SEAS IEOR E4578: Intellectual Property for Entrepreneurs and Managers
(open to all Columbia graduate, undergraduate, post-doctoral students, Faculty, staff, and alumni)

NOTE: zero credit course, no exceptions

Fall 2020, B-term
Oct 23, Oct 30, Nov 6, Nov 13, Nov 20, Dec 4
Fridays 10:10 – 12:40pm
TBD (likely Morningside Campus)

Course Overview

Intellectual property (patents, copyrights, trademarks) are an increasingly critical part of almost any business, at almost any stage of growth. This course will provide the aspiring business executive, entrepreneur, or scientist an overview of commercial opportunities and risks associated with intellectual property, with a particular focus on technology patents. While legal principles will be addressed, the primary focus of the class will be on leveraging intellectual property to create financial returns.

By the end of this course, you should be able to:
1. Understand the basics of intellectual property as it affects entrepreneurs and business executives;
2. Work effectively with IP attorneys;
3. Be comfortable reading and assessing a patent from a business perspective;
4. Have an appreciation for drafting patent claims;
5. Understand the differences between patents and other types of IP (i.e., trade secrets, trademarks, and copyrights);
6. Be comfortable participating in the negotiation for an IP licensing agreement, including developing an awareness of the risks and opportunities therein;
7. Have an appreciation for the IP strategies employed by start-ups and the Fortune 500; and,
8. Understand the basics of patent litigation as it impacts inventors and entrepreneurs.

The class will include panel discussions with guest speakers. In previous class offerings, we had speakers from the Fortune 500 (Google, Philips, IBM, Nokia, Yahoo, GE, Merck), venture capital (NEA, Matrix Partners, Gates Ventures, Breakout Labs, Highland Capital Partners, Osage), the patent world (USPTO, premier patent prosecutors and litigators), assertion entities (Acacia, Desmarais, Finjan), many entrepreneurs, alternate models for patent monetization (IPXI; Rockstar; Patent Properties), and others.
Elements of each session

In general, each class will consist of some combination of the following elements:

- **Guest speakers (60 minutes)**
  Some class sessions will feature a panel discussion with prominent outside speakers.

- **Review & discussion (60 minutes)**
  Each week, students will be required to submit in advance two questions or discussion topics from that week’s assigned readings. The professors will pick a few of these topics for group discussion at the outset of each class, so be prepared to be called upon for your opinion! We will also discuss issues raised by the panel Q&A, as well as any breaking IP-related headlines and flag any events in the NYC area that may be of interest to the class.

- **Faculty Lecture (~60 - 90 minutes)**

- **Mock negotiation session (~60 minutes)**
  A few of the sessions will include team-based mock negotiation exercises, in which assigned teams will attempt to strike a deal to license a patent. Each team will be given objectives and constraints, and will be expected to negotiate a fair and reasonable outcome.

Brief Faculty Bios

Orin Herskowitz (please call me Orin)
http://techventures.columbia.edu/orin-herskowitz

Orin Herskowitz is the Senior VP of Intellectual Property and Tech Transfer for Columbia University, as well as Executive Director of Columbia Technology Ventures (CTV). He also is an Adjunct Professor, teaching an Intellectual Property for Entrepreneurs course. He has served on boards or served as the Principle Investigator for a number of innovation and entrepreneurship-focused initiatives, including the CyberNYC Inventors-to-Founders program; the NYC Media Lab, the PowerBridgeNY clean energy proof-of-concept center, the Columbia BioMedX accelerator, the NYC ACRE technology incubator, and Harlem Biospace; has been a peer reviewer for innovation and entrepreneurship awards for the National Science Foundation and the Association of Public and Land-grant Universities; and is a frequent speaker at IP- and technology-focused events in NYC and across the country. He is a board member for the Center for American Entrepreneurship, a nonpartisan, not-for-profit research, policy, and advocacy organization engaging policymakers in Washington and across the nation regarding the critical importance of entrepreneurs and start-ups to innovation, economic growth, and job creation. Orin was also an appointee to a two-year term on the National Advisory Council on Innovation and Entrepreneurship (NACIE), a Federal committee that advises the U.S. Secretary of Commerce on issues related to accelerating innovation, enhancing entrepreneurship, and expanding workforce skill development.

Columbia Technology Ventures is the tech transfer office of Columbia University, with the core objective to facilitate the transfer of inventions from academic research to outside organizations for the benefit of society on a local, national and global basis. Each year, CTV manages more than 400 invention disclosures emerging from Columbia’s research labs, leading to over 100 license deals and over 20 new start-ups. Columbia Technology Ventures has a particular focus on patent-backed start-up companies. Over the years, CTV has been involved with launching well over 250 companies based on Columbia’s technologies.

Orin received his BA from Yale and his MBA from the Wharton School of Business. Prior to joining Columbia, Orin spent 7 years at the Boston Consulting Group's New York office as a strategy consultant, and was previously an entrepreneur and a consultant to start-ups.

Jeff Sears (please call me Jeff)
http://ogc.columbia.edu/jeffrey-m-sears

Jeff Sears is a Partner in the Office of General Counsel at Columbia University, where he provides both transactional and litigation-related legal services for the university’s technology transfer office. Prior to joining Columbia, Jeff spent nine years as a partner at Wilson Sonsini Goodbody & Studley, where he represented leading technology companies in high-stakes patent cases. Jeff received his JD from the University of Pennsylvania and his AB from Brown University.
Jeff is Associate General Counsel and Chief Patent Counsel for Columbia. His practice encompasses all aspects of patent law, including prosecution, strategic counseling, licensing and post-licensing compliance, litigation, and legislative, regulatory, and policy matters. Jeff manages the university’s global patent portfolio and works closely with faculty inventors, technology transfer officers, and executive leadership on commercialization activities. Also, Jeff is a member of the Patent Public Advisory Committee of the U.S. Patent and Trademark Office, to which he was appointed by the U.S. Secretary of Commerce.

Jeff holds an S.B. in physics from MIT, an M.A. and Ph.D. in physics from SUNY Stony Brook, and a J.D. from NYU. He is admitted to practice law in New York and before the U.S. Patent and Trademark Office.

**Textbook and Materials**

There is no textbook for this course. Weekly readings from current newspaper reports, academic journal articles, and commonly-available business paperbacks will be available online.

**Exercises**

Throughout the semester, we will give out exercises to the students. However, as this class is being offered *zero credit*, these exercises will be optional. We encourage students to complete the exercises, and will discuss them in class, but the assignments will not be graded.

A partial list of these exercises that may be used are below:

1. **Patent Claim Drafting & Office Action Response exercise**
   Each team will be given a common low-technology object and asked to draft some patent claims to cover that object, per the teaching of Class 2. Also, each team will be given an Office Action and be asked to draft a simple response to get a claim allowed over the cited prior art, per the teaching of the same session.

2. **Patent assessment**
   Each team will be given an actual patent and asked to provide an assessment of that patent. We will provide more details on this assignment during session 2. The emphasis will be on identifying potential prior art, summarizing the commercial potential of the patent, and identifying potential licensees based on adjacent patent filings.

3. **Negotiation exercise – strategy & assessment**
   Prior to the negotiation exercise, the team will be expected to submit a 1 – 2 page strategy for the upcoming exercise, including their objective, their strategy for how to get to that objective, and some tactics they plan to employ.

**Day-to-Day Course Logistics**

If you have questions about the course content, please email both of the professors. We will do our best to reply to your emails promptly.

We will not be holding regular office hours. However, both professors will be available via email, and can meet with students during or after class if need be.
**SAMPLE Syllabus from prior years (will be adapted closer to the course dates)**

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<tr>
<th>#</th>
<th>Date</th>
<th>Session title</th>
<th>Pre-class assignments</th>
<th>Activities</th>
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<tr>
<td>0</td>
<td>Pre-class</td>
<td>Watch “Patenting &amp; Licensing Early-Stage Technology” <a href="https://vimeo.com/266135774">https://vimeo.com/266135774</a></td>
<td>Submit at least 2 questions via email to <a href="mailto:orin.herskowitz@columbia.edu">orin.herskowitz@columbia.edu</a> by __________</td>
<td>Lectures: Class overview (Herskowitz) Discussion of the “Patenting &amp; Licensing” video Patents 101: Why Claims Matter (Sears) Patents 102: Prosecution Strategy (Sears) Distribute &amp; explain Patent Claim Drafting &amp; Office Action Response exercise (optional)</td>
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<tr>
<td>2</td>
<td>Oct 30</td>
<td>IP 102</td>
<td>Reading&lt;br&gt;• TBA</td>
<td>Discussion of assigned reading &amp; Claim Drafting &amp; Office Action Response exercise Distribution of assigned reading &amp; Claim Drafting &amp; Office Action Response exercise (optional)</td>
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In class: the Stickiprene negotiation
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|       | Jay Walker talk at IPAS (in Files section on Courseworks) | Career Paths to Patent Law (Sears)  
|       |                                  | Guests from IP counsel TBD                 |
| Dec 4 | Course Wrap-Up                   | VCs Talk Back panels from AUTM: 1st part here, 2nd part here | Guests from Venture Capital TBD  
|       | Course Wrap up                   | Remaining questions from the class  
|       |                                  | Career Paths to Tech Transfer (Herskowitz) |