



American Intellectual Property Law Association

May 24, 2021

Mr. William Covey
Director for the Office of Enrollment and Discipline
United States Patent and Trademark Office
Mail Stop OED
P.O. Box 1450
Alexandria, VA 22313-1450
Via Federal eRulemaking Portal

Re: Request for Comments on Proposed Administrative Updates to the General Requirements Bulletin
[Docket No. PTO-P-2021-0005]

Dear Director Covey:

The American Intellectual Property Law Association (“AIPLA”) is pleased to have the opportunity to present its views on the proposed Administrative updates to the General Requirements Bulletin (“GRB”) for Admission to the Examination for Registration to Practice in Patent Cases before the United States Patent and Trademark Office [Docket No. PTO-P-2021-0005].

Founded in 1897, the American Intellectual Property Law Association is a national bar association of approximately 8,500 members who are primarily engaged in private or corporate practice, in government service, and in the academic community. AIPLA members represent a wide and diverse spectrum of individuals, companies, and institutions involved directly or indirectly in the practice of patent, trademark, copyright, trade secret, and unfair competition law, as well as other fields of law affecting intellectual property. Our members represent both owners and users of intellectual property. Our mission includes helping establish and maintain fair and effective laws and policies that stimulate and reward invention while balancing the public’s interest in healthy competition, reasonable costs, and basic fairness.

AIPLA values its long relationship of working in partnership with the Office to foster innovation. We are honored to work again with the Office to update the GRB with respect to technical and scientific qualifications needed to take the examination for registration. We believe the qualifications should reflect the state of modern innovation, while ensuring that the patent practitioners who represent inventors are qualified, understand the technology, and can communicate effectively with inventors and the Office regarding the technical features of their inventions.

We appreciate the OED Director publishing the criteria for the scientific and technical qualifications for admission to the exam, in accordance with 37 CFR 11.7. We further applaud the Office for submitting the proposed administrative changes to the GRB. The GRB Category A list of degrees has not substantively changed over at least 20 years.¹ Technology is advancing

¹ Compare USPTO, *General Requirements Bulletin for Admission to the Examination for Registration to Practice in Patent Cases Before the United States Patent and*

at a fast pace resulting in emerging fields. AIPLA believes that regular updates to the GRB are necessary to keep pace with these evolving areas and corresponding patentable innovations. Updating the GRB on an ongoing basis will help create a dynamic workforce to represent applicants before the Office for all technical fields.

It is the view of AIPLA that, first and foremost, the integrity of the patent system should be the paramount goal. Changes to the GRB should contribute toward ensuring a robust well-functioning patent system. We also believe that streamlining the application process for certain applicants and helping bring more qualified practitioners into the patent system will benefit both the Office and stakeholders in the United States patent system. The qualifications should reflect the entire spectrum of patenting activity without arbitrary, overly restrictive, or excessively burdensome or biased requirements.

Expansion of the qualifications, in the ways proposed, would in no way dilute or reduce the competency of the patent practitioners or the patent bar. Of course, the qualifications are only a prerequisite to sitting for the patent bar. Passage of the patent bar will continue to be the final requirement for determining competency. The patent bar, which has an average passage rate of less than 50%, will continue to function as an effective filter to protect the public from unqualified practitioners by requiring baseline competence, in addition to compliance with the USPTO Rules of Professional Conduct.

Executive Summary

Before providing more specific comments to the questions posed by the Office for response, AIPLA summarizes our general response to the questions below.

1. What additional degrees should qualify under Category A?

AIPLA agrees with the proposal to add the common Category B categories to Category A to reflect current and anticipated patenting activity. In our survey of patent practitioners, we also advise considering the addition of degrees matching emerging technical fields on a regular basis.

2. Should the USPTO include master's or doctoral degrees in a Category A subject as qualifying technical and scientific training?

AIPLA supports the inclusion of master's and doctoral degrees as acceptable under the requirements of Category A. AIPLA is not aware of any persuasive reason that advanced degrees should be excluded as providing evidence of sufficient technical knowledge to qualify under 37 CFR §11.7(b).

Trademark Office 3-6 (2001),

[http://www.law.uh.edu/patentofficestudies/Decline%20of%20the%20Patent%20Registration%20Exam/GRBs/GRB%202001%20\(Apr\).pdf](http://www.law.uh.edu/patentofficestudies/Decline%20of%20the%20Patent%20Registration%20Exam/GRBs/GRB%202001%20(Apr).pdf), with USPTO, *General Requirements Bulletin for Admission to the Examination for Registration to Practice in Patent Cases Before the United States Patent and Trademark Office 3-7 (2021)*, https://www.uspto.gov/sites/default/files/documents/OED_GRB.pdf.

3. Should the USPTO change the Category B requirement of two sequential courses in chemistry or physics, each containing a lab to that of eight semester hours in a combination of chemistry, physics, and/or biology, with at least one course including a lab for Option 4; and to eight semester hours in a combination of chemistry and physics, with at least one course including a lab for Option 2?

AIPLA agrees with the USPTO's proposal to amend Category B, Options 2 and 4, to permit a combination of courses that need not be sequential.

Detailed Responses

1. What additional degrees should qualify under Category A?

AIPLA agrees with the proposal to add the common Category B categories to Category A to reflect current and anticipated patenting activity. Common Category B degrees identified include the following degrees: aerospace engineering, bioengineering, biological science, biophysics, electronics engineering, genetic engineering, genetics, marine engineering, materials engineering, materials science, neuroscience, ocean engineering, and textile engineering. In our survey of patent practitioners and review of patent analytics of technologies being filed at the U.S. Patent and Trademark Office, we also advise considering the inclusion of degrees in the areas of data science, mathematics, environmental engineering, health-related technologies, and other degrees that are being offered in emerging technologies for which patent protection is being sought.

A 2020 USPTO study found that artificial intelligence in U.S. patent filings rose by more than 100% since 2002.² Then Director Iancu said "AI has the potential to vastly broaden the inventor community in the United States. We have entered a new era of invention, entrepreneurship, and technological development. It is imperative that we train the next generation of Americans in the STEM subjects and innovation skills that will enable them to be part of this revolution." As such, degrees in data science, mathematics, and all computer science degrees³ should also be considered to properly assist this broadened inventor community. In addition, as early as 2018, B.S. degrees in AI have been offered by top ranking computer science universities.⁴ Such degrees should also be considered for inclusion in Category A.

Because the degrees being offered by universities and colleges differ in name and evolve over time, we recommend a formal review of the degrees being offered, which of course, include those offered by historically diverse institutions. The degrees being offered should be compared to technical fields for which patent applications are being filed. The formal review should be

² Andrew A. Toole et al., USPTO, *Inventing AI: Tracing the Diffusion of Artificial Intelligence with U.S. Patents 2-5* (2020), <https://www.uspto.gov/sites/default/files/documents/OCE-DH-AI.pdf>.

³ AIPLA recommends that computer science degrees from accredited United States colleges or universities, or the equivalent thereof from a foreign university, should be included in Category A, regardless of accreditation by the Computer Science Accreditation Commission (CSAC) or the Computing Sciences Accreditation Board (CSAB) or by the Computing Accreditation Commission (CAC) of the Accreditation Board for Engineering and Technology (ABET).

⁴ See *Top 20 Artificial Intelligence Engineering Schools in the U.S. 2020*, Computer Science Degree Hub (June 2020), <https://www.computersciencedegreehub.com/best/artificial-intelligence-engineering-schools/> (providing examples of schools with programs in Artificial Intelligence Engineering. This link is not an endorsement of any program or school by AIPLA and is provided for informational purposes only).

conducted, at least every four years, to determine which additional degrees should be included into Category A. A formal review process should be described in the GRB, and both solicit suggestions from the public and consider inclusion of the common degrees approved under Category B.

2. Should the USPTO include master's or doctoral degrees in a Category A subject as qualifying technical and scientific training?

AIPLA is not aware of any persuasive reason that advanced degrees should be excluded as providing evidence of sufficient technical knowledge to qualify under 37 CFR §11.7(b). Thus, we support the inclusion of masters and doctoral degrees as acceptable under the requirements of Category A.

AIPLA believes that any individual who can show sufficient technical and/or scientific aptitude and understanding to provide competent representation of a client before the Office should qualify under Section III of the GRB, “Scientific and Technical Training Requirements for Admission to the Examination.” Generally, reputable colleges and universities confer graduate degrees (e.g., master’s degrees or doctorate degrees) on individuals who have shown advanced understanding and skill in an academic discipline, particularly with technical and scientific graduate degrees, requiring at least advanced technical scientific research, successful completion of advanced technical courses, and frequently requiring the submission and acceptance of an advanced technical thesis. Thus, AIPLA believes that a graduate degree in an appropriate technical or scientific area that is conferred by an accredited United States college or university, or the equivalent thereof by a foreign university, is evidence of advanced understanding and skill in that technical area, regardless of undergraduate degree. AIPLA is unaware of the Office’s rationale for considering a technical or scientific bachelor’s degree sufficient for satisfying Category A, while excluding graduate degrees in the same technical or scientific areas, and the GRB includes no such rationale. Thus, absent compelling evidence to the contrary, AIPLA believes that a graduate degree in a technical or scientific area is evidence that the applicant possesses at least as much technical and scientific aptitude and understanding as an individual holding a bachelor’s degree in the same technical area.

The Office also appears to recognize that, in practice, technical aptitude and understanding, rather than a specific technical degree, qualifies a practitioner to represent others before the Office. The Office does not bar registered practitioners from practicing in technical areas beyond their specific technical degrees, and AIPLA is not aware of any disciplinary action taken against a registered practitioner for lacking a specific technical degree while practicing within any particular technical area. Thus, it would appear that the Office recognizes that a particular technical degree, bachelor’s degree or otherwise, does not necessarily limit a practitioner from being of valuable service to applicants in other technical areas, so long as the practitioner provides competent representation to a client, as required by 37 CFR § 11.101. Yet, the Office has narrowly defined the scientific and technical qualifications for admission to the examination as requiring a bachelor’s degree in all but Category C of Section III of the GRB, and specifically excludes graduate degrees as qualifying under Category A if the applicant does not also possess a bachelor’s degree in one of the qualifying technical areas, without providing a rationale for such a limitation. In fact, the Office appears to provide no rationale for requiring a bachelor’s degree at all if an applicant has a graduate degree in an appropriate technical area. Thus, AIPLA

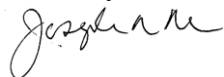
encourages the Office to amend both Category A and Category B to recite “Bachelor’s Degree, Master’s Degree, or Doctorate Degree” anywhere “Bachelor’s Degree” is recited, and remove subsection ii. “Graduate Degrees” under Category A.⁵

3. Should the USPTO change the Category B requirement of two sequential courses in chemistry or physics, each containing a lab to that of eight semester hours in a combination of chemistry, physics, and/or biology, with at least one course including a lab for Option 4; and to eight semester hours in a combination of chemistry and physics, with at least one course including a lab for Option 2?

AIPLA agrees with the USPTO’s proposal to amend Category B, Options 2 and 4, to permit a combination of courses with a lab, that need not be sequential.

AIPLA appreciates the opportunity to provide feedback to the Office on the Request. AIPLA looks forward to further dialogue with the Office with regard to the issues raised above.

Sincerely,



Joseph R. Re

President

American Intellectual Property Law Association

⁵ AIPLA suggests that it may be worthwhile for the Office to compile data to determine whether certain medical degrees that have frequently qualified under Category B might be considered for inclusion in Category A.