



# Lecture 4-2

# Intellectual Property

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# Participation Quiz

Let  $X$  denote the set of all sets that do not contain themselves. Is it the case that  $X \in X$ ?

- A. yes
- B. no
- C. none of the above

# Discuss in groups

- What protections for intellectual property are reasonable?
- What protections for intellectual property are unreasonable?
- What principles should we appeal to in answering these questions?

# Intellectual Property Protection

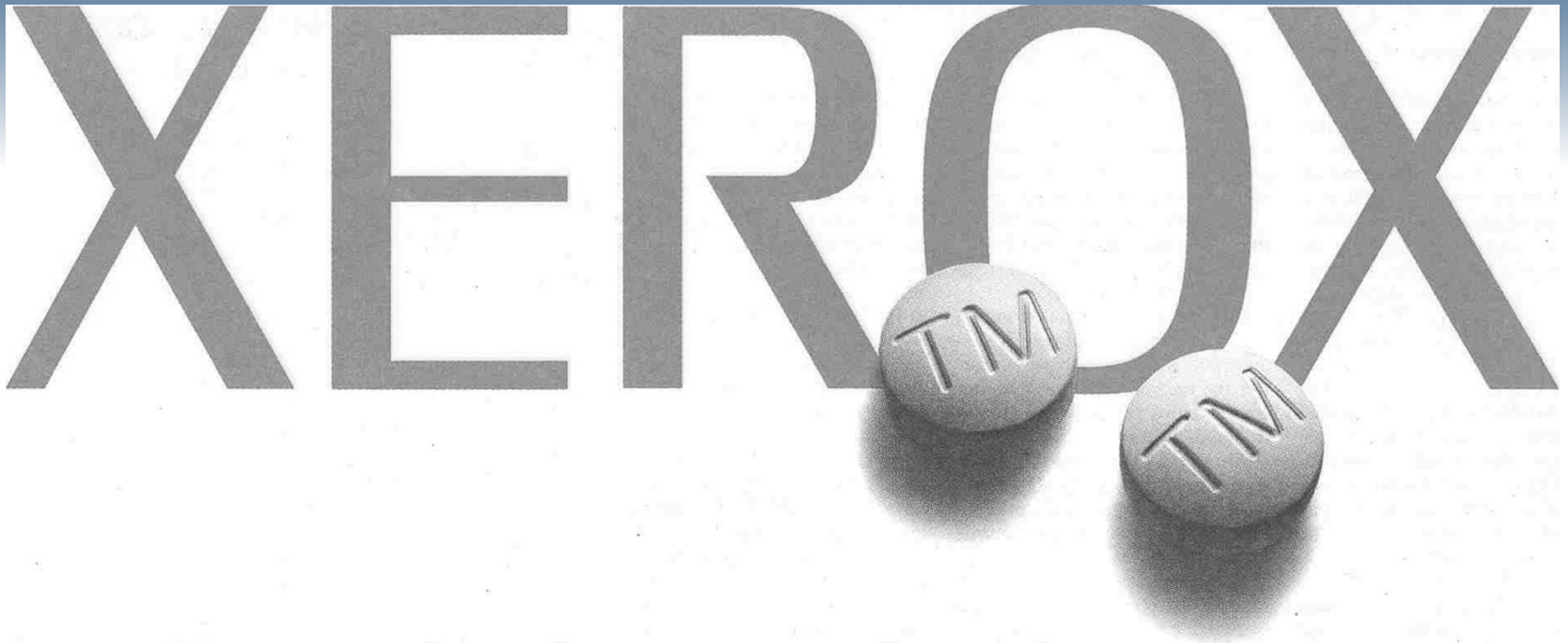
- So, why Intellectual Property Protection?
  - Some people are altruistic; some are not
  - Allure of wealth can be an incentive for speculative work
  - Thus, benefits to intellectual property protection
- But, these rights should come with limits
  - Giving creators rights to their inventions stimulates creativity
  - Society benefits most when inventions in public domain
  - Strike a compromise by giving authors and inventors rights for a limited time
- It might make more sense to call it “intellectual monopoly” rather than “intellectual property”

# 1. Trade Secret

- Confidential piece of intellectual property that gives company a competitive advantage
- Never expires
- No legal protection
- Reverse engineering allowed
- May be compromised when employees leave firm

## 2. Trademark, Service Mark

- Trademark: Identifies goods
- Service mark: Identifies services
- Company can establish a “brand name”
- Does not expire
- If brand name becomes common noun, trademark may be lost
- Companies advertise to protect their trademarks
- Companies also protect trademarks by contacting those who misuse them



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# 3. Patent

- A public document that provides detailed description of invention
- A government office decides whether the invention is novel, non-obvious
- Provides owner with exclusive right to the invention
- Owner can prevent others from making, using, or selling invention for 20 years



# Software Patents

- Patent protection began in 1981
- Inventions can be patented, but not algorithms
- Patent Office having a hard time determining prior art
- Result: some bad patents have been issued
  - Amazon One-Click purchasing
  - Apple: squares with rounded corners
- General skepticism about value of software patents
- *Patent trolls: what are they? What do you think?*