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VIA ELECTRONIC SUBMISSION TO:

February 23, 2021

RE: Docket Number: PTO-P-2020-0057
United States Patent and Trademark Office, Department of Commerce
Comment on the National Strategy for Expanding American Innovation

"When people walk into a system and [they] don't see anybody who looks like [them], it undermines confidence in that system…."
United States Supreme Court Justice Sonia Sotomayor[1]

To Whom It May Concern:

This timely submission constitutes the Public Comment of the *Fair Inventing Fund* with regard to the U.S. Patent and Trademark Office's ("PTO") request in the Federal Register, Docket Number PTO-P-2020-0057. The Fair Inventing Fund (https://www.fairinventing.org/) ("FIF") is an organization established in 2020 for the purpose of advocating for the rights of people who invent, but are not included in the patent ecosystem. The FIF promotes the inclusion of all inventors regardless of their background. Recently as part of its wider efforts, the FIF submitted an *amicus* brief in support of inclusion to the case: *United States v. Arthrex Inc.* Nos. 19-1434, 19-1452, 19-1458.[2] After many years of disregarding the issue of diversity, in a series of Executive Orders, the Biden administration acknowledged what too many Americans already know: The lack of inclusion and diversity harms the United States in unforeseen ways. In an effort to combat these pernicious effects, President Biden signed the "Executive Order on Advancing Racial Equity and Support for Underserved Communities Through the Federal Government." That Order states, in part:

> Equal opportunity is the bedrock of American democracy, and our diversity is one of our country's greatest strengths. But for too many, the American Dream remains out of reach. Entrenched disparities in our laws and public policies, and in our public and private institutions, have often denied that equal opportunity to individuals and communities.[3]

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[1] *Sotomayor Calls for More Diversity on the Bench*, Madison Bober, THE EMORY WHEEL, February, 6, 2018, *available at* https://emorywheel.com/sotomayor-calls-for-more-diversity-on-the-bench/

[2] Available at: https://www.supremecourt.gov/DocketPDF/19/19-1434/165057/20201230164532270_19-1434%2019-1452%20and%2019-1458%20Amicus%20Brief%20Fair%20Inventing%20Fund%20in%20Support%20of%20Arthrex%20Inc.pdf

[3] *Executive Order On Advancing Racial Equity and Support for Underserved Communities Through the Federal Government*, EXECUTIVE ORDER, President Joseph Biden January 20, 2021.

Regrettably, the Patent and Trademark Office (PTO) has not provided that opportunity to all Americans, and specifically, those from underrepresented communities of African-Americans, Hispanics, and women. The process of creating, securing, commercializing, and protecting patents is expensive, which benefits large institutions to the detriment of the small inventor. These institutional biases pose insurmountable barriers to entry for those without the resources or institutional support; a condition that disproportionately impacts women, people of color, and people living in socioeconomically deprived areas. Because of the perceived systemic prejudice in the PTO, underrepresented groups are discouraged and do not engage with the patent process. The Fair Inventing Fund advocates for those underrepresented groups to access the patent process and the belief that equal protection and due process standards of review in the patent ecosystem would enable more diverse inventors to be rewarded for the labor of their mind.

Summary of Argument

This Comment addresses the issues of systemic bias at the PTO by noting troubling statistics of racial and gender bias and identifying the PTO and Patent and Trademark Appeals Board ("PTAB") practices that create the systemic bias. This Comment further recommends lasting, practical solutions to expand our innovation ecosystem to include all inventors. The current disparities faced by demographically underrepresented communities are caused by the systemic bias of the PTAB that favor large institutions. The PTAB's procedural obstacles to obtaining and maintaining patents creates the bias that disfavors small inventors that do not have access to capital.

Introduction

This request for comment was noticed pursuant to the *Study of Underrepresented Classes Chasing Engineering and Science Success* ("SUCCESS") *Act*, which is the most recent Congressional effort to promote the interests of inventors from traditionally underrepresented communities.[4] The SUCCESS Act attempted to promote the participation of those communities as part of the efforts to modernize the patent system and our government. The recent efforts trace their origin to the original America Invents Act ("AIA") and, specifically, Section 29, which mandated that the Director of the PTO conduct statistical studies of the race and gender of inventors similar to the mandate of the AIA.[5] The SUCCESS Act follows those initial efforts to address the systemic issues of the underrepresented small inventor. Recently, those congressional efforts were finally echoed by the Biden Administration, which prioritized advancing equity in the form of systemic change to our government.

I. The Negative Effects of the Systemically Biased Patent Trial and Appeal Board Is The Lack of Access to Finance for the Small Inventors

In response to the AIA, information and statistics have been collected to gain a greater understanding of the disparities and the challenges these communities face. The common theme that every community reports is the lack of access to capital and funding to obtain a patent. A recent PTO report[6]

[4] SUCCESS Act. PUB. L. 115–273, 132 STAT. 4158 (2018)
[5] Pub. L. 112-29, Sec. 29, 125 Stat. 284, 339 (2011).
[6] Report to Congress Pursuant to Pub. L. No. 115-273, SUCCESS Act. USPTO & SBA p. 12 (Oct. 2019).

found that African-Americans are severely underrepresented as inventors and "that observed gaps in patenting rates between Whites and racial/ethnic minorities cannot be explained by differences in parental income or performance on school tests." Researchers fear that the disparities could be worse because much of the data relies upon the voluntary participation of the subjects, which is not always forthcoming.

On the other hand, gender, which is easier to identify by the names of the inventors, is another category that suffers from disparities. The disparities between the genders are glaring. In a companion report dated July 4, 2020, the PTO found that substantial differences exist between the amount of patents initially challenged and eventually granted to women and men. The difference severely disfavors women.[7]

What all these categories have in common is that more often than not, the small inventor is a woman or a minority inventor who does not have access to the capital, nor the institutional support that other inventors enjoy.[8] Many of the inequities recorded are caused by the systemic biases that favor large institutions to the detriment of the small inventor. The common ailment that plagues all the underrepresented communities is the structural, systemic bias of the PTO and the PTAB. The challenges to the unrepresented communities are equal to those of the "small inventor" without access to resources. Therefore, to expand the opportunities for underrepresented inventors, the PTO must eradicate the systemic biases that favor large institutions.

Upon close examination, the systemic, structural unfairness of the PTO process is found not only in the granting of patents but in how the PTAB adjudicates challenges to those patents. Regretfully, those challenges overwhelmingly favor Big Tech to the detriment of small inventors. The statistics are telling: the PTAB cancels challenged claims in seventy-six (76) percent of instituted patent reviews; that is two and half times greater than in federal courts.[9] The evidence demonstrates that the PTAB favors parties with strong institutional support and access to capital. As the PTO's own studies demonstrate, underrepresented communities lack institutional support and finance to meaningfully benefit from the patent system. On the other hand, large corporations appear to use the PTAB as a cudgel to discourage competitors and protect their monopoly of critical parts of the economy.

To date, as is often the case, the PTO and its Congressional supporters have focused on the symptoms of the issue but failed to remedy the underlying problem. The PTO has identified and collected information regarding the detriments of the underrepresented patent holders, but it has never truly addressed the causes of systemic bias that are inherently related to how the PTO deploys its powers. Many reports commissioned by Congress and the PTO identify and raise awareness of the disparate impacts of this systemic bias of the PTO.[10] Several studies weakly connect the disparate impact and

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[7] Progress and Potential 2020 Update on U.S. Women, Office of the Chief Economist (July 2020).
[8] *See* Lisa D. Cook, Policies to Broaden Participation in the Innovation Process, THE HAMILTON PROJECT, 8-10, 12-13 (2020).
[9] Are more than 90 percent of patents challenged at the PTAB defective? Steve Brachman & Gene Quinn, IP Watchdog, June 14, 2017 (*available at* https://www.ipwatchdog.com/2017/06/14/90-percent-patents-challenged-ptab-defective/id=84343/)
[10] For example to address problems raised by actual women and minority inventors the USTPO recommended that Congress could "issue a commemorative series of quarters and postage stamps… featuring American inventors from a variety of backgrounds, including those from underrepresented groups."

the need for small inventors to obtain institutional support and financing. But none dare to openly challenge why so much institutional support is necessary to be successful at the PTO. By way of example, the average cost to obtain a patent in the U.S. is $51,000.00 and the average cost to defend a patent in a PTAB review is $450,000.00, astronomical sums.[11]

The Fair Inventing Fund urges the PTO not to simply continue raising awareness of diversity and inclusion through threadbare publicity campaigns, such as this request for comment. Rather, greater reform is needed at the institutional level of the PTO and profound change at the PTAB is required.

II. The Systemic Bias of the PTAB Impedes Individual Inventors and Small Businesses from Patents and Ultimately, Financial Resources

An agency is institutionally biased when its structure creates an unconstitutionally overwhelming motive, or perception of motive, to favor any institution or its members.[12] Regrettably, through many of its unique and unorthodox, extra-judicial practices, the PTAB has suffered from problems that have created the agency capture and systemic bias at issue in this Comment.

A. The PTAB Leadership Combines Administrative and Judicial Functions

The combination of executive and judicial functions is consistently identified as a significant contributor to unconstitutional bias.[13] The PTO impermissibly combines significant executive and judicial responsibilities in PTAB administrative positions to oversee a PTAB budget that is critically dependent on fees it collects from the parties to the litigation it adjudicates.

The Chief Administrative Patent Judge ("APJ"), Deputy Chief APJ, and Vice Chief APJ serve as the "Leadership" of the PTAB in both executive and judicial functions. The leadership implements policy and aims to harmonize PTAB decisions. The Director also controls which APJs will preside over the *inter partes* review procedure.[14] The Leadership claims that oversight of the PTAB process and individual decisions increase uniformity in the institutions and final written decisions. In other words, the same APJs who determine the operating procedures of how to administer cases are the same judges that adjudicate the merits of those cases. Despite their oversight role of the APJs, the Leadership is authorized to participate in the judicial process by serving on PTAB institutional panels to determine, which if any, decisions should be overturned or reviewed.

The AIA converted the PTO into a self-funded agency granting the institution the ability to generate its own fees and to determine the fees and fee increases. However, freeing the PTO from Congressional funding placed it squarely in the control of those that pay most of its fees: large institutions and corporations. The PTO's periodic proposed funding request for comment directly acknowledges the link between the fees received and its objectives as "the USPTO is also working towards improving patent quality by providing increased clarity on patentable subject matter eligibility.

See https://www.uspto.gov/sites/default/files/documents/US-Inventor-to-PPAC_November-2019-SUCCESS-Act-Correction.pdf

[11] American Intellectual Property Law Association, Report of the Economic Survey, I-163 (June 2017).

[12] *See generally Tumey v. Ohio*, 273 U.S. 510, 532 (1927).

[13] *Ward v. Vill. of Monroeville*, 409 U.S. 57 (1972)

[14] 35 U.S.C. § 6(c).

. . The Office continues to strive to create consistency and increased clarity through this guidance."[15] The connection between generating funds and reaching the right outcome is evident.

Specifically, a considerable portion of those fees are generated by the litigation at the PTAB. Because the PTAB generates its own fees, the PTAB leadership facilitates the PTAB's finances as a separate business entity within the PTO. This state of affairs places the PTAB Leadership in control of both the fees generated by the PTO and the merits of decisions rendered by the PTAB. The conflict of interest could not be greater. The incentives from deciding the merits of the litigation and the budget that litigation supports creates inequitable consequences, which detrimentally impact underrepresented patent holders who do not have the same access to capital as large institutions. A generous PTAB that favors larger institutions will favor corporations with deep pockets that can challenge a range of patents and continue to fund the PTAB with their fees.

The incentives to bias large institutions are overwhelming and alarming. The Leadership has every opportunity to freely put their fingers on the scales of justice. The performance of each APJ is rated and reviewed by the PTAB leadership, which base those performance metrics on a particular outcome of cases. Those performance metrics are moored, at least in part, on the revenue generation requirement of the PTAB. For example, to receive a "Fully Successful" rating, an APJ must resolve a certain amount of cases before his or her docket. A reduction in the amount of cases could reduce the performance rating of the APJ and consequently their pay, a direct pecuniary benefit.[16]

B. Mixing the Judicial and Administrative Functions Creates Anomalous Judicial Results

As a result of mixing the Judicial and Administrative roles, the PTAB leadership has created unique initiatives that have used administrative action to achieve questionable judicial results. The revelation of these initiatives has been catastrophic for the credibility of the PTAB and generated these requests for public comment. These initiatives create a bias that undermines the judicial independence that a party would expect before a judicial body. The initiatives create uncertainty where the judicial body does not decide a particular matter on precedent or its merits, but rather on the whims of the PTAB leadership and their metrics of performance.

These issues have not gone unnoticed. Many criticisms regarding the transparency and independence of the PTAB have surfaced in various legal decisions and arguments. In the case *Nidec Motor Corp. v. Zhongshan Broad Ocean Motor Co.*, for example, Circuit Judges Dyk and Wallach wrote separately to note their concerns of the PTAB practice to increase the number of APJs on particular cases to "secure and maintain uniformity of the Board's decisions."[17] In *Oil States Energy Servs., LLC*, the Supreme Court raised the issue of whether the PTAB was signaling that it will "stack the deck with judges who we like."[18] Chief Justice John Roberts noted that adding additional APJs give the appearance that the PTAB is a "tool of the executive activity, rather than anything resembling a determination of rights."

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[15] Fed. Reg. Vol. 84, No. 147 /Wednesday, July 31, 2019 Proposed Rules.
[16] *Esso Standard Oil Co. v. Lopez-Freytes*, 522 F.3d 136 (1st Cir. 2008).
[17] *Nidec Motor Corp. v. Zhongshan Broad Ocean Motor Co.*, 868 F.3d 1013, 1020 (Fed. Cir. 2017) (quoting the brief filed on behalf of the PTO Director).
[18] *See* Tr. of Oral Arg. p. 47 ln 20 - p. 48 ln. 4 *In Oil States Energy Servs., LLC v. Greene's Energy Grp., LLC*, 138 S. Ct. 1365 (2018) (available at

Another sensational example of "unethical" action, as described by former Commerce Department Inspector General Todd Zinser, was the secretive Sensitive Application Warning System ("SAWS") program.[19] The SAWS program flagged particular patents to be targeted for scrutiny and possible invalidation. No one knows who created this list or why. Regardless of the speculation, the list accomplished its goal to generate a cloud of doubt over similar patents, diminishing valuation and increasing the costs and risks of enforcement. To date, the PTAB has not adequately responded or addressed the issue and the message could not be clearer: Black, Hispanic, and female small inventors are not the PTAB's priority. Such secretive lists are another example of the impermissible structural biases that exist at the PTO.

C. The PTAB Favors Large Institutions to the Detriment of the Underrepresented Inventor

Many of the issues raised by the Courts find their origin in the form of the judicial process that the PTAB employs. In Congress' latest efforts to modernize and harmonize the patent system, the AIA was viewed as favoring large corporations with more resources to file patent applications early and make amendments if necessary.[20] The primary concerns of advocates for small inventors are the post-grant review proceedings that provide an opportunity to invalidate patents before the PTAB. These procedures in the PTAB are popular with large, often multinational, corporations because of the additional rights and more favorable standards it offers to those who can pay for them. For example, the PTAB has a lower evidentiary standard (preponderance of evidence) for demonstrating unpatentability; the broadest reasonable claim construction standard that potentially encompasses a greater amount of invalidating prior art.[21]

In the case of *Oil States Servs., LLC v. Greene's Energy Grp., LLC*, J. Gorsuch appropriately admonished the PTO, postulating:

> Consider just how efficient the statute before us is. The Director of the Patent Office is a political appointee who serves at the pleasure of the President. He supervises and pays the Board members responsible for deciding patent disputes. The Director is allowed to select which of these members, and how many of them, will hear any particular patent challenge. If they (somehow) reach a result he does not like, the Director can add more members to the panel— including himself— and order the case reheard. Nor has the Director proven bashful about asserting these statutory powers to secure the "'policy judgments'" he seeks.[22]

The absurdity of the present situation is evident.

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https://www.supremecourt.gov/oral_arguments/argument_transcripts/2017/16-712_7kh7.pdf) (argument of Mr. Stewart on behalf of the Government) at p. 43 ln. 19-23; and p. 34 ln. 15, p. 35 ln. 1.

[19] Ryan Davis, USPTO Docs Shed Some Light On Secretive SAWS Program, Law360 (July 24, 2018).

[20] 157 CONG. REC. S1496-97 & S1497 (Mar. 9, 2011) (statement of Sens. Hatch & Leahy respectively).

[21] *See* Ryan Gatzmeyer, *Are Patent Owners Given a Fair Fight: Investigating the AIA Trial Practices*, 30 BERKLEY TECH. L. J., 531, 531-32 (2015).

[22] 138 S. Ct. 1365 (2018)

III. To Address the Systemic Bias, Serious Reform of the PTAB Is Required to Support Small, Independent Inventors and Businesses to Successfully Translate their Skills and Creativity into Intellectual Property

A. PTAB Judges Should Maintain Their Judicial Independence

In Federalist Paper 78, Alexander Hamilton expressed fears that the judiciary was "in continual jeopardy of being overpowered, awed, or influenced by its coordinate branches" and "nothing can contribute so much to its firmness and independence as permanency in office."[23] If the Courts "are to be considered as the bulwarks of a limited Constitution against legislative encroachments, this consideration will afford a strong argument for the permanent tenure of judicial offices, since nothing will contribute so much as this to that independent spirit in the judges. . . "

Both an independent appointment process and tenure are recognized as important tools to maintain the independence of a judiciary. While Article III judges receive public scrutiny, such as financial disclosure requirements, and the publicity of their history, careers, and judicial philosophy. On the other hand, APJs are not subject to any public examination.

B. Increased Transparency of APJ Appointment Creates More Equitable Outcomes

The conflicts of interest appear not only on the systemic, institutional level, but also at the individual level of the APJ. Presently, virtually nothing is known about the origin or previous careers of APJs. There is no information about whether these APJs "look like" the inventors that rely on them to protect their Constitutional right to patent. Without the transparency of a public hearing pursuant to the Constitutional 'advise and consent' process required for the Federal Judiciary, the judicial experience that forged the APJs' philosophy remains unknown. The APJs' views on fundamental Constitutional jurisprudential issues such as the inviolability of a government issued property rights have a considerable bearing on the willingness of an APJ to extinguish a previously granted patent. Small inventors, without corporate resources to engage in endless litigation by attrition, rely on APJs to protect their Constitutional rights, which in turn protect the fruits of their labor by patents.

Further, cloaking the APJ selection process fosters the perception of impropriety. Generally, the Department of Commerce and its progeny the PTO and PTAB are governed by the Standards of Ethical Conduct for Employees of the Executive Branch.[24] Such rules limit payments and financial payments from former employers.

However, those rules fall far short of the ethical rules that normally apply to federal judges.[25] The Code of Conduct for U.S. Judges require a higher degree of conduct to ensure that the faintest reflection of impropriety does not besmirch the reputation of the court. For example, Canon 2 warns judges from the appearances of impropriety that could arise from conflicts of interest. Such conflicts often arise when attorneys litigate against former clients. Particularly, in other patent actions, the

[23] The Federalist No. 78 at 470-71 (Clinton- Rossiter Ed. 1961).
[24] 5 C.F.R. Part 2635
[25] Code of Conduct for United States Judges (revised March 12, 2019) *available at* https://www.uscourts.gov/sites/default/files/code_of_conduct_for_united_states_judges_effective_march_12_2019.pdf

judiciary has been swift to maintain the integrity of the forum by removing counsel that appear to have a conflict.[26] Judges, as arbiters, are no different and should voluntarily remove themselves from any case in which they have represented any party. However, because the process to appoint APJs is so opaque, it is impossible for anyone to determine whether a conflict of interest exists. Furthermore, the astronomically high invalidation rate of the post-grant reviews of granted patents filed by large corporations raises concerns that perhaps the PTAB gives undue weight to institutional inventors.[27] For example, "only 4 percent of all PTAB petitions for review proceedings end with a final written decision in which all claims are upheld as patentable" and "[a]t least 84 percent of patents reaching a final written decision in a PTAB validity challenge are adjudicated to have at least one invalid claim.[28]"

In light of the other systemic bias regarding the institution and issues raised by the patently unjust SAWs program and court-packing scheme, APJs would find it difficult to comply with the federal judiciary's ethical standards. In the end, it is the small inventor that suffers. Small inventors, without teams of lawyers prepared to litigate by attrition, must overcome the prejudices inherent of judges that appear to be on the payroll of pre-ordained industry leaders.

C. Securing Tenure Protections Would Promote Equitable Decisions

The PTO should advocate Congress to maintain the judicial independence of APJs by securing tenure. Without tenure, APJs would answer directly to the political whims of the Director of the PTO, a political appointee. Congress sought to protect APJs with tenure to encourage and foster independent and impartial adjudication of important judicial issues. Removing those tenure protections would expose APJs to additional political interference.

Further, the tenure provisions are fundamental to avoid political influence from the Director of the PTO and to enable judges to follow the latest efforts of the Executive and Legislative branches to respect and promote inclusion. Because many patent holders are large corporations with profound resources and political influence, the review and oversight of the PTAB is paramount to maintain the integrity and fairness of the patent ecosystem.

Conclusion

Without transparency of the identity, conflicts, conduct and compensation of the APJs, the appearance of bias is hard to ignore. The FIF hopes that the PTO and the PTAB listen to those small inventors and patent holders from underrepresented communities and address the perception of bias that plague it. The PTO and PTAB must preclude 'agency capture' and avoid favoring the larger incumbent "customers" of the patent system that pays the big bills and deploys armies of lobbyists and lawyers to overwhelm all three branches of government. The property rights of patents originate from the Constitution and traditionally underrepresented communities of women and people of color could obtain a patent before they could vote or enjoy full citizenship. Patents, as public protections for the labor of the mind, were in a sense America's first civil rights law. Sadly, today a patent issued to a small

[26] *In re Atoptech, Inc.,* 565 F. App'x 912 (Fed. Cir. 2014).
[27] United States Patent and Trademark Office TRIAL STATISTICS IPR, PGR, CBM (September 2020) *available at* https://www.uspto.gov/patents/ptab/statistics/aia-trial-statistics-archive.
[28] Are more than 90 percent of patents challenged at the PTAB defective? Steve Brachman & Gene Quinn, IP Watchdog, June 14, 2017 (*available at* https://www.ipwatchdog.com/2017/06/14/90-percent-patents-challenged-ptab-defective/id=84343/)

inventor that is female or not white is not equal to a patents tied to a large corporate owner. We hope the PTO will remedy that.

In conclusion, we end where we began with the wisdom of our Justices. Justice Gorsuch succinctly detailed the travails that face the small inventor today:

> After much hard work and no little investment you devise something you think truly novel. Then you endure the further cost and effort of applying for a patent, devoting maybe $30,000 and two years to that process alone. At the end of it all, the Patent Office agrees your invention is novel and issues a patent. The patent affords you exclusive rights to the fruits of your labor for two decades. But what happens if someone later emerges from the woodwork, arguing that it was all a mistake and your patent should be canceled? Can a political appointee and his administrative agents, instead of an independent judge, resolve the dispute?[29]

Thank you for your consideration.

Sincerely,

Courtnay C. M. Saunders
Member, Board of Directors
Fair Inventing Fund

[29] *Oil States Energy Servs., LLC v. Greene's Energy Grp.*, LLC, 138 S. Ct. 1365 (2018)