

## **The Art of Invention: An Introduction to Patents and Intellectual Property**

Technology and Management Program  
University of California, Santa Barbara  
<http://www.tmp.ucsb.edu>

### **Course Details:**

**Lecture:** Mon/Wed 12:30 – 1:45pm in GIRV 2128  
**Instructor:** Dr. Ilan Ben-Yaacov, ESB room 2213, ext 5295, [ilan@engineering.ucsb.edu](mailto:ilan@engineering.ucsb.edu)  
**Office Hours:** Wed 9:45–11:45am in ESB room 2213  
**Class Web Page:** [http://www.ece.ucsb.edu/courses/TMP131/131\\_S14Ilan](http://www.ece.ucsb.edu/courses/TMP131/131_S14Ilan)

### **Course Description**

This 3-unit course is designed to provide emerging inventors, entrepreneurs, and scientists with a working knowledge of intellectual property (patents, copyrights, trademarks, and trade secrets), with the main focus being on patents. We will cover the basic functions of patents (what rights a patent gives you), structure of patents (what elements must be included in a patent application), patent prosecution (process for getting a patent issued), obtaining coverage in foreign jurisdictions, and discuss general patenting and IP strategies for businesses, as well as several other topics, including special topics from 1-3 guest lecturers (dates/times TBA).

In addition to weekly lectures, there will be weekly reading assignments, several written assignments, and students will also complete a final project which entails drafting an entire patent application. Students may optionally choose to file the applications which they draft. Grades for the course will be determined approximately 25% by attendance, 25% by the written assignments, and 50% by the final project.

### **About the Instructor:**

Dr. Ben-Yaacov received his PhD in Electrical and Computer Engineering from U.C. Santa Barbara in 2004. Since 2004, he has served as a lecturer at UCSB in the ECE Department, the College of Creative Studies Physics program, and the TMP, teaching semiconductor processing, circuits, general physics, EE project design, and IP/patent courses. Since 2007, he has been operating an independent IP consulting business, primarily focusing on patents, trade secrets, and trademarks. He also manages the IP portfolio of a local semiconductor company. His IP areas of expertise include general IP strategy, patent drafting and prosecution, IP portfolio advising and management, domestic and foreign filing strategies, establishment of trade secrets, infringement analysis, IP due diligence for investors, and licensing agreements.

## Tentative Course Schedule and Assignments

<b>DAY / DATE</b>	<b>TOPIC / ACTIVITY</b>	<b>TASK / ASSIGNMENT DUE IN CLASS</b>
<b>Week 1</b>	Introduction to IP, terminology. What is a patent? What can be patented?	Read Glossary of Terms. Look over Yoga Patent Final Publication.
<b>Week 2</b>	Requirements for patentability. How are patents utilized.	Look over sample disclosure form, and read Yoga Patent Final Publication.
<b>Week 3</b>	Contents of a patent application. Figures claims.	Look over patents from SB companies.
<b>Week 4</b>	Patent claims. Infringement analysis. Engineering around others' patents.	Read all handouts related to Yoga Patent. Claims exercise due in class.
<b>Week 5</b>	Patent Prosecution. Overcoming Rejections. Process of obtaining a patent.	Exercise due in class: patent analysis, engineering around patents.
<b>Week 6</b>	Trademarks. Branding.	Branding exercise.
<b>Week 7</b>	Inventorship. Types of patent apps (provisional, non-provisional, continuation, CIP).	Inventorship exercise. Determine patentable elements of final project.
<b>Week 8</b>	Cost analysis, analyzing others' patents,	Work on Final Project.
<b>Week 9</b>	Business IP strategies. Licensing.	Read Winans patent and Festo article, work on Final Project.
<b>Week 10</b>	Doctrine of Equivalence. Patent litigation.	Final projects due Tues 6/10 by 5pm.