

Program Statement for Masters in Patent Practice

This memorandum describes the program for a *Masters in Patent Practice* at the Case Western Reserve University School of Law. The proposal was initiated by Professor Craig Nard and Interim Deans Jessica Berg and Michael Scharf. The proposal has the deans' full support.

General Description

The *Masters in Patent Practice* is designed to prepare students for a career as patent agents.¹ The program is open only to candidates who are eligible to sit for the patent bar exam, which requires the candidate to possess an undergraduate degree in engineering, computer science, or one of the physical or biological sciences as set forth in the U.S. Patent and Trademark Office's Rules of Eligibility.²

Rationale and Mission

The purpose of the degree program is to prepare a cadre of students for successful careers as patent agents. In any given year, recently graduated engineers and scientists enroll in law school with the goal of becoming patent lawyers, but over the past few years, a growing number

¹ A patent agent is someone who does not have a JD degree, but has passed the patent bar and is therefore licensed to prepare, file, and prosecute patent applications before the U.S. Patent & Trademark Office ("USPTO"). The USPTO website states there are currently 31,699 patent attorneys and 10,740 patent agents. See <https://oedci.uspto.gov/OEDCI/> (last visited on May 15, 2014).

² See [uspto.gov/ip/boards/oed/exam/GRB_January_2014.pdf](https://www.uspto.gov/ip/boards/oed/exam/GRB_January_2014.pdf). Eligibility to sit for the patent bar can also be satisfied if the student fits into the USPTO's "Category B" eligibility requirements, which provides for a combination of credit hours from various technical disciplines as set forth by the USPTO's Rules of Eligibility. The proposed *Masters in Patent Practice* will also consider applicants who are moderately shy of eligibility with respect to credit hours, but have expressed a willingness to enroll in the necessary science or engineering courses to fulfill eligibility requirements.

have become reluctant to invest in a three-year JD program. The proposed *Masters in Patent Practice* seeks to provide a viable alternative for these students. A career as a patent agent enables engineers and scientists to stay close to their technological specialty, yet provides a livelihood that has comparative advantages over that of a practicing engineer or bench scientist.³

Indeed, the patent law landscape over the past 10 years has witnessed the growing importance of patent agents. Most IP boutique firms or IP practice groups within general firms have at least one, and oftentimes several, patent agents; and it is also common for patent agents to work in-house for corporations of all sizes. The *Masters in Patent Practice* will not only prepare the engineer and scientist to take the patent bar, but will introduce them to the nuances of patent searching, the complexities of patent drafting, and the arcana commonly associated with patent law doctrine and USPTO regulations.

Requirements for Admission to the Masters program

- Candidates must be eligible to sit for the patent bar⁴
- Candidates must have a strong academic record.

Admissions decisions will be based on the ability of the student to thrive in our academic program, as evidenced by the applicant's academic record and professional accomplishments, and on the candidate's ability to add to the richness of the academic and

³ For example, according to the American Intellectual Property Lawyers Association's "Report of the Economic Survey 2013," the average salary of a patent agent with fewer than five years of experience at a private law firm is \$92,250, with the first and third quartile range of \$55,500 to \$126,250.

⁴ As indicated in footnote 2, the *Masters in Patent Practice* will also consider applicants who have expressed a willingness to enroll in the necessary science or engineering courses to fulfill eligibility requirements.

extra-curricular programs of the J.D. students. Admissions decisions will be made by the Dean of the law school and the Director of the Center for Law, Technology & the Arts.

Program Description

The program will prepare engineers and scientists for a career as patent agents. Our program is 24-credit hours and will take one year to complete. The proposal anticipates the need for an additional three course offerings, namely (1) *Patent Drafting and Prosecution*, (2) *Patent Bar Review*, and (3) *Claim Drafting Lab*. The progress of the Masters Degree candidate will be assessed midway through the academic year by the director of the Center for Law, Technology & the Arts to determine whether the candidate's progress is satisfactory and merits continuation in the program.

Demand For Our Program

We have not undertaken a systematic marketing and feasibility study. But the Director of the Center for Law, Technology & the Arts has received numerous inquiries over the past year from undergraduate engineering students as well from graduate students majoring in a physical or biological science about law school programs focused on patent agent training. As noted above, many of these students are reluctant to invest in three years of law school, but remain very interested in patent law and a career as a patent agent. We anticipate admitting 5-10 students per year, but this number may increase as the reputation of the program grows.

We are aware of only three other programs that focus on training engineers and scientists for careers as patent agents. The University of Notre Dame offers a "Masters of Science in

Patent Law;”⁵ Webster University has a “Masters in U.S. Patent Practice;”⁶ and Arizona State University offers a “Masters of Legal Studies in Patent Practice.”⁷

Marketing

We expect enrollment in the *Masters of Patent Practice* program to be between 5-10 students per year. Our website will be our most effective marketing tool.

Administration

The *Masters of Patent Practice* program will be under the direction of Professor Craig Nard, the Tom J.E. and Bette Lou Walker Professor of Law and Director of the Center for Law, Technology & the Arts.

Administrative support will be provided by the existing administrative structure within the law school. The masters program will not put undue burdens on the operations of our Office of Admissions, Career Planning, or the Registrar. We anticipate hiring an additional two to three adjuncts to teach in the program.

Tuition and Financial Aid

No financial aid will be made available to the students from the law school budget for the Masters program.

⁵ See www.patentlaw.nd.edu.

⁶ See www.webster.edu/masters/us-patent-practice.html

⁷ See www.law.asu.edu/admissions/Admissions/MLSMasterofLegalStudiesProgram/MLSPatentPractice.aspx. Also, in 2013, George Washington University announced it was planning to launch a “Masters of Patent Practice.” See www.mediarelations.gwu.edu/gw-launch-new-master-patent-practice-degree.

Impact on J.D. Program, Facilities, and Support Services

This program will have a positive impact on our J.D. program, and we can accommodate the size of a program that we envision with existing facilities and administrative support.

The proposed program may add a moderate burden to staff and faculty, but we believe that this additional burden will be strongly outweighed by the benefits of the program. The non-monetary benefits of the program are likely to outweigh the non-monetary costs.

Many of our JD students are engineers or scientists, and we believe the presence of additional technically trained students will enrich the educational experience for all of our J.D. students and faculty.

We have adequate space for the additional 5-10 students per year. The only space requirement will be for law library carrels during the student's required year of residency.

APPENDIX A

Masters in Patent Practice Description

The *Masters in Patent Practice* is a masters degree offered by the law school. The degree is primarily intended for training students to be patent agents. Currently, there are three other institutions that offer a degree focused on training patent agents.⁸

The proposed *Masters in Patent Practice* offers 24-credit hours of course work, including a clinical experience. All of the courses and an experiential opportunity are designed to train students to represent clients (inventors) before the U.S. Patent & Trademark Office.

⁸ See footnote 5-7, *supra*.

MASTERS IN PATENT PRACTICE COURSE OF STUDY

Students must successfully complete a total of 24 credits as set forth in the Course of Study to obtain the *Masters in Patent Practice*.

FALL	SPRING
IP Survey (3)	Patent Bar Review (4)
Patent Law (3)	LTA Elective Course (3)
Patent Preparation and Drafting I (3)	Patent Preparation and Drafting II (2)
Commercialization & IP Management (3)	Experiential Elective (3) <i>or</i> Claim Drafting Lab (3)

NEW COURSE DESCRIPTIONS

Patent Preparation and Drafting I: Patent preparation, drafting, and filing of a patent application are the fundamental aspects of patent practice. Students will learn how to conduct a client-inventor interview, what questions to ask the client-inventor and what information is most important to obtain prior to commencing the patent drafting process. Technical aspects of patentability searching will also be explored. In addition, the student will learn the various parts of the patent application and best practices associated with drafting each part. Emphasis will be placed on specification drafting and claim drafting, and how to claim around prior art.

Claim Drafting Lab: The patent claim is the most important part of the patent application, because it is the claim that represents the metes and bounds of inventor's property right. This Lab is devoted to drafting claims, understanding the different types of claims, and how claims

differ depending on the nature of the technology. A particular emphasis will be placed on computer-implemented (e.g., software) and biomedical-related inventions (e.g., life science and biomedical devices)

Patent Bar Review: Passing the patent bar is a requirement for practicing before the U.S. Patent & Trademark Office (“USPTO”). This course will introduce students to 35 U.S.C. (the United States “patent laws”) and 37 C.F.R. (Code of Federal Regulations encompassing the “patent rules”), followed by an in-depth study of the M.P.E.P. (Manual of Patent Examining Procedure), which is the Patent Office’s rule book that covers all the patent laws and rules as interpreted by the USPTO. In addition, the course will cover the particulars of the patent bar exam, including questions from prior exams; essential materials the students need to master to pass the exam, and provide students with several opportunities to hone their bar taking skills.

II (B) Review of the FP by RACGS Member Institutions

(1) Academic Quality: Competency, experience, and number of faculty, and adequacy of students, curriculum, computational resources, library, laboratories, equipment, and other physical facilities, needed to mount the program.

The *Masters in Patent Practice* program would be supported by one dedicated director, at least one staff member, and the library staff. The library has 26,778 linear feet of materials, with 352 available student seats or carrels. There are two, thirty-computer labs, one of which is used for instruction; an on-site technical computer staff; and, an on-site, full-time computer program tutor.

(a) In addition to this analysis, for entry level graduate degree programs, academic quality assessment will focus on the adequacy of the answers provided in response to the following questions:

There are only three other institutions in the United States that offer a masters degree for aspiring patent agents. While the *Masters in Patent Practice* is not a requirement for practicing before the U.S. Patent & Trademark Office, a student who enrolls and completes the requirements of this degree will be better prepared and more competent to represent clients before the U.S. Patent & Trademark Office.

i. Is the program distinctly different, both conceptually and qualitatively, from the undergraduate degree programs in the same or related disciplines? If so, is there a detailed listing of the specific differences?

There is no undergraduate program in this country that prepares students for a career as a patent agent. At the graduate level, there are only three other programs in the country that offer a masters degree focused for aspiring patent agents. The University of Notre Dame offers a

“Masters of Science in Patent Law;” Webster University has a “Masters in U.S. Patent Practice;” and Arizona State University offers a “Masters of Legal Studies in Patent Practice.”⁹

ii. Does the program emphasize the theoretical basis of the discipline as expressed in the methods of inquiry and ways of knowing in the discipline?

The proposed *Masters in Patent Practice* assumes an undergraduate or graduate degree in engineering, computer science, or a physical or biological science. The *Masters in Patent Practice* program will familiarize students with both the theoretical and practical aspects of patent practice and its methods of inquiry.

iii. Does the program place emphasis on professional decision making and teach the use of critical analysis in problem solving?

The *Masters of Patent Practice* program will emphasize, at a minimum, professional decision making and critical analysis commonly associated with representing clients before the U.S. Patent & Trademark Office.

iv. Is the program designed to educate students broadly so that they have an understanding of the major issues and concerns in the discipline or professional area.

A student in the *Masters of Patent Practice* program will have been educated already broadly in the major issues and concerns of the technical discipline such as engineering or science, which is an important part of being a patent agent. The *Masters of Patent Practice* program will expose the student to the major issues and concerns relating to patent law, rules, and regulations associated with representing clients before the U.S. Patent & Trademark Office.

v. Does the design of the program include a capstone experience, such as an exit project (which would not necessarily be a research experience)?

⁹ See footnotes 4-6, *supra*.

The *Masters of Patent Practice* program provides a capstone experience for the student in the form of an experiential opportunity (e.g., externship), wherein the student can develop skills associated with representing clients before the U.S. Patent & Trademark Office, including the drafting and filing of a patent application.

vi. Does the proposed program identify faculty resources appropriate for the research component of the program?

A member of the law school faculty with expertise in the student's subject matter must commit to guiding the student and providing oversight. The faculty member must agree to undertake this task in writing and explain the professor's belief in the prospective student's ability to successfully undertake and complete the program.

vii. Does the program curriculum offer what students need to know for competence at the expected level of professional expertise.

The master's program student is required to successfully complete 24-credit hours of coursework. The coursework is specifically designed to expose the student to the doctrine, regulations, and policy of patent practice.

(b)

i. What admission criteria, in addition to the traditionally required transcripts, standardized test scores, letters of recommendation, and personal statements of purpose, will be used to assess the potential for academic and professional success in prospective students? The special consideration of student experience and extant practical skills within the admission process should be specifically noted.

All students must possess an undergraduate or graduate degree in engineering, computer science, a biological or physical science, or a sufficient amount of credits in one of the

aforementioned disciplines. Students will have demonstrated outstanding ability in their undergraduate or graduate programs.

Lastly, the applicant's professional accomplishment's or the applicant's ability to add to the richness of the academic and extra-curricular programs of J.D. students, will be considered.

Admissions decisions will be made by a committee consisting of the Dean of the law school and the Director of the Center for Law, Technology & the Arts

ii. If field/clinical experience is subsumed within the academic experience, how does that experience related to the academic goals of the professional graduate degree program? Provide a description of the involvement of supervisory personnel. Describe the level of communication between the field/clinical experience site and the academic department. Provide an outline of the anticipated student activities as well as student requirements.

The *Masters in Patent Practice* program is focused on training students to be patent agents. As part of this training, the student will have the opportunity to engage an experiential opportunity to develop skills consistent with representing clients before the U.S. Patent & Trademark Office. The experiential opportunity will be supervised by a full-time faculty member, who will meet with the student on a weekly basis to discuss the student's experience.

iii. If the faculty qualifications associate with the professional graduate degree program differ from national norms and the traditional standards of faculty excellence, how do such qualifications differ and why do they differ? Provide the specific qualifications of adjunct, part-time, and special faculty who do not hold traditional academic credentials. Also, give a rationale for such faculty without academic credentials to participate in the professional degree program as regular program faculty.

Only tenured, tenure-track, and adjunct legal faculty who are highly experienced in patent practice will teach in the *Masters of Patent Practice* program and supervise and counsel students.

iv. How does accreditation by the appropriate professional organization relate to the academic experience outlined in the program plan? Describe the specific aspects of the program plan, if any, that are necessary to achieve professional accreditation.

In order to achieve professional accreditation, it is necessary that the American Bar Association Committee on Legal Education “acquiesce” in the offering of the degree. The American Bar Association requires that a program provide adequate administrative and faculty support, adequate physical facilities, adequate law library support, and not detrimentally affect the diversity and richness of J.D. course offerings.

v. What is the relationship between theory and practice as expressed within the proposed curriculum? Identify a set of core courses and show how the curriculum enhances the student’s professional preparation.

There are a total of eight courses in the *Masters of Patent Practice* program (a total of 24-credit hours) that are designed to marry the theory and practice of representing clients before the U.S. Patent & Trademark Office. These courses include:

1. Intellectual Property Survey
2. Patent Law
3. Patent Drafting and Prosecution I
4. Patent Drafting and Prosecution II
5. IP Management and Commercialization
6. Patent Bar Review
7. Claim Drafting Lab
8. Experiential

vi. Does the number of credit hours required for graduation differ significantly from traditional graduate degree programs? How is the number of credit hours required for graduation influence by mandated professional experiences?

The number of credit hours required to complete the *Masters of Patent Practice* program (24-credit hours) does not differ significantly from traditional graduate degree programs

vii. Can it be demonstrated that the culminating academic experience, such as an exit project, thesis or dissertation, will contribute to the enhancement of the student's professional preparation? In support of the response here, provide a list of possible research projects, theses, or dissertation topics.

The student will engage in a series of drafting and writing projects, culminating in a capstone, experiential opportunity that will allow the student to develop skills consistent with representing clients before the U.S. Patent & Trademark Office. These projects include preparing patentability opinion letters, drafting patent applications and amendments to the applications in response to the patent office.

(2) Need for such a program: student interest; potential enrollment; societal demand; local, regional, national, and international needs.

The *Masters of Patent Practice* program will accept between 5-10 students per year. The program will be very highly selective. Currently, there are only three other institutions that offer a masters degree for students interested in becoming patent agents. Patent agents are in high demand in the United States, and an increasing number of engineers and scientist have become interested in careers in patent law, but are reluctant to invest in three years of law school. A one-year program such as the proposed *Masters of Patent Practice* is designed to meet this growing demand

(3) Access and Retention of Underrepresented Groups:

The *Masters in Patent Practice* program will be open to all interested students, and engage in an aggressive effort to recruit underrepresented groups. These efforts will include (1) building relationships with chairs of engineering and science departments, particularly at schools that

have large populations of underrepresented groups (e.g., HBCUs); (2) develop effective networks; (3) attend and present the *Masters of Patent Practice* program at minority-focused fairs and conferences (e.g., Annual Biomedical Conference for Minority Students); (4) offer campus visits and research opportunities; and (5) communicate inclusiveness efforts

(4) Statewide Alternatives

A *Masters in Patent Practice* is not currently offered in the state of Ohio. Admission to the masters program at Case Western Reserve University School of Law would be strictly limited only to students of the very highest academic potential.

(5) External Support: Community, Foundation, Governmental, and other Resources.

While endowment may be sought, the *Masters in Patent Practice* program can be fully supported from the operating budget, including endowment funds from the Center for Law, Technology & the Arts. As part of the significant interdisciplinary initiatives of the law school, and the Case Western Reserve University's prioritization of the complete integration of the law school into the university's fuller community, masters students will have the full academic support of the university as a whole.