February 8, 2021

Via Federal eRulemaking Portal, www.regulations.gov

The Honorable Drew Hirshfeld Acting Under Secretary of Commerce for Intellectual Property and Director of U.S. Patent and Trademark Office U.S. Patent and Trademark Office 600 Dulany Street Alexandria, VA 22314

Re: Request for Comments on the National Strategy for Expanding Access to Innovation, Docket No. PTO-P-2020-0057, December 23, 2020

Dear Director Hirshfeld:

We _____submit the following comments in response to the United States Patent and Trademark Office's ("the Office") Request for Comments on the National Strategy for Expanding Access to Innovations, 85 Fed. Reg. 83906. We appreciate the Office's efforts to build a more diverse innovation ecosystem and are pleased to have the opportunity to comment.

As set forth in detail herein, we believe that the Office should change the eligibility requirements to sit for the patent bar insofar as they relate to design patents. The proposed change would help diversify the patent bar (Question No. 13) and would also remove a barrier to participation by women in patenting (Question No. 2). In its current form, the eligibility requirements allow those with a background in science and engineering to prosecute design patents but those with a background in design-related fields cannot. We respectfully submit that this is not justifiable and unnecessarily restricts the number of women admitted to the patent bar. Changing the eligibility rules to include designers would result in design matters being handled by those practitioners best positioned to do so and would mirror the Office's own hiring practices for design patent examiners. It would also increase the number of women patentees because women inventors are sometimes quite partial to hiring a female patent attorney particularly when their invention relates to a product for women. We set forth below several ways in which the proposed change to the eligibility rules could be implemented.

I. The Eligibility Requirements Unnecessarily Reduce the Number of Women Admitted to the Patent Bar

a. The Eligibility Rules

Eligibility to sit for the patent bar exam and ultimately be registered to practice before the Office includes a showing that the person "[p]ossesses the legal, scientific, and technical qualifications necessary for him or her to render applicants valuable service."¹ In almost all cases, this means that the applicant has an undergraduate degree or extensive coursework in one of 32 disciplines.² The list of included fields, found in the General Requirements Bulletin, contains the natural and physical sciences, a variety of engineering fields, and computer science.³ Excluded from the list are degrees in art, design, or architecture.⁴ Yet the eligibility requirements apply to those wishing to appear before the Office relating to design inventions as well as utility inventions. So, if an applicant qualifies for the patent bar based on an electrical engineering degree, he can prosecute patents not only related to electrical engineering but also in any other subject including biotech, pharmacology, astrophysics, and, even, design. Yet if an applicant has a degree in product or industrial design, she isn't allowed to even prosecute design patents. The practical effect is that many people qualified to prosecute design patents are excluded from the patent bar with the overwhelming majority of those excluded being women.

¹ 37 C.F.R. § 11.7 (a)(2)(ii). This requirement applies to attorneys as well as patent agents. For simplicity we will use 'patent attorneys' to cover both attorneys and agents.

² Category A relates to undergraduate degrees and Category B is directed to coursework. There is a Category C: passing a comprehensive engineering exam administered by the National Council of Examiners for Engineering and Surveying. The requirements are the same for attorneys as well as patent agents. U.S. PATENT AND TRADEMARK OFFICE, GENERAL REQUIREMENTS BULLETIN FOR ADMISSION TO THE EXAMINATION FOR REGISTRATION TO PRACTICE IN PATENT CASES BEFORE THE UNITED STATES PATENT AND TRADEMARK OFFICE at 4-8 (hereinafter "GENERAL REQUIREMENTS BULLETIN"). ³ The acceptable fields of study are:

Biology, Pharmacology, Electrochemical Engineering, Biochemistry, Physics, Engineering Physics, Botany, Textile Technology, General Engineering, Computer Science, Aeronautical Engineering, Geological Engineering, Electronics Technology, Agricultural Engineering, Industrial Engineering, Food Technology, Biomedical Engineering, Mechanical Engineering, General Chemistry, Ceramic Engineering, Metallurgical Engineering, Marine Technology, Chemical Engineering, Mining Engineering, Microbiology, Civil Engineering, Nuclear Engineering, Molecular Biology, Computer Engineering, Petroleum Engineering, Organic Chemistry, and Electrical Engineering.

⁴ The issues described here are discussed in significantly greater detail in Christopher Buccafusco & Jeanne C. Curtis, *The Design Patent Bar: An Occupational Licensing Failure*, 37 CARDOZO ARTS & ENTERTAINMENT LAW JOURNAL 263 (2019).

b. The Relevant Demographics

The Office estimates that the patent bar is currently about 70% men.⁵ This number has been relatively unchanged for many years.⁶ By limiting access to the patent bar to people who have studied science and engineering, the PTO's rules disparately impact women's access to the profession. However much sense the PTO's rules make for those prosecuting utility patents before the Office, they are not justifiable for people prosecuting design patents.

It is well known that science and engineering fields are skewed towards men in colleges and universities. As of 2013, women earned only 37% of undergraduate STEM degrees in the U.S.⁷ By contrast, women make up the vast majority of students at leading industrial and fashion design schools like Parsons School of Design (78%),⁸ Rhode Island School of Design (69%),⁹ and Fashion Institute of Technology (85%).¹⁰ Accordingly, the patent bar is drawing attorneys from a highly distorted pipeline of talent.¹¹ If the Office allowed in either design majors or people with any undergraduate major to prosecute design patents, the number of women in the patent bar would be sure to rise. And having a designer prosecuting design patents yields the strongest nexus between the skill set of the prosecuting attorney or patent agent and the subject matter of the application thereby insuring that the prosecuting attorney has 'the legal, scientific, and technical qualifications necessary for him or her to render applicants value service' as is required under 37 C.F.R. § 11.7 (a)(2)(ii).

Design patents aren't only expanding in raw numbers. They also seem to be increasingly valuable to firms' IP portfolios.¹² The recent smartphone litigations between Apple and Samsung, resulted in enormous infringement verdicts that were largely based on Apple's design

⁵ January 19, 2021 Letter from the Office to Senators Coon, Tillis, and Hirono addressing the demographic of the patent bar, at 2. See also Saurabh Vishnubhakat, *Gender Diversity in the Patent Bar*, 14 J. Marshall Rev. Intell. Prop. L. 67, at 80 (2014).

⁶ See, e.g., Saurabh Vishnubhakat, *Gender Diversity in the Patent Bar*, 14 J. MARSHALL REV. INTELL. PROP. L. 67 (2014), at 80.

⁷ National Science Foundation, Integrated postsecondary education data system, 2013, COMPLETIONS SURVEY. NATIONAL CENTER FOR SCIENCE AND ENGINEERING STATISTICS: INTEGRATED SCIENCE AND ENGINEERING RESOURCES DATA SYSTEM available at <u>https://webcaspar.nsf.gov (2014)</u>. *See also* Sapna Cheryan, Sianna A. Ziegler, Amanda K. Montoya & Lily Jiang, *Why Are Some STEM Fields More Gender Balanced Than Others?*, 143 PSYCHOL. BULL. 1, 1 (2017).

⁸ PETERSON'S, https://www.petersons.com/college-search/parsons-the-new-school-for-design-000_10000570.aspx (last visited June 4, 2018).

⁹ U.S. NEWS & WORLD REPORT, https://www.usnews.com/best-colleges/risd-3409 (last visited June 4, 2018).

¹⁰ Enrollment Data, FIT STATE UNIV. OF NY http://www.fitnyc.edu/about/get-to-know/enrollment-data.php (last visited June 4, 2018).

¹¹ On the "pipeline problem" and diversity see THE EDUCATION PIPELINE TO THE PROFESSIONS: PROGRAMS THAT WORK TO INCREASE DIVERSITY (Sarah E. Redfield, ed. 2012).

¹² See Mark Nowatarski, *The Power of Portfolio: Strong Design Patents III*, IP WATCHDOG, Aug. 23, 2013, at http://www.ipwatchdog.com/2013/08/23/the-power-of-portfolio-strong-design-patents/id=44774/.

patents.¹³ Accordingly, we expect design patents' legal and economic significance to continue to grow. Revising the eligibility requirements to include design-related fields will allow women greater access to this important and expanding area of patent practice - a goal seemingly sought by many, including Congress and the Office.

Revising the eligibility requirements will not only provide for prosecution of design patent applications by those with competence to do so, but it will result in these matters being handled by people especially well-positioned to do so. In fact, the Office's hiring practices as well as its classification system explicitly recognize this. When the Office hires design patent examiners it does not look for applicants with science and engineering backgrounds.¹⁴ Rather, it looks for applicants who understand designs. In a recent job posting for design patent examiners, the PTO sought "talented individuals with degrees or education in Industrial/Product Design, Architecture, Applied Arts, Graphic Design, Fine/Studio Arts."¹⁵ When they interview, the Office asks design patent examiner applicants questions about visual similarities between different designs.¹⁶ And applicants are evaluated on spatial reasoning tests and their ability to describe drawings in words.¹⁷ Once a patent application is filed, the PTO assigns an examiner to the application based on the class designation.¹⁸ Utility patents are typically assigned to examiners with scientific and engineering backgrounds, while design patents are typically assigned to examiners with backgrounds in design, the arts, and architecture.

For these reasons, we respectfully submit that the exclusion of designers from the patent bar is unnecessary and inhibits diversity in the patent bar. The concern about low quality or dishonest

https://www.uspto.gov/sites/default/files/patents/resources/classification/overview.pdf

 ¹³ Apple Inc. v. Samsung Elecs. Co., Ltd., 678 F.3d 1314 (Fed. Cir. 2012); Apple Inc. v. Samsung Elecs.
Co., Ltd., 839 F.3d 1034 (Fed. Cir. 2016) (jury damages of \$98 million)

¹⁴ See, e.g., U.S. PATENT & TRADEMARK OFFICE, INFO SESSION FOR DESIGN PATENT EXAMINER POSITIONS, at <u>https://www.uspto.gov/about-us/events/info-session-design-patent-examiner-positions</u> (the info session was held Mar. 9, 2016 in San Jose, CA).

¹⁵ U.S. PATENT & TRADEMARK OFFICE, INFO SESSION FOR DESIGN PATENT EXAMINER POSITIONS, at <u>https://www.uspto.gov/about-us/events/info-session-design-patent-examiner-positions</u> (the info session was held Mar. 9, 2016 in San Jose, CA).

¹⁶ The website Glassdoor allows applicants to post about job interviews, and it includes a number of posts from people who have applied for design patent examiner positions with the PTO. *See e.g.* Anonymous Employee in Alexandria, VA, *Design Patent Examiner Interview*, US PAT. AND TRADEMARK OFF.: GLASSDOOR (Sept. 7, 2016), https://www.glassdoor.com/Interview/US-Patent-and-Trademark-Office-Design-Patent-Examiner-Interview-Questions-EI_IE41351.0,30_KO31,53.htm; Anonymous Interview Candidate in Alexandria, VA, *Design Patent Examiner Interview*, US PAT. AND TRADEMARK OFF.: GLASSDOOR (June 10, 2016), https://www.glassdoor.com/Interview/US-Patent-and-Trademark-Office-Design-Patent-Examiner-Interview-Questions-EI_IE41351.0,30_KO31,53.htm; Anonymous Interview Candidate in Alexandria, VA, *Design Patent Examiner Interview*, US PAT. AND TRADEMARK OFF.: GLASSDOOR (June 10, 2016), https://www.glassdoor.com/Interview/US-Patent-and-Trademark-Office-Design-Patent-Examiner-Interview-Questions-EI_IE41351.0,30_KO31,53.htm.

¹⁷ See Sarah Burstein, *Design Patent Myths -- On Examiners and Expertise*, THE FACULTY LOUNGE (Oct. 30, 2013, 8:04 AM) http://www.thefacultylounge.org/2013/10/design-patent-examiners.html.

¹⁸ U.S. PATENT AND TRADEMARK OFFICE, OVERVIEW OF THE U.S. PATENT CLASSIFICATION SYSTEM (2012) at 3-4

practitioners and patents of poor quality – the apparent bases for the eligibility requirements in the first instance¹⁹ – simply does not exist.

II. The Eligibility Requirements Negatively Impact Gender Diversity Among Patentees

The lack of diversity in the patent bar is also a factor that negatively impacts gender diversity among patentees. Female prospective patentees may have a strong preference for hiring a female patent attorney particularly when their invention relates to a product for women.²⁰ They may believe another woman is best suited to understand the novelty of their design, how it satisfies an unmet need, and how it can be distinguished from the prior art.²¹

One need not look any further than the example of Sara Blakely, the creator of the now ubiquitous Spanx brand of products. When Ms. Blakely developed her product, she sought to retain a female patentee believing that a woman would best understand her product, its uniqueness, and how it addressed a previously unmet need.²² Ms. Blakely could not find a single female patent attorney in the entire state of Georgia.²³ Thankfully, she was not deterred, and her resourcefulness led to the filing and issuance of numerous design patents.²⁴ Yet it is easy to imagine the number of prospective patentees that might have instead given up, abandoning useful and novel inventions. It is also easy to imagine the positive ripple effect on female innovation created by Ms. Blakely's well publicized story.

III. Proposals for Changing the Eligibility Requirements

a. Expand the List of Degrees Included in the Eligibility Requirements and Issue a Limited Registration for Those with Design Degrees

The easiest solution for the Office is to issue limited registrations to attorneys with degrees in design-related fields. Design-related degrees could be simply be added to the list of eligible

¹⁹ See Kara W. Swanson, *The Emergence of the Professional Patent Practitioner*, 50 TECH. & CULT. 519 (2009), at 537-40; William Hubbard, *Razing the Patent Bar*, 59 ARIZ. L. REV. 383, 404 (2017); Corey B. Blake, *Ghost of the Past: Does the USPTO's Scientific and Technical Background Requirement Still Make Sense*, 82 TEX. L. REV. 735 (2004); Act of February 18, 1922, ch. 58, § 3, 42 Stat. 390; U.S. PATENT AND TRADEMARK OFFICE, Official Gazette of the U.S. Patent Office 971, r. 17 (Aug. 17, 1897); Christi J. Guerrini, *The Decline of the Patent Registration Exam*, 91 NEB. L. REV. 325, 328-29 (2012).

²⁰ Colleen V. Chien, Inequalities, Innovation, and Patents,

https://digitalcommons.law.scu.edu/facpubs/955, at 40 (2018).

²¹ Id.

²² Ms. Blakely's belief in this regard was borne out by her experience with potential manufacturers. She was turned down time and time again until one manufacturer, after initially turning her down, discussed the concept with his daughters who told him these were unique products with limitless potential. *Id.* at 52. *See also* How Spanx Got Started, *Inc.* at https://www.inc.com/sara-blakely/how-sara-blakley-started-spanx.html.

²³ Id.

²⁴ Patents by Inventor Sara T. Blakely, *Justia Patents*, at https://patents.justia.com/inventor/sara-t-blakely

degrees in Category A. The precise degrees to be added could mirror the list of backgrounds sought by the Office for examiners of design applications - degrees in industrial design, product design, architecture, applied arts, graphic design, fine arts, and studio arts. Logically, fashion design should also be included. And there are likely others as well. The Office has navigated the landscape well with respect to the addition of newer and less-established scientific and engineering degrees and we assume it could do so here too. Category B could be likewise modified for inclusion of those with the specified amount of design-related coursework.

Expanding the eligibility requirements to include design-related degrees would help ensure that patent prosecutors have 'the legal, scientific, and technical qualifications necessary for him or her to render applicants valuable service' while at the same time adding some long overdue diversity to a bar that is currently about 70% men.

The PTO could limit the registration of those eligible to sit for the patent bar exam by virtue of a design-related degree and coursework registration to the prosecution of design patents. Those possessing a degree in science or engineering would still be able to prosecute utility and design patents, but those with design-related degrees would only be permitted to prosecute design applications. This solution can create a stronger connection between the background of the prosecuting attorney and the subject matter of the applications being prosecuted and can only serve to improve the quality of design patents.

In other contexts, the Office has successfully utilized limited registrations. One example is in the context of the Office-certified law school clinics that are now in place in more than fifty law schools around the country.²⁵ In these clinics, students work with a supervising attorney to prosecute patent applications. Pursuant to 37 C.F.R. § 11.17, the Office issues limited registrations to these students in order that they might file patent applications prepared as part of their clinic work.²⁶ And the Office seems pleased with how this process is going. It recently expanded the number of clinics and, thus, number of students who can work under limited registrations. The Office also issues limited registrations under 37 C.F.R. § 11.9 for a particular application or applications upon a showing of need or justification and 'good moral character and reputation'.

This approach has quite a lot of appeal. It would likely enhance the quality of design patents, because it creates a strong nexus between the prosecuting attorney and the subject matter of the applications being prosecuted. It does not require the PTO to wade into unchartered territory

²⁵ U.S. PATENT AND TRADEMARK OFFICE, LAW SCHOOL CLINIC CERTIFICATION PROGRAM (2018), <u>https://www.uspto.gov/learning-and-resources/ip-policy/public-information-about-practitioners/law-school-clinic-1</u>; U.S. PATENT AND TRADEMARK OFFICE, USPTO ADDS ADDITIONAL SCHOOLS TO LAW SCHOOL CLINIC CERTIFICATION PROGRAM, Press Release June 20, 2018, <u>https://content.govdelivery.com/accounts/USPTO/bulletins/1f8bd25</u>

²⁶ *Id.* These students do not need to take an exam directed to patent law or PTO procedure and rules.

administratively. It is consistent with the PTO's own hiring practices for design patent examiners, and finally, it advances a pressing social issue.

b. Create a Separate Prosecution Bar for Design Patents

i. Separate Eligibility Rules for People with Design Degrees

Another approach is for the PTO to create a completely separate track for design patent prosecutors. The PTO could hive off design patent prosecution from utility patent prosecution and maintain separate criteria for each. The design patent bar could mirror the general framework of degrees, coursework, and/or training of Categories A and B but for design-related backgrounds. The eligible fields would include industrial design, product design, architecture, applied arts, graphic design, fine arts, studio arts, fashion, and perhaps mechanical engineering. Individuals with science and engineering backgrounds (other than, perhaps, mechanical engineering) would not be eligible. This approach would allow every design application to be prosecuted by someone with a background strongly correlated to the subject matter of the application just as is the case currently for utility patents. In addition, the PTO could offer a separate bar exam that more thoroughly tested issues related to design patent prosecution.²⁷

Creating a separate bar and bar exam will introduce additional administrative costs for the PTO, and ultimately, these costs may get passed on to applicants in terms of higher fees. This is not ideal. Additionally, members of the patent bar may oppose the exclusion of scientists and engineers from the design bar. This is understandable as they may rightfully believe that they too are competent to handle design applications even though their backgrounds are not as closely aligned with the subject matter of the applications as that of designers.

ii. Eliminate Eligibility Rules for Design Patent Prosecution

The PTO could simply scrap the eligibility rules with respect to design patent prosecution, expanding eligibility to join the new design patent bar to any attorney in good standing with a state bar. The inherent differences between the nature and scope of utility patent applications on the one hand and design patent applications on the other make this proposal a viable option.

Design patents are fundamentally different from utility patents and may be among the clearest legal documents to read and draft. Design patent claimants are asserting rights in the novel ornamental shape or surface ornamentation of a product of industrial design not the functionality.²⁸ Unlike the multiple and highly technical nature of the claims of a utility patent, design patents only contain a single claim, and that claim is made by way of drawings of the

²⁷ Currently, the patent bar exam only includes two or three questions about design patents out of the one hundred total questions. Buccafusco & Curtis, *supra* note 4, at 274.

²⁸ 35 U.S.C. § 171(a) ("Whoever invents any new, original and ornamental design for an article of manufacture may obtain a patent therefor...").

claimed design.²⁹ The patent has no abstract or in-depth written description; the PTO deems the drawings the best description of the invention.³⁰ The drawings are not scientific in nature and disclose a variety of views of the design, often including different perspectives and shading of contours.³¹ Like utility patents, however, design patents also list the relevant prior art associated with the claimed invention. Although there are important strategies associated with design patent claiming,³² many of them are comprehensible to lay people and are no more difficult than the sorts of things attorneys do for clients in many other legal fields.³³

Moreover, any risk of unsavory practitioners that seemingly led to the adoption of the General Requirements Bulletin in the first instance is low today. In the 1800's and well into the 1900's, patent prosecution was still a new and developing practice area, and any concerns, therefore, were based on a very different professional landscape then they are now. Today, patent prosecution is a well-established practice area, and many of the parties who are seeking design patent prosecution are reasonably sophisticated, repeat players.³⁴ To the extent that corporations (as well as law firms) think that patent prosecuting attorneys possessing it. Once hired, patent prosecutors can be assigned to applications that are directly related to their technical background and in fact, this is generally the practice. ³⁵

Another protection from unqualified practitioners is found in the code of professional responsibility. Attorneys' ethical obligations are likely to deter inappropriate behavior. Attorneys in every state are bound by a code of professional responsibility including canons of ethics that require lawyers to competently represent their clients.³⁶ This includes only taking on

²⁹ The claim of a design patent is always "The ornamental design for [the article which embodies the design or to which it is applied] as shown." *Id.* The language [and described] is added at the end of the one claim if a special description is included for any of the drawings (*e.g.*, a description of the look of portions of design which are not illustrated in the drawing but which are claimed, such as a mirror image of one side). ³⁰ *Id.*

³¹ *Id*.

³² Jeanne C. Fromer & Mark P. McKenna, *Claiming Design*, 167 UNIV. PA. L. REV. (2018).

³³ For example, tax law and estate planning are almost certainly more complicated that design patent prosecution.

³⁴ The top five firms (Microsoft, Apple, Samsung, Xerox, and Sony) apply for more than 50% of one class of design patents. Jason Du Mont & Mark Janis, *Virtual Design*, 17 Stan. Tech. L. Rev. 107, 136 (2013).

³⁵ Although a small percentage of patent applicants, individual inventors also have at their fingertips today an abundance of resources to insure that they have the information and opportunity to secure high caliber prosecution counsel (*e.g.*, the Office's pro bono program, PTO-certified law school clinics, entrepreneur clinics and innovation labs at universities around the country, bar association legal services programs, etc.).

³⁶ AMERICAN BAR ASSOCIATION, MODEL CODE OF PROFESSIONAL RESPONSIBILITY (2015), Canon 6 (*e.g.*, EC 6-3: 'While the licensing of a lawyer is evidence that he has met the standards then prevailing for admission to the bar, a lawyer generally should not accept employment in any area of the law in which he is not qualified.')

matters in practice areas for which one has the skills to provide quality legal services.³⁷ The ethical obligations which bind all attorneys are significantly more robust today than when the eligibility requirements came in to play.

Doing away with the education requirements would place design patent prosecutors between the Office's treatment of utility patent prosecutors and its treatment of trademark prosecutors. Trademark prosecutors are not subject to the same requirements as patent prosecutors. Indeed, the PTO does not require trademark prosecutors to be registered with the office,³⁸ nor does it require trademark prosecutors to sit for and pass a separate bar exam³⁹ even though trademark prosecution, like patent prosecution, is governed by a robust set of Office rules.⁴⁰ The Office does not require that trademark prosecutors possess a specific educational background⁴¹ despite the possibility that certain backgrounds such as art, design, marketing, and advertising could be useful in the context of trademark prosecution.

IV. Conclusion

For the reasons set forth herein, we respectfully submit that the Office should change the eligibility requirements to sit for the patent bar insofar as they relate to design patents.

Sincerely,

[____]

https://www.americanbar.org/content/dam/aba/migrated/2011_build/professional_responsibility/mod_cod e_prof_resp.authcheckdam.pdf

 $^{^{37}}$ *Id*.

³⁸ 37 C.F.R. § 11.14.

³⁹ Id.

⁴⁰ U.S. PATENT & TRADEMARK OFFICE, U.S. TRADEMARK LAW, RULES OF PRACTICE & FEDERAL STATUTES, (2018), *https://www.uspto.gov/sites/default/files/documents/tmlaw.pdf* ⁴¹ 37 C.F.R. § 11.14.