Patent Law

Prof. Kumar, Fall 2014
Email: skumar@central.uh.edu
Office: Multi-Purpose Suite, Room 201R
Office Phone: 713-743-4148

Course Description

This course will introduce students to the law and policy of the United States patent system. This course begins with a discussion of the origin of the patent system followed by a look at the composition of an issued patent and the procedural mechanism for obtaining patent rights. We will then proceed with an examination of the substantive requirements of patentability, including the disclosure requirements, novelty, nonobviousness, utility, and subject matter. Next, we will consider issues associated with enforcing a patent, including the scope of a patent owner's rights, and the common defenses to a patent infringement suit. Throughout the course, we will consider the relationship between the Federal Circuit and the institutions it oversees, and will consider how the Federal Circuit's semi-specialized nature effects its decision making.

No technical background is required to succeed in this course; IP survey is NOT required.

Course Materials

Craig Nard, *The Law of Patents* (3rd Edition). Relevant materials can also be found at the casebook website: http://law.case.edu/lawofpatents/. Additional materials will be posted on the Lexis course website. A copy of the casebook is available on reserve at the library.

Note that while students are permitted to use the Kindle edition of the casebook, the Kindle cannot be used during the exam. I do have one extra copy of the casebook, and you can arrange to borrow it at the beginning of the semester if you are a Kindle user.

Attendance Policy

You should attend class sessions and arrive on time. If you arrive late, out of respect for the other students and the class environment, please try to minimize the disturbance.

I will take attendance by distributing a roll sheet at the beginning of each class. Each student should personally initial by his or her name for that class session. It is your responsibility to insure that you have initialed the roll sheet before you leave the classroom each day. Students who do not sign the role sheet are deemed to have been absent. You may not sign the role sheet if you miss more than 15 minutes of class.

Please note that you are responsible for managing your absences from class and ensuring that your total number of absences does not exceed the threshold for the class. An absence is an absence, regardless of the reason, except for those covered by the University and Law Center religious holiday policy. Students who exceed six (6) absences will be reported to the Associate Dean and dropped from the class.

If you need to miss a single class, you do NOT need to e-mail me and let me know. I encourage you to e-mail a friend to check if there was a handout you missed, or a modification in the reading assignment. Feel free to contact me if more than a week passes without the recorded lecture being uploaded.

If you need to miss several classes, please inform me.

Participation

I will call on students, both to discuss cases and to comment on the issues we are discussing. If you are unable to prepare for a particular class, be sure to indicate so on the Pass Sheet, which will be at the podium. You may pass twice without any negative effect to your final grade.

Students with poor class participation will have their final grade dropped by 1/3 of a letter grade. The

decision to drop a grade for participation is at my discretion and is non-negotiable. A drop in class participation can result from a combination of unpreparedness, not paying attention in class, and absences (even if you are within the six-absence limit).

In exceptional circumstances, a student may go up a 1/3 of a letter grade for making a substantial contribution to the class. Note that volunteering every class does not constitute a substantial contribution—quality, not quantity matters!

Class Website

There is a class website on Lexis. To enroll, follow the following steps:

. Go to www.lexisnexis.com/lawschool and sign in with your custom ID and password
. Once on the home page, under "Learning LexisNexis">"Class Preparation," select the "Access Web Courses" link. Web Courses will open in a separate page
. Click on the red "Courses" tab at the top of the page
. Under "Course Catalogue," Click the "University of Houston" link
. Scroll down the list to find "Fall 2014 Patents" with Prof. Kumar as the instructor
. Click the "Enroll" button

If you have any questions on accessing the class website, please contact our Lexis representative Billy Saqr (billy.saqr@lexisnexis.com). Please access the class website early in the semester. This is where I post old exams (with model answers and my exam memos), recordings of lectures, all handouts, and the like. Do not wait until two weeks before finals.

Audio Recordings of Lectures

I will record all of the lectures and upload them to the class website. These recordings are for class preparation purposes only, and they are not to be reproduced or redistributed in any manner. Note that recordings sometimes fail or are lost before they can be uploaded. Having lectures recorded is a privilege. If there is ever a class where more than 20% of the class is absent (excluding poor weather or approved UH events), the lecture will not be recorded.

Grading

The final exam will be an open book and open notes (i.e., you can bring any printed materials, including commercial outlines). The format will be a mix of multiple choice (not to exceed 33% of the exam), short answer, and essay. There will be a word limit on the essay portion of the exam.

Office Hours (shared with Administrative Law)

Office hours will be held on Wednesdays, 9:45am to 11:15am (subject to change), starting Sept. 3. I encourage everyone to come to office hours, whether to talk about class material, career goals, or anything else. Too often, students who are struggling don't come to office hours until the end of the semester. Remember—no question is too stupid, unless it is two weeks before the final exam.

If you have a question outside of office hours, feel free to e-mail me. Please do not stop by my office outside office hours without e-mailing me first to check my availability—sometimes I am busy preparing for another class or the like.

Miscellaneous Class Policies

- **First Names.** I call on students by first names, because it is the only way I'll ever learn them.
- **Socratic Method.** I will randomly call on students to discuss cases. To do this, I will shuffle a deck of index cards that you fill out on the first day and select a card. This means if you get called on one class, you can still be called on the following class. Or your card may never come up.

- **Volunteering and Class Participation.** Students are always welcome to volunteer to discuss cases. Students can also make comments and ask questions in class. That being said, nobody likes to hear from the same three students for the entire semester, so I will sometimes request to hear from students who haven't spoken recently.
- **Laptop Use.** Use of laptops is permitted, with the caveat that studies indicate students learn more when they handwrite notes. Although I do not prohibit web surfing, if your behavior becomes distracting to other students or to me, you will risk a 1/3 letter grade drop for poor participation.
- **Use of old outlines on exam.** You are permitted to use any outline you want on the final exam, and you can bring any print materials with you. However, you need to update your old outline. Citing cases or material that we covered in previous years but not recently will cause your answer to be marked down.

Reading

All statutory provisions are from the Patent Act (Title 35) unless otherwise noted.

Part I: Overview of the Patent System & Claiming an Invention

Patent law is atypical from other subjects in many regards. First, unlike other areas of law that you have studied, the law of patents is relatively young. Though the U.S. system is based on the English patent system of the 1700s, modern patent law was born under the 1952 Patent Act, and only recently refined under the 2011 America Invents Act.

Second, the balance of power between branches of government is highly atypical. The U.S. Patent & Trademark Office lacks notice and comment rulemaking and cannot engage in formal adjudication. In contrast, the U.S. Court of Appeals for the Federal Circuit is extremely powerful, because it hears all appeals from patent litigation, as well as patent-related adjudication from the PTO and International Trade Commission.[1] Consequently, we often do not know what the Patent Act means until the Federal Circuit weighs in.

In this part of the course, we will also look at the anatomy of a patent. We will examine how an inventor claims an invention and what the inventor must disclose under § 112.

- **(8/26) Introduction to patent law. Read entire syllabus plus p. 1–6, 24–39 (start with first full ¶ on p.24, skip box on p.29); § 154(a).**
  This reading introduces the Patent Act, the Federal Circuit, and the Patent & Trademark Office. It also provides some basic information on patent law. This lecture will provide background that will help with understanding future reading.

  Focus Questions: (1) What is a patent? (2) What are the pros and cons of specialized courts? (3) Are patents private or public goods (or something else?)

- **August 28: CLASS CANCELLED!**

- **(9/2) The Patent Document. p. 39–51 (if you have never seen a patent, spend 15 min. looking at p. 52–58); 59–60, §112.**
  We will discuss the basics of how one obtains a patent and talk about the different parts of a patent.

  Focus Questions: (1) What are the different parts of a patent? (2) What is the difference between an independent and a dependent claim? (3) What are the three different transitional phrases? (4) What is a Markush group?

- **(9/4) Claim Interpretation. p. 59–70, skim 70–74, read 74–85.**
  This class will look at the role of claims in defining the scope of an invention and cover how we interpret claim language.

  Focus Questions: (1) What are claims? (2) What are the three steps for interpreting claims? (3) What are the different types of intrinsic and extrinsic evidence? (4) What is the all-elements rule?

- **(make-up class Friday 9/5) Enablement. p. 89–108 (through n.3), 112–113, § 112**.
  Section 112 states that "the manner and process of making and using [the invention], in such full,

[1] The Federal Circuit also has jurisdiction over appeals a number of non-patent agencies and courts, such as the Merit Systems Protection Board and the Court of International Trade.

clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same." In *O'Reilly v. Morse*, we see the Supreme Court grapple with what the optimal claim scope should be to ensure the inventor captures her invention but does not get a patent on more than she invented. The Incandescent Lamp Case introduces the concept of claiming an entire genus through discovering a subset of species.

Focus Questions: (1) What is enablement? (2) What must an inventor show to enable an entire genus? (3) Does the size of the genus affect whether the invention is enabled?

- **(9/9) Undue Experimentation. p. 113–125.**
  An idea has evolved through common law that a disclosure is sufficient if it enables PHOSITA to make and use the invention without "undue experimentation." These words don't appear in the Patent Act, making the concept of undue experimentation wholly judge-created.

  Focus Questions: (1) What are the eight *Wands* factors? (2) Explain how what constitutes "undue experimentation" vary by the field of invention. (3) Is a patent that requires some experimentation invalid?

- **(9/11) Written Description. p. 125–142.**
  Section 112 states that "[t]he specification shall contain a written description of the invention." The Federal Circuit has treated this as a distinct requirement from enablement.

  Focus Questions: (1) What was the original understanding of the written description requirement? (2) How does the modern written description requirement differ from enablement? (3) What is the Possession Test?

- **(9/16) Definiteness, Best Mode, and Claim Interpretation. p.142–147; 157; 510–517**
  This class finishes up the requirements under § 112

  Focus Questions: (1) When does a claim fail the definiteness requirement? (2) What is the best mode requirement and when can it be challenged under the AIA? (3) Who gets to interpret claim language and why?

Part II: Eligible Subject Matter and Utility

This Part examines the statutory subject matter requirement for inventions under § 101 of the Patent Act. Section 101 provides us with little guidance for how to evaluate which inventions merit patent protection: "Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title." This sparseness has led to a massive wave of litigation in the past five years.

- **(9/18) Introduction to § 101. p. 165–185; § 101.**
  This class will introduce § 101 and provide background on important cases that are not in the reading. We will discuss *Chakrabarty*, where we see the Supreme Court expand the scope of patentable material under § 101. In *Mayo v. Prometheus*, we see the Supreme Court dramatically narrow § 101, in a highly controversial decision.

- **(9/23) Biomedical-Related Inventions. p. 188–202** (don't worry if you don't understand genetic technology!). Students without biotech background should read this very short biotech primer: http://www.councilforresponsiblegenetics.org/ViewPage.aspx?pageId=166

  The Supreme Court and Federal Circuit have struggled with interpreting § 101 in light of recent innovations in technology. The result is a series of decisions that are often at odds with what the patent community and members of the public want.

  Focus Questions: (1) How do we define what constitutes an unpatentable natural law under § 101? (2) Is the Supreme Court's distinction in *Myriad* between isolated DNA and cDNA on p. 195 meaningful? (3) Should the Federal Circuit consider the public policy implications of its statutory interpretation?

- **(9/25) Business Methods and Process-Related Inventions. p. 213–230 (through n.3) (skip grey box on p. 214).**

  Although *Bilski* was, from the surface, a unanimous decision about the patentability of a particular business method, it is a highly fractured opinion. Note that from the majority, only Parts I, II.A, II.B.1, and II.C.1 are precedential, having gained Scalia's needed fifth vote. Parts II.B.2 and II.C.2, which includes a segment on the patentability of software, are mere four-justice pluralities (Kennedy, Alito, Roberts, Thomas). The liberal justices on p. 221 comprise the concurrence in the judgment (really, more of a dissent), and Scalia joints Breyer in a concurrence in the judgment on p. 223.

  Objective: Pick apart the different factions in *Bilski*, and attempt to figure out what Scalia's position is. Does this case help clarify anything?

- **(9/30) Utility. p. 240–260 (don't stress over technology in *Fisher*)**

  The utility requirement is derived from §§ 101 and 112. There are three forms of utility. Operability asks whether the invention actually works, and protects the public against fraud. Substantial utility asks whether the invention has a "specific and substantial" use. Beneficial utility asks whether the invention is socially harmful; this doctrine is mostly dead in the U.S., but remains in the EU.

Part IV: Novelty, Priority, and Statutory Bars under § 102 of the 1952 Patent Act and the AIA

Novelty protects the public by not allowing patents to issue on inventions that are already within the public domain. Priority allows us to determine who is entitled to a patent in light of competing claims. Statutory bars provide a negative incentive for inventors to file patent applications promptly. We will be learning both pre-AIA and post-AIA law.

- **(10/2) Novelty.** Old § 102(a) and (b); AIA § 102(a); p. 263–273, also download and read *Schering Corp. v. Geneva Pharms., Inc.*, 339 F.3d 1373 (Fed. Cir. 2003).

  Only new inventions are entitled to a patent. Consequently, an inventor must be able to distinguish her invention from prior art. Under the 1952 Act, novelty is measured from the date the claimed invention was reduced to practice; under the AIA, it is measured from the filing date of the patent application.

  Questions: (1) When is an invention anticipated? (2) What is inherency?

- **(10/7) "Known or Used" Under § 102(a), Novelty-Defeating Patent Disclosures under § 102(e). p. 273–290,** Old § 102(e).

  Under Old § 102(a), a patent cannot be issued if it was "known or used" by others in the U.S. prior to invention. Under AIA § 102(a)(1), a patent cannot be issued if "the claimed invention was...in public use...or otherwise available to the public." We will examine what types of public knowledge can defeat a patent application.

  Questions: (1) When is an invention "known or used" by others? (2) How does Old § 102(a) differ from AIA 102(a)(1)? (3) When is an invention publically available?

- **(10/9) Printed Publications; Introduction to the On-Sale Bar. p. 310–318, 437–444,** Old § 102(b), AIA 102(b)(1).

  Under Old § 102(a), an inventor cannot receive a patent if the claimed invention was "described in a printed publication" prior to invention. Similarly, under AIA § 102(a)(1), a patent cannot be issued if the claimed invention was "described in a printed publication" before the filing date of the claimed invention (with exceptions made for disclosures by the inventor less than one year prior to filing under AIA § 102(b)(1)(A)). We will look at what counts as a printed publication. We will then begin to look at ways in which the inventor's own behavior can prevent her from getting a patent under Old § 102(b).

  Questions: (1) Can something count as a printed publication even if nobody ever saw it? (2) Can a poster on display count as a printed publication? (3) Do printed publications need to be accessible to the general public? (4) What constitutes a sale to the public for the purposes of Old § 102(b)?

- **(10/14) What Constitutes an "Offer for Sale"; Public-Use Bar p. 444–460.**

  In this class, we continue to figure out what constitutes an offer for sale, and how the law may be different under the AIA. We will also look at when a method is offered for sale, and discuss what constitutes the public use of an invention.

Questions: (1) How do we distinguish the invention in *Space Systems* with that in *Pfaff*? (2) When is a method offered for sale? (3) What is the difference between anticipation and obviousness?

- **(10/16) Public-Use Bar; Experimental Use. p. 460–470; 482–485.**

  Today we'll see more wrinkles in what constitutes public use, including use that is supervised by the inventor and use under a non-disclosure agreement.

- **(10/21) No reading—catch up and work § 102 exercises.**

Part V: Nonobviousness

Under § 103, a patent may not be obtained if its differences from the prior art would have been obvious to a POSITA at the time the invention was made. This section will look at when it is appropriate to combine prior art references to defeat a patent, and will examine the rise and fall of the rigid Teaching-Suggestion-Motivation test.

- **(10/23) The Graham Test. p. 353–372,** Old § 103(a).

  In *Graham*, we see the Supreme Court emphasize how the IP Clause limits Congress's ability to take knowledge out of the public domain. The Court creates a test to determine whether an invention is obvious, taking into account secondary considerations. *Adams* shows us an application of the *Graham* factors, and introduces the (now mostly dead) teaching-suggestion-motivation test.

  Questions: (1) What is the *Graham* test? (2) What are secondary considerations? (3) What is the teaching-suggestion-motivation test?

- **(10/28) Application of the Graham Test. p. 373–395 (through n.8) (skim all notes)**

  In *KSR*, we see the Supreme Court reject the Federal Circuit's rigid approach to § 103 and express concern about hindsight bias; in *Perfect Web Technologies*, we see the CAFC attempt to pick up the pieces.

  Questions: (1) What is the law after *KSR*? (2) What is the principal of teaching away? (3) How does common sense come into play in an obviousness analysis?

- **(10/30) Constructing the POSITA. p. 408–412, 413 (skip Hartsfield article)–426**

  Questions: (1) What factors do we consider in determining level of ordinary skill in the art? (2) When can prior art from a different field serve as prior art?

Part VI: Enforcement (tentative)

- **(11/4) Literal Infringement & the Doctrine of Equivalents. p. 517–524, 526–531**

  To show literal infringement, one must show the presence of every element or its substantial equivalent in the accused device. If even one element of a patent's claim from the accused product

means there can be no finding of literal infringement. However, often not every element is in the accused device, which leads to the need for the doctrine of equivalents.

Questions: (1) How does one establish literal infringement? (2) What is the doctrine of equivalents? (3) What are the four limitations on the DOE?

- **(11/6) Limitations on the Doctrine of Equivalents. p. 531–559**

  Initially, the DOE seems like a very expansive doctrine. But in *Warner-Jenikinson*, we see the court narrow DOE substantially, by requiring the DOE applies to each element.

  Questions: (1) What are the policy reasons for the DOE? (2) What is the all-limitation rule? (3) What is prosecution history estoppel and does it bar all DOE claims? (4) What is the function way result rule?

- **(11/11) All-limitations Rule and Specific Exclusion; Prior Art. p. 570–587**

  A structure can be deemed outside DOE's reach because structure is clearly excluded from claims. This can happen either expressly or implicitly.

  Questions: (1) What is the specific exclusion rule? (2) How does it explicitly and implicitly occur? (3) How does this relate to the all-limitations rule?

- **(11/13) Indirect Infringement. § 271(b), (c), 603–621**

  One can infringe a patent even if they do not manufacture the entire infringing device or practice the entire infringing product.

  Questions: (1) What is contributory infringement? (2) What is indirect infringement? (3) What is inducement?

- **(11/18) Geographic scope. § 271(a), (f), p. 630–655.**

  How do we treat infringing actions that occur outside the U.S.? On one hand, there is a presumption against applying U.S. law against foreign activities. On the other hand, infringers could easily circumvent patent law by shifting activities abroad. § 271(a) tells us that if someone makes, uses, offers to sell or sell an invention in the U.S. without authorization, she infringes the patent. In *NTP v. RIM*, we look at whether § 271(a) is violated if a component or step of the patented invention is located or performed abroad.

Part VII: Patent Agencies

- **(11/20) The International Trade Commission. Skim 936–940, read ITC supplement.**

  Many high-profile patent cases are litigated before the ITC. This independent agency has jurisdiction when infringing goods are imported into the U.S. under 19 U.S.C. § 1337. This agency can offer a powerful remedy—an exclusion order—that can block infringing goods from entering the country. Given that *eBay v. Mercexchange* now limits a court's ability to issue an injunction, the ITC has become an important way to enforce patent rights.

- **(11/25) Review**
- **December 8, 1-4pm Final exam (room TBA)**