COVER LETTER

March 26, 2014

To whom it may concern:

I am writing to apply to the 7th Annual Entrepreneurship Research Boot Camp hosted by the National Bureau of Economic Research Entrepreneurship Working Group. Pursuant to the application guidelines, I have enclosed a curriculum vitae and an essay explaining my interest in the program.

A letter of recommendation will be sent separately by Professor Noam Yuchtman (yuchtman@haas.berkeley.edu), who is my PhD advisor and a faculty member in the Business and Public Policy group at the Haas School of Business.

Sincerely,

Jeffrey M. Kuhn

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CURRICULUM VITAE

EDUCATION

UNIVERSITY OF CALIFORNIA, BERKELEY, HAAS SCHOOL OF BUSINESS

Ph.D., *Business and Public Policy* — *anticipated* May 2016

M.A., *Economics* — *anticipated* May 2015

Robert N. Noyce Memorial Fellow (2012-2014)
Ryoichi Sasakawa Young Leaders Fellow (2011-2012)
Berkeley Innovation Seminar Organizer (2012-2014)

UNIVERSITY OF CALIFORNIA, BERKELEY, SCHOOL OF LAW

J.D. — May 2008

Senior Article Editor, *Berkeley Technology Law Journal*.
Advisor, *Law & Technology Writing Workshop*.
Completion Certificate, *Law & Technology Program*.
Member, *Patent Law Society.*

PURDUE UNIVERSITY

B.S., *Mathematics* and *Computer Science* (Honors Program) — May 2005

B.A., *Psychology* — August 2005

Dean's List; National Merit Scholarship; Purdue Academic Success Award; Indiana Resident Top Scholar Award; Robert C. Byrd Scholarship; Higher Education Award; Northrop Grumman Scholarship

PUBLICATIONS

INFORMATION OVERLOAD AT THE U.S. PATENT AND TRADEMARK OFFICE: REFRAMING THE DUTY OF DISCLOSURE IN PATENT LAW AS A SEARCH AND FILTER PROBLEM — 2011

Yale Journal of Law and Technology, Vol. 13, page 90.
Selected for republication in the Intellectual Property Law Review (Thomson Reuters 2012) as one of the best intellectual property law review articles published in 2011.

AN ESTOPPEL DOCTRINE FOR PATENTED STANDARDS (with Robert P. Merges) — 2009

California Law Review, Vol. 97, page 1.

PATENTABLE SUBJECT MATTER MATTERS: NEW USES FOR AN OLD DOCTRINE — 2007

Berkeley Technology Law Journal, Vol. 22, page 89.

WORKING PAPERS

EVALUATING THE DUTY OF DISCLOSURE IN PATENT LAW 2014

REFINING APPLICANT PATENT CITATIONS: NEW MEASURES OF PRIVATE PATENT VALUE 2014

RESEARCH EXPERIENCE

UNIVERSITY OF CALIFORNIA, BERKELEY, SCHOOL OF LAW May 2006 – May 2008

Research Assistant

Conducted research on the status and history of the written description requirement of patent law for Robert P. Merges, Wilson Sonsini Goodrich & Rosati Professor of Law and Technology. Drafted memos to explain software patent disputes. Summarized new cases for patent textbook. Updated patent textbook teacher's manual.

PURDUE UNIVERSITY Summer 2003

Research Assistant

Researched computation offloading on handheld devices for Professor Zhiyuan Li. Participated with a team that programmed a modification of the GNU GCC compiler.

PROFESSIONAL ACCREDITATIONS

California State Bar, Member Number 259729 December 2008

United States Patent Bar, Member Number 66393 April 2010

PROFESSIONAL EXPERIENCE

WEAVER AUSTIN VILLENEUVE & SAMPSON LLP, OAKLAND, CA September 2008 – August 2011

Patent Attorney

Prepared and prosecute patent applications at the United States Patent and Trademark Office for clients such as Salesforce.com and Cisco Systems. Supervised junior attorneys in the preparation and filing of patent applications. Supervised the filing and prosecution of international patent applications. Prepared and presented legal opinions to clients regarding intellectual property portfolio strategy, due diligence, non-infringement, and invalidity.

BEYER WEAVER LLP, OAKLAND, CA Summer 2007

Legal Intern

Prepared and prosecuted patent applications in the Unites States and abroad. Assisted senior attorneys in the preparation of due diligence, non-infringement, invalidity, and portfolio strategy opinions.

PH.D. COURSEWORK

Courses

Course ID	Department	Description
PHDBA279A	Business	Institutions
PHDBA279B	Business	Political Economy
PHDBA279C	Business	Corporate Strategy and Technology
PHDBA297B	Business	Research Tools in the Behavioral Sciences
ECON201A	Economics	Economic Theory (Microeconomics I)
ECON201B	Economics	Economic Theory (Microeconomics II)
ECON224	Economics	The Economics of Institutions
ECON240A	Economics	Econometrics I
ARE212	Agricultural and Resource Economics	Econometrics II
ARE213	Agricultural and Resource Economics	Applied Econometrics
STAT243	Statistics	Statistical Computing

Seminars

Course ID	Department	Description
PHDBA C270	Business	The Oliver Williamson Seminar for Institutional Analysis
PHDBA C279I	Business	The Economics of Innovation
PHDBA 279S	Business	Student Research Seminar
IND ENG 298	Industrial Engineering	Student Research Seminar
PHDBA 300	Business	Teaching Business

ESSAY

As a law student with a background in computer science and math, my approach to legal studies was different than that of my peers. While many other law students viewed the study of law through a sociological or philosophical lens, I drew from my analytical background and more closely approached an economics framework to make sense of the various doctrinal issues. This framework is rigorously promoted by the Law and Economics program at the UC Berkeley School of Law, where interdisciplinary scholars apply economic methods and theories to explain the effects of laws, to assess which legal rules are economically efficient, and to predict which legal rules will be promulgated.

It is this approach that I have explored more substantively and deeply in the Business and Public Policy Ph.D. program at the Haas School of Business at U.C. Berkeley. While at Haas I have taken courses and attended seminars in economic theory, econometrics, political economy, institutional analysis, innovation, and entrepreneurship. This coursework has been integral to helping me build the tools I need for a lifetime of research. I hope to expand this toolset by attending the 2014 Entrepreneurship Boot Camp sponsored by the National Bureau of Economic Research.

My research to date has focused primarily on innovation, technology, and entrepreneurship. As a law student at UC Berkeley, I participated for two years in the Law & Technology Writing Workshop, where I wrote an article that argued for restricting the scope of patentable subject matter, a fundamental doctrine in patent law. I was also a Senior Article Editor at the Berkeley Technology and Law Journal, which publishes interdisciplinary scholarship on law, technology, economics, and business. As a senior editor, I directly edited each of the articles we published and helped the primary editors analyze arguments and provide useful criticism to authors. Nearly all of these articles drew on economic concepts, and some focused exclusively on the application of economic models to technology law.

In law school I also worked as a research assistant for Robert Merges, a professor of intellectual property in the Law and Economics program at UC Berkeley. What began as researching case law and legal policy articles evolved into co-authoring a separate paper arguing for a new judicially created defense to patent infringement. Our proposed doctrine, called standards estoppel, is based on the argument that such economic principles as network effects, technology lock-in, and sunk costs govern the adoption of standards, particularly in rapidly developing industries. Armed with analytical tools based on this understanding, courts

should refuse to unfairly punish firms that have a good faith belief that they are not infringing patent rights when they adopt standardized technology.

The legal academic research that I performed during law school strengthened my interest in pursuing an academic career with a focus on entrepreneurship and innovation. The knowledge of patenting practices in the software industry that I have obtained while preparing and prosecuting patents for companies such as Cisco Systems, Salesforce.com, and L-1 Identity Solutions aids me in my research agenda. For example, while practicing as a patent attorney I wrote an article titled Information Overload at the U.S. Patent and Trademark Office: Reframing the Duty of Disclosure in Patent Law as a Search and Filter Problem, published in 2011 by the Yale Journal of Law and Technology. This article approaches the problem of mandatory disclosure in patent law from an information processing perspective, drawing upon literature from management science, information systems science, and behavioral economics. I have worked to extend this research while pursuing my Ph.D. by constructing a novel data set that is helping me to critically examine the duty of disclosure as well as the use of patent citations to measure phenomena related to innovation and entrepreneurship.

An important part of my graduate school experience has been helping to organize the Berkeley Innovation Seminar. The Innovation Seminar has introduced me to research by NBER researchers as I have organized seminars by Ajay Agrawal, Pierre Azoulay, Lee Branstetter, Erik Brynjolfsson, Wesley Cohen, Jeffrey Furman, Bronwyn Hall, Benjamin Jones, Shane Greenstein, William Kerr, Timothy Simcoe, Scott Stern, and Heidi Williams. These presenters have covered a broad range of topics that have helped to focus my research interests on entrepreneurship.

My education and experience make me well-suited to study entrepreneurship. Motivated by seminar presentations, I have worked in the past year to construct a theoretical model of crowdfunding. When conducting research in entrepreneurship, I can draw from my legal background to investigate the role that patents play in the growth of startups. I can also employ the toolset emphasized by the Business and Public Policy program at Haas to examine topics such as firm boundary decisions, early stage financing, and market entry.

I believe that the NBER Entrepreneurship Research Boot Camp will help me focus my interests further so that I can identify specific research questions that I can pursue for my dissertation. The organized literature review provided by the Boot Camp syllabus will expose me to a broad range of topics in entrepreneurship, and access to the faculty instructors will help me refine my research ideas. At the 2014 Entrepreneurship Boot Camp, I hope to improve my research skills, develop my research questions, and learn from interacting with some of the most important researchers in entrepreneurship.

March 30, 2014

To whom it may concern:

I write to enthusiastically recommend that Jeffrey Kuhn be invited to attend the NBER entrepreneurship bootcamp. Jeff is a thoughtful, mature, and technically skilled economist. Moreover, he has a deep understanding of the process of innovation, and the institutions that sustain it, from his work as an intellectual property attorney. I have no doubt that the attendees of the bootcamp will benefit a great deal from interacting with Jeff, and I also believe that Jeff will benefit immensely from attending the bootcamp.

I have gotten to know Jeff well from having taught him in a course on research methods for PhD students, and having interacted with him in student seminars, where he has regularly presented his own research on intellectual property. Jeff has a unique combination of very strong skills as a programmer, as an economist (especially in empirical work), and deep institutional knowledge. Jeff's research up to now has been based on a remarkable dataset he has constructed on US patent applications, rejections, resubmissions, approvals, and citations, across several years. Jeff built this dataset himself by scraping Google's data from the US patent office – this took significant technical skill, and I believe the dataset is extremely valuable.

Jeff has answered several questions using the dataset: first, how has the patent application process – in particular, patterns of citation – been shaped by recent legal decisions that put patents at risk if relevant citations are omitted from an application? This is of interest both because the interactions among patent attorneys, entrepreneurs, and patent examiners are an extremely interesting element of the production of intellectual property, and because citations are a commonly used measure of the quality of a patent. If the process of citation production changed, then this changes the meaning of citations. Indeed, Jeff finds interesting variation in patterns of citations both across time and in the cross section that indicates that not all citations mean the same thing.

The work that Jeff has done has examined fundamental methodological issues in the economics of innovation. I believe that the next step in Jeff's development as a scholar is to develop research questions that build on the very careful work he has done toward examining the economic consequences of his analysis – how does a better understanding of the pattern of citations change the way we think about innovation or intellectual property? I think the NBER bootcamp is an ideal place for Jeff to have conversations and be exposed to ideas that will allow him to take the next step. Given his toolkit and his base of knowledge, I believe he will do great work on the ideas he develops from participating.

In sum, Jeff is a young economist interested in innovation and the institutions that foster it. He has a combination of tools that make him especially likely to produce

important work in this area, and I believe that the NBER bootcamp offers a wonderful opportunity for Jeff to develop research ideas.

Thank you very much for your consideration of this letter. Please feel free to contact me if I can provide any additional information.

Yours,

Noam Yuchtman

Assistant Professor
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