

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 decisionmaking.

No technical background is required to succeed in this course. That being said, this class will be the most useful for students who plan to pursue a career in intellectual property or a related field (such as health law).

Class will meet on Tuesday/Thursday from 9am to 10:20am. By virtue of extending class from by 5 minutes each day, we will gain one extra class worth of lecture time. Consequently, if I am sick or there is bad weather, we will not need to make up the missed class. If we get through the semester with an extra class remaining, we will end the semester one class early.

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 and Participation

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. Any student who misses more than 20% of all scheduled (or makeup) classes will be reported to the Dean of Students and faces penalties.

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 roll sheet are deemed to have been absent. 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. Note that if you miss more than 15 minutes of class, you are deemed absent and may not sign the class roll sheet.

Even if you have notified me that you will be absent, that absence still uses one of your available

absences. An absence is an absence, regardless of the reason,¹ except for those covered by the University and Law Center religious holiday policy. Exceeding the absences threshold has consequences, as detailed below.

Students who exceed six absences will be reported to the Associate Dean. In addition, if a student exceeds that threshold by one absence, the student will take a grade reduction of 1/3 of a letter grade *per each additional absence*.

Participation

I will call on students, both to present cases and to comment on the issues we are discussing. If exceptional circumstances make it impossible for you to prepare for a particular class, leave me a note on the podium before class and I will not call on you that day. You may give me up to two of these notes without any affect to your class participation grade. If I call on you and you are unprepared (and did not sign the pass sheet), **you will be marked absent for the day** and will also be at risk for being dropped 1/3 of a letter grade for poor participation.

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!

Audio Recordings of Lectures

Audio recordings will be made of all of the lectures and placed on 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 and recordings can take up to a week to be posted! I will not record a class if more than 20% of the class is absent, except in cases of bad weather.

Grading

The final exam will be 9am-noon on December 9. It will be a three-hour open book in-class exam, and you may bring any print materials on the exam (note: Kindles are not permitted on the exam!). The exam format will be determined at a later date, but will likely be a mix of targeted essay questions and short answer. Previous exams are available on the class website.

Office Hours: To be determined

¹ In highly unusual cases, I will grant an exception to my grade dropping policy for a student with a major medical condition. Such a student would still be reported to the associate dean. Thus far, the only exception granted on such grounds was to a student undergoing chemotherapy.

Reading (Tentative)

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.² 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.

- **Introduction to patent law. 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?)

- **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?

- **Claim Interpretation. p. 60–90.**

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?

- **Enablement. p. 90–108 (through n.3), 112–113**

Section 112 states that “the manner and process of making and using [the invention], in such full, 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

² 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.

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?

- **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?

- **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?

- **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.

- **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.

- **Biomedical-Related Inventions. p. 188–202** (don’t worry if you don’t understand genetic technology!). Students without a biotech background should first read this 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 the disjointed *Myriad* decision, where the court struggles on the issue of patentability of DNA and cDNA.

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?

▪ **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 joins 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?

▪ **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.

Focus Questions: (1) When is the operability requirement violated? (2) How does the *Fisher* court attempt to draw the line between inventions with use versus mere academic discoveries?

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.

- **Novelty.** Old § 102(a) and (b); AIA § 102(a); p. 263–273; also 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?

- **“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?

- **Novelty-Defeating Inventive Activity and Foreign-Based Activity under § 102(g). Reading TBA**

We will spend most of the class working problems.

- **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)?

- **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?

- **Public-Use Bar; Experimental Use. p. 460–470; 482–485; § 102 exercises**

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.

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.

- **The Graham Test. p. 347–349; 353–372**

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?

- **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?

- **Constructing the PHOSITA. p. 408–412, 413 (skip Hartsfield article)–426.**

Part VI: Enforcement

Part VII: Defenses (if time)

Part VIII: Patent Agencies (if time)