

# Patent Law

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Class 1: Introduction – theory

## Today's agenda

- Administrative notes
- Justifying the patent system
- ~~Intro to the patent system~~

# Administrative notes

## Administrative notes

- Class meetings
- Make-up classes
- Reading assignments
- Grading
- Patent cases and technology

# Justifying the patent system

## Justifying the patent system

→ There are a bunch of justifications for private property rights:

- Natural rights / Locke: Someone who creates something is morally entitled to that thing
- Personhood / Hegel: A creation is a manifestation of its creator's personality and so belongs to him / her

# Justifying the patent system

- There are a bunch of justifications for private property rights:
- Human flourishing / Aristotle: Ownership furthers society's interest in people faring well and doing well
  - Utilitarianism / law and economics: Property makes people better off by creating incentives and enabling markets

# Justifying the patent system

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# Justifying the patent system

- U.S. Const., Art. I, sec. 8, cl. 8:
- “[Congress shall have the power] To promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries.”

# Justifying the patent system

- 35 U.S.C. § 101:
- “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....”

# *INS v. AP (1918)*

→ Warning:

- This is not a patent case.
- It is probably not good law today.
- We are reading it for principles, not legal rules.

# *INS v. AP (1918)*

→ World War I:

- INS and AP reporting from Europe
- INS (William Randolph Hearst) was perceived as favoring Germany/Austria, and so locked out of Allied (England/France) territory
- So INS started copying AP reports

# INS v. AP (1918)

- No copyright:
  - Facts can't be copyrighted
  - Text wasn't copied
  - Couldn't be registered on time anyway
- AP nevertheless wins
  - Why?

# INS v. AP (1918)

- "The parties are competitors in this field; and, on fundamental principles, applicable here as elsewhere, when the rights or privileges of the one are liable to conflict with those of the other, each party is under a duty so to conduct its own business as not unnecessarily or unfairly to injure that of the other." (p.3)

# INS v. AP (1918)

- Isn't this just competition?
  - Reporters compete today for scoops
  - Reporters routinely report news that someone else has previously reported

# INS v. AP (1918)

- “[D]efendant, by its very act, admits that it is taking material that has been acquired by complainant as the result of organization and the expenditure of labor, skill, and money, and which is salable by complainant for money, and that defendant in appropriating it and selling it as its own...” (p.5)



# INS v. AP (1918)

- “Stripped of all disguises, the process amounts to an unauthorized interference with the normal operation of complainant’s legitimate business precisely at the point where the profit is to be reaped, in order to divert a material portion of the profit from those who have earned it to those who have not; with special advantage to defendant in the competition because of the fact that it is not burdened with any part of the expense of gathering the news.” (p.5)

# INS v. AP (1918)

- The argument:
- Reporting from Europe is expensive; copying it is cheap
  - If INS can copy AP, they will
  - AP isn’t dumb; it won’t send reporters to Europe if it can’t reap profits
  - Society will get less reporting from WWI
  - So we need legal rules to prevent INS from copying AP, so AP can profit

# INS v. AP (1918)

- This is exactly the argument for patents:
- Inventing something new is expensive; copying it is cheap
  - If people can copy inventions, they will
  - Inventors aren't dumb; they won't invest in inventing things if they can't reap profits
  - Society will get less inventions
  - So we need rules to prevent people from copying inventions, so inventors can profit

## The patent bargain

- Patents represent a bargain between an inventor and society:
- The inventor gives society a valuable new invention and new scientific knowledge
  - In return, society grants a limited monopoly so the inventor can charge higher prices and recoup her initial investment

# The patent bargain: pharma example

- Drug development is *\*very\** expensive
  - \$2.6 billion on average for a new drug (per Tufts Center for the Study of Drug Development)
- Copying a drug is much cheaper
  - More like \$10 million
- Patents let drug developers charge higher prices, recouping their initial investment

# The patent bargain

- Problems with this story:
  - If it works, consumers pay higher prices
  - Monopoly injury: reduced output

## The 5 Most Expensive Drugs in the World

The five most expensive drugs in the world from 2013 will set you back a minimum of \$205,000 per year. Find out what makes these drugs so special -- and why they carry such exorbitant price tags.

Sean Williams (TMFUltraLong)  
Oct 26, 2014 at 12:21PM



SOURCE: STOCKMONKEYS.COM VIA [FLICKR](#)

Whether you're prepared for it or not, prescription drug prices remain on the rise within the United States.

Overall medical cost inflation may be at a multi-decade low in the U.S., but that doesn't seem to matter too much to middle-class families who are paying more than ever out of their pockets for medical care. According to the Organisation for Economic

# The patent bargain

- Problems with this story:
- It doesn't always work; not all inventions are expensive to invent and cheap to copy
  - Explains pharmaceuticals well
  - Software less so

# The patent bargain

- Problems with this story:
  - Maybe the thing would have been invented anyway
  - Simultaneous invention is common

# The patent bargain

- Problems with this story:
  - There may be other ways to get these benefits
  - Prizes, research funding, tax benefits

# The patent bargain

→ Discussion question:

- Scientists are working on improved fuel additives.
- One night, the janitor knocks over a couple of vials of chemicals.
- Cleaning up, she notices that where they mixed, the floor is very clean.
- Who should get the patent?

# The patent bargain

→ Discussion question:

- The scientists?
- The janitor?
- No one?

→ There are lots of accidental inventions...

- Play-Doh; post-it notes; microwaves

# The patent bargain

- So we can tell a story where the patent system is good for society and one where it is bad for society
  - More inventions and knowledge
  - Incentive to commercialize
  - Higher prices and rent seeking
- How do we know which is accurate?

## *Bonito Boats v. Thunder Craft Boats*

- Boat hulls:
  - Affect how fast a boat can go in the water
  - Functional, but also aesthetic



# ***Bonito Boats v. Thunder Craft Boats***

- Turns out, hull shapes are expensive to develop and cheap to copy
  - Engineering is expensive
  - It's also hard to predict which shapes will succeed in the market
  - Once one does, a copier can just take an impression

# ***Bonito Boats v. Thunder Craft Boats***

- So states protected them:
  - California: you can't use "direct molding process" to duplicate (unpatented) boat hulls
  - Florida: same thing



# *Bonito Boats v. Thunder Craft Boats*

→ Supreme Court: the state laws are invalid. **Why?**

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→ Supreme Court: the state laws are invalid. **Why?**

- Balance between innovation and monopoly
- Default assumption: competition building on work of others
- Don't remove information from public

# *Bonito Boats v. Thunder Craft Boats*

- “The Patent Clause itself reflects a balance between the need to encourage innovation and the avoidance of monopolies which stifle competition without any concomitant advance in the ‘Progress of Science and useful Arts.’” (p.880)

# *Bonito Boats v. Thunder Craft Boats*

- “From their inception, the federal patent laws have embodied a careful balance between the need to promote innovation and the recognition that imitation and refinement through imitation are both necessary to invention itself and the very lifeblood of a competitive economy.” (p.881)

# *Bonito Boats v. Thunder Craft Boats*

- “Sections 102(a) and (b) operate in tandem to exclude from consideration for patent protection knowledge that is already available to the public. They express a congressional determination that the creation of a monopoly in such information would not only serve no socially useful purpose, but would in fact injure the public by removing existing knowledge from public use. ” (p.881)

# *Bonito Boats v. Thunder Craft Boats*

- So how do we know if federal patent law strikes the right balance?

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- So how do we know if federal patent law strikes the right balance?
  - We don't – but it's better than letting states get involved.

# *Bonito Boats v. Thunder Craft Boats*

- So how do we know if federal patent law strikes the right balance?
  - “Where it is clear how the patent laws strike that balance in a particular circumstance, that is not a judgment the States may second-guess.” (p.881)

# *Bonito Boats v. Thunder Craft Boats*

→ So how do we know if federal patent law strikes the right balance?

- Especially when state law lacks the protections of patent law!
- “...without the careful protections of high standards of innovation and limited monopoly contained in the federal scheme” (p.884)

# *Bonito Boats v. Thunder Craft Boats*

→ “If we did not have a patent system, it would be irresponsible, on the basis of our present knowledge of its economic consequences, to recommend instituting one. But since we have had a patent system for a long time, it would be irresponsible, on the basis of our present knowledge, to recommend abolishing it.” –Fritz Machlup (1958)

# *Bonito Boats v. Thunder Craft Boats*

- 1998: Congress enacts the Vessel Hull Design Protection Act
  - 17 U.S.C. § 1202(a)(2): “The design of a vessel hull or component part of a vessel hull, including a plug or mold, is subject to protection under this chapter...”

**Next time**

# Next time

→ Introduction: patent mechanics

- Read the '473 patent closely – we'll spend most of the class on it