiency, reliability, and predictability are best served by continuing to exercise this discretion based on a balanced assessment of the circumstances of each case, including the merits of the arguments.

### USPTO Responses to Questions for the Record – Representative Biggs U.S. House Committee on the Judiciary Subcommittee on Courts, Intellectual Property, and the Internet

"Oversight of the U.S. Patent and Trademark Office" – May 9, 2019 Witness: The Honorable Andrei Iancu, Undersecretary of Commerce for Intellectual Property and Director of the U.S. Patent and Trademark Office Submitted: November 26, 2019

1. In recent weeks, the Patent Trial and Appeal Board ("PTAB") has designated two decisions as precedential-including one in which you sat on the panel-enforcing the agency's discretion under 35 U.S.C. 325(d) to reject repetitive claims filed by the same or a different challenger against the same patent.

Despite these precedential decisions, there have been reports that the Central Reexamination Unit (under the authority of the Commissioner for Patents, not the PTAB) does not feel bound by the PTAB's precedential decisions and is therefore allowing multiple reexaminations to be ordered against the same patent.

• As a general policy matter, do you think it is appropriate to grant a request for ex parte reexamination, if the request asserts the same or substantially the same prior art or argument that was previously presented by the same person in an inter partes review petition which the PTAB declined to institute against the same patent claims?

**Response:** As a matter of general policy, a party whose request for an *inter partes* review was denied by an exercise of the Director's authority under 35 U.S.C. § 325(d) should, under most circumstances, not have a reexamination request granted when the prior art or arguments raised in the reexamination request are limited to the same or substantially the same prior art or arguments in the denied petition for *inter partes* review. In the majority of instances where a reexamination request was filed after a petition for *inter partes* review was denied, however, the basis for the denial of the *inter partes* review was a statute, such as 35 USC § 314, that does not implicate *ex parte* reexamination. Additionally, it has been our experience that the requests for reexamination granted by the USPTO have not been based on the same or substantially the same prior art or arguments presented in the denied *inter partes* review petition. Where the request raises a new issue, either through the prior art or by argument, that previously was not fully evaluated by the USPTO, and the examiner determines that the issue would have been important in determining the patentability of the claims, reexamination may be ordered even though other parts of the request may contain arguments similar to those previously presented in the *inter partes* review petition.

• As the head of the agency, what steps have you taken-or plan to take-to ensure that the PTAB's precedential decisions involving 35 U.S.C. 325(d) are applied consistently by different components of the agency, including by the Central Reexamination Unit and the Office of Patent Legal Administration, in cases deciding whether to grant or reject a request for ex parte reexamination?

**Response:** The databases within the USPTO that are available to both the Central Reexamination Unit (CRU) and Office of Patent Legal Administration provide information about whether a trial has been requested on the patent and the determination made by the PTAB, including the grounds

for the determination. These PTAB decisions are reviewed by the CRU when determining whether it is appropriate to grant reexamination in light of a decision issued by the PTAB in accordance with 35 U.S.C. § 325(d).

# • Given that the statutory authority under 35 U.S.C. 325(d) is vested in you as the "Director," do you have any plans to personally sign a decision rejecting a reexamination request, analogous to the various PTAB panels on which you have personally sat?

**Response:** As with cases before PTAB, each reexamination request is unique, and whether I personally would sign a decision will depend on the specific facts of the case.

### 2. Several patents have been determined to be valid in a district court and invalid in the PTAB. What is the legal condition of said patent?

**Response:** If the PTAB's judgment is not disturbed on appeal, the patent in this example would be invalid. Nearly half a century ago, the Supreme Court held that a judgment of patent invalidity creates a nonmutual defensive collateral estoppel that may be invoked by other defendants. See Blonder-Tongue Labs., Inc. v. Univ. of Ill. Found., 402 U.S. 313 (1971). This means that if a patent is adjudged invalid in one case, an accused infringer in another case, who was not a party to the judgment of invalidity in the first case, can nevertheless invoke that judgment to defend against an infringement suit. See id. at 349-50. The Federal Circuit has also recognized that a prior district-court judgment of validity, even if affirmed on appeal, does not preclude a subsequent judgment of invalidity in USPTO post-issuance proceedings. See In re Swanson, 540 U.S. 1368, 1377 (Fed. Cir. 2008); Fresenius USA, Inc. v. Baxter In'l, Inc., 721 F.3d 1330, 1339-40 (Fed. Cir. 2013). As the Federal Circuit explained in Swanson: "In civil litigation, a challenger who attacks the validity of patent claims must overcome the presumption of validity with clear and convincing evidence that the patent is invalid. If this statutory burden is not met, courts do not find patents 'valid,' only that the patent challenger did not carry the burden of establishing invalidity in the particular case before the court. Therefore, a prior holding of validity is not necessarily inconsistent with a subsequent holding of invalidity, and is not binding on subsequent litigation or PTO reexaminations." Swanson, 540 F.3d at 1377 (citations omitted).

### 3. How many patents have completed in one or more AIA trials?

**Response:** Approximately 5,700 patents have been involved in a completed AIA proceeding. Completed proceedings include terminations (before or after a decision on institution) due to settlements, requests for adverse judgement, dismissals, final written decisions, and decisions denying institution.

### 4. How many patents have been partially invalidated by AIA trials?

**Response:** Approximately 1,300 patents involved in a completed AIA proceeding have had at least one, but not all, challenged claims found unpatentable in a final written decision. In addition, at least one, but not all, challenged claims have been cancelled in approximately 200 patents after the filing of a request for adverse judgement.

### 5. How many patents have been fully invalidated by AIA trials?

**Response:** Approximately 500 patents involved in a completed AIA proceeding have had all challenged claims found to be unpatentable in a final written decision. In addition, all challenged claims have been cancelled in approximately 60 patents after the filing of a request for adverse judgement.

### USPTO Responses to Questions for the Record - Representative Steube U.S. House Committee on the Judiciary Subcommittee on Courts, Intellectual Property and the Internet

"Oversight of the U.S. Patent and Trademark Office" – May 9, 2019 Witness: The Honorable Andrei Iancu, Undersecretary of Commerce for Intellectual Property and Director of the U.S. Patent and Trademark Office Submitted: November 26, 2019

1. Please specify with explanations all the authorizing statutes under which the USPTO (a) instructed examiners to spend time on identifying applications with SAWS subject matter; (b) instructed their Supervisory Patent Examiner (SPE) to spend time and review and flag (designate) such applications under the SAWS program, and (c) established automatic mechanisms and procedures to prevent issuance of any such flagged patent applications even when they are found patentable and allowable.

**Response:** The SAWS program was discontinued in March 2015. Under the patent laws, as codified in Title 35 of the United States Code, the USPTO is authorized to issue patents, as well as to manage the examination of patent applications and processing.

2. Documents produced by the USPTO under a FOIA including the Board's Standard Operating Procedure SOP-8 show that the Board of Patent Appeals and Interferences, the predecessor of the Patent Trial and Appeals Board, (the Board) was notified of the SAWS designation and was given the SAWS reports pertaining to SAWS applications under appeal or interference.

a. Please specify with explanations what legal authority or statute authorizes informing the Board of such SAWS facts when such facts could have no bearing on the Board's decision under the patent law?

**b.** Please specify with explanations what legal authority authorizes the examiner to conduct such *ex-parte* communications with the Board while withholding it from the applicant?

**Response to Question 2:** The SAWS program was discontinued in March 2015. Under the patent laws, as codified in Title 35 of the United States Code, the USPTO is authorized to issue patents, as well as to manage the examinations of patent applications and processing, which includes the Board of Patent Appeals and Interferences and the Patent Trial and Appeals Board (collectively "the Board"). Standard Operating Procedure (SOP)-8, which was issued before the SAWS program ended on March 2, 2015, was concerned with the assignment of judges to *ex parte* merits panels. SOP-8 does not contain any reference to SAWS reports that may have been prepared within a Technology Center being provided to the Board or distributed within the Board.

3. In her January 9, 2015 responses to Senate inquiries for the record, then Acting Director Lee asserted that the SAWS program was a quality control program. The Inspector General audited the USPTO quality control programs in 1997, 2010, and 2011. Under the Inspector General Act of 1978 (as amended) the USPTO was to provide the IG with "access to all records, reports, audits, reviews, documents, papers, recommendations, or other material available ... which relate to programs and operations" of the USPTO subject to the IG's audit. 5 U.S.C. App. § 6(a)(l).

a. If Director Lee's assertion was correct, please explain why the USPTO consistently acted contrary to the IG Act of 1978 by concealing from the IG in all three investigations the existence and operation of the SAWS as a quality control program?

b. Please provide the names of the USPTO officials who decided in each of the respective audits that the SAWS program should not be subject to such IG audits.

c. Please provide the name(s) of the person(s) who have prepared, drafted, or written Director Lee's explanations in her January 9, 2015 response for the record that the SAWS was a quality control program.

**Response to Question 3:** The SAWS program was discontinued in March 2015. Under the patent laws, as codified in Title 35 of the United States Code, the USPTO is authorized to issue patents, as well as to manage the examination of patent applications and processing. It is unclear to what extent, if any, the scope of the referenced audits would have either encompassed the SAWS program or have warranted a specific discussion of it. However, an IG audit on the USPTO's patent quality assurance was conducted in 2014, and the Final Report OIG-15-026-A resulting from this audit did note the existence of the SAWS program.