Patents in the United States

CJ341 – Cyberlaw & Cybercrime
Lecture #10

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Topics

- Patents Defined
- US Constitution and Laws
- Utility
- Design
- Plants
- Infringement
- Exemption
- Remedies
- Reform
- International Agreements

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Patents Defined

- Word means “open” (14th century Latin)
- Defined: “a property right granted by the Government of the United States of America to an inventor ‘to exclude others from making, using, offering for sale, or selling the invention throughout the United States or importing the invention into the United States’ for a limited time in exchange for public disclosure of the invention when the patent is granted.” (Source: http://www.uspto.gov)
- Patent Protection = reward for disclosing invention

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High-Profile Patent Disputes

- NTP Inc. v. Research in Motion (RIM) – BlackBerry Communication devices
- Polaroid v. Eastman Kodak – violation of instant photography patents, resulted in $873M judgment against Kodak
- Pitney Bowes, Inc. v. Hewlett-Packard – alleged patent violation of printer light scanning system, case settled for $400M
- First USA v. PayPal, alleged violation of cardless payment systems

Now in the News

- MANGOSOFT v. eBay & Skype, filed patent infringement suit alleging violation of “Dynamic Directory Service” (September 2006)
- Ring Plus v. Cingular, filed patent infringement suit alleging violation of music ring tone/ ring back (September 2006)

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US Constitution and Laws

- US Constitution Article 1, §8, clause 8:
  - Progress of science and useful arts
  - Limited time of exclusive right to use
    - ✓ Writings
    - ✓ Discoveries
- 1st Patent Act: 1790
- Patent Act of 1793
- 35 USC: Patent Act of 1952, amended 1995
  - Utility patents
  - Design patents
  - Plant patents
- Patent Reform Act of 2005
  - Proposes significant changes to patent laws
  - Not yet passed, in bill format
  - See Burgunder p. 79-80, Exhibit 3.1

Most patents last 20 years

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Utility

- US Patent Act - §101
  - Entitled to a patent for an invention if it is *novel, nonobvious, and a proper subject*
- §103 - New, useful and nonobvious
  - ✓ Process
  - ✓ Machine
  - ✓ Manufacture
  - ✓ Composition of matter
  - ✓ Improvement

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Novel

- US Patent Act §102 *excludes* patents if
  - Previously known or used in US
  - Patented or described in printed publication before filing
  - In public use or for sale in US >1 year before filing
  - Abandoned
  - Someone else previously filed for patent on it
  - Not invented by applicant
  - Also invented by someone else
- §102 encourages rapid filing by inventors
  - 1 year to file

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Useful

- Reject patent filing if
  - Doesn't work
  - Has no defined purpose
- Exceptions
  - Cannot patent natural process or material
  - Abstract mathematical equations or algorithms care not patentable
    - ✓However, *expressing* ideas mathematically or as computer algorithms *does NOT preclude* patent

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Nonobvious

- Exclude patent filing if
  - Obvious to person with
    - ✓Ordinary skill
    - ✓In art (meaning science, technique, technology)
- What defines "ordinary skill?"
  - Awareness of all pertinent prior art
  - Types of problems encountered
  - Prior art solutions
  - Speed of technology change
  - Educational level

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Amazon vs Barnesandnoble (2001)

- Amazon developed & patented "1-click" ordering
- B&N developed "Express Lane" single-click ordering and used on Web site
- Amazon sued B&N
- B&N protested that 1-click ordering was obvious and therefore patent was invalid
- District Court ruled that Amazon was likely to prove patent validity and ordered a preliminary injunction
  - No one had *put together all ideas* in this way

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1-Click Case (cont'd)

- BN appealed to the Federal Circuit, claiming patent was invalid and no infringement, if valid
- Fed Circuit held: *Amazon carried its burden with respect to demonstrating likelihood of infringement, but BN raised substantial questions of patent validity. Therefore, no preliminary injunction.*
- Parties settled the dispute in March 2002.
- See Burgunder p. 197-99
- Case demonstrates difficulty of PTO to review Internet business methods & make decisions about novelty

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Design

- US Patent Act §171 defines patents for design
  - new, original and ornamental design
  - Any article of manufacture
  - 14 year protection
- Seiko Epson Corp v Nu-Kote Intl (1999)
  - Patent infringement on *shape of ink cartridges*
  - Trial court ruled against plaintiff because cartridges not visible to user, thus not patentable as "design"
  - US Court of Appeals *reversed* lower court
    - ✓Patent was valid even if design not visible or obvious to user

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Patent Duration

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- Utility Patents: at least 20 years
  - Changed in 1995 to comply with international agreement obligations
- Legal protection starts when the PTO (Patent Trademark Office) issues the patent and lasts until expiration
  - Note: term begins when filed
    - ✓Invention can be used while PTO processes a patent application, even though patent term has not begun
    - ✓But once patent granted, patent holder can require royalties for previous use
  - Exceptions apply for new pharmaceutical products

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Infringement

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- Without permission of patent holder, to
  - Make
  - Use
  - Offer for sale
  - Sell
  - Import

  } the patented invention

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Exemptions

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US Patent Act §273

- Good faith
- Used subject of patent at least 1 year before filing date of patent
- Holder of patent abandoned it for ~6 years or more

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Enforcement Issues & Challenges

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- Patent issued by PTO assumed valid
  - Challenger of patent must overcome presumption of validity
  - Must show patent invalidly granted by PTO
    - ✓Erred in determination that product or process was *novel* or *nonobvious*

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Remedies

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- Injunction to stop infringing
  - Likely most powerful weapon of patent holder
- Damages equivalent to royalty + interest + costs
  - Limited to 6 year period before filing of complaint
  - Examples:
    - ✓Profits from lost sales
- *Treble* damages at discretion of court
  - Awarded if *willful* infringement
- Attorney fees in exceptional cases
  - E.g., where willful infringement found

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Reform

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- Patent Reform Act of 2005 in works
- Currently, US stands alone in *first-to-invent* approach
  - Focuses on novelty inquiry on date of invention rather than date of application
  - Likely to join international consensus with Reform Act passage
- Drawback to current approach
  - Increases litigation expenses
    - ✓Determining priority by invention is tough;
    - ✓Simple to determine who is the first to file
- Challenges to change
  - Fairness concerns
  - Produce a race to the patent office
    - ✓Less thoughtful patent applications?

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International Agreements on Patents

- Paris Convention for Protection of Industrial Property (1883)
- TRIPS (1994)
  - Agreement on *Trade-Related Aspects of Intellectual Property Rights*
  - See http://www.wto.org/english/tratop_e/trips_e/tripfq_e.htm
- NAFTA (1992)
  - *North American Free Trade Agreement*
  - See http://www.ladas.com/BULLETINS/1994/NAFTAGATT.html
  - See also http://www.customs.ustreas.gov/nafta/docs/us/chap-17.html

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Dealing with PTO & Other Considerations

- See Burgunder p.137 – Overview Patent Application Procedures
  - Initial/provisional application
  - Patentability Search
  - Fees
    - Filing & Maintenance fees
      - $700-$1,400 (2006) to file
    - Attorney's Fees, Expert fees
  - Disclosure (e.g., summary of invention)
  - Claims to Invention
  - Appeals
  - Litigation/claims (infringement)

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DISCUSSION

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