



Intellectual Property and the Web

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Sources

- US Patent and Trademark Office
 - www.uspto.gov
- Scrape It, Scrub It and Show It: The Battle Over Data Aggregation
 - http://www.ffhsj.com/bancmail/bmarts/aba_art.htm
- A Gift of Fire: Social, Legal, and Ethical Issues for Computers and the Internet, 2nd Edition by Sara Baase
 - PowerPoint slides created by Sherry Clark



Intellectual Property

- Intellectual property (IP) is an intangible creative work
 - It is not the physical form on which it is stored or delivered
- IP can be protected through the use of patents, copyrights, trademarks, and trade secret laws



Outline

- Patents
- Copyrights
- Trademarks
- Trade Secrets
- Data Aggregation



Patents

- **PATENTS** provide rights for up to 20 years for inventions in three broad categories:
 - **Utility patents** protect useful processes, machines, articles of manufacture, and compositions of matter
 - Some examples: fiber optics, computer hardware, medications.
 - **Design patents** guard the unauthorized use of new, original, and ornamental designs for articles of manufacture
 - The look of an athletic shoe, a bicycle helmet, the *Star Wars* characters are all protected by design patents
 - **Plant patents** are the way we protect invented or discovered, asexually reproduced plant varieties
 - Hybrid tea roses, Silver Queen corn, Better Boy tomatoes are all types of plant patents



What Can Be Patented

- Any person who “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,”
 - This covers practically everything that is made by man and the processes for making the products.
- The patent law specifies that the subject matter must be “useful.”
 - The term “useful” refers to the condition that the subject matter has a useful purpose
 - A machine which will not operate to perform the intended purpose would not be called useful, and therefore would not be granted a patent.
- Laws of nature, physical phenomena, and abstract ideas are not patentable subject matter.
- A patent cannot be obtained upon a mere idea or suggestion.
 - A complete description of the actual machine or other subject matter for which a patent is sought is required.



Novelty And Non-Obviousness, Conditions For Obtaining A Patent

- In order for an invention to be patentable it must be new as defined in the patent law, which provides that an invention cannot be patented if:
 - If the invention has been described in a printed publication anywhere in the world, or if it was known or used by others in this country before the date that the applicant made his/her invention.
 - If the inventor describes the invention in a printed publication or uses the invention publicly, or places it on sale, and more than one year has gone by.
- The inventor must file on the date of public use or disclosure, however, in order to preserve patent rights in many foreign countries.
- The subject matter sought to be patented must be sufficiently different from what has been used or described before that it may be said to be nonobvious to a person having ordinary skill in the area of technology related to the invention.
 - For example, the substitution of one color for another, or changes in size, are ordinarily not patentable.



Copyrights

- **COPYRIGHTS** protect works of authorship, such as writings, music, and works of art that have been tangibly expressed.
 - The Library of Congress registers copyrights which last the life of the author plus 70 years
 - Books, albums, movies are all copyrighted
 - You cannot copyright facts, such as the information in the telephone book
 - But you can copyright the particular presentation of those facts



Copyrights

- Copyright owners have the exclusive right to:
 - Make copies of the work
 - Produce derivative works
 - Distribute copies
 - Perform the work in public
 - Display the work in public



U.S. Copyright Law

- History

- 1790: First U.S. copyright law; covered printed material. Later, newer technologies (photography, sound recordings, etc.) were added
- 1909: Definition of unauthorized copy formed
- 1960s: Some software and databases receive protection
- 1992: Making copies for personal gain became a felony
- 1997: Illegal to make copies regardless of financial gain
- 1998: Illegal to circumvent copy protection schemes

- Source: A Gift of Fire



Fair-Use Doctrine

- Under certain circumstances, permission to use a work is not required
- Allows the use of copyrighted material that contribute to the creation of new works
 - The new works cannot significantly affect sales of the source material, thus depriving copyright holders of their income
- Allows use for some research and educational purposes
- Allows use for news reporting and critiquing



Copyright Law

- Fair-Use Cases

- *Sony vs. Universal City Studios*

- 1984: U.S. Supreme Court ruled that non-commercial copying of a movie for viewing at a later time was fair use
 - Court ruled that copying devices (e.g., Betamax VCR) should not be banned if they have significant legal uses

- *Sega Enterprises vs. Accolade*

- 1992: Reverse engineering a complete program in order to produce new, creative work was ruled as fair use



Trademarks

- **TRADEMARKS** protect words, names, symbols, sounds, or colors that distinguish goods and services.
 - Trademarks, unlike patents, can be renewed forever as long as they are being used in business.
 - The roar of the *MGM* lion, the pink of the *Owens-Corning* insulation, and the shape of a *Coca-Cola* bottle are familiar trademarks.

Trade Secrets

- **TRADE SECRETS** are information that companies keep secret to give them an advantage over their competitors
- The formula for *Coca-Cola* is one of the most famous trade secrets





Data Aggregation

- Data aggregation, aka “screen scraping” or “wrapping” is conducted widely today
- Some of it is on sound legal ground
 - Business to business sharing of data
 - Partnerships where organizations agree to share the information on their web sites
 - Data aggregation within an organization
 - Aggregation of public information
 - Aggregation of facts
- but some it is has more ambiguous legal standing
 - News aggregation (e.g., Google News)
 - Auction aggregation (e.g., Ebay vs. BiddersEdge)
 - Deep linking (e.g., Microsoft vs. Ticketmaster)



First Union vs. Secure Commerce Services

- Companies such as VerticalOne, Yodlee, and Secure Commerce Services provide aggregation of account information for customers
- Dec 30, 1999, First Union Bank filed a complaint against SCS over the Paytrust Smartbalance feature
 - Alleged “unauthorized access to a computer, trademark and copyright infringement, misrepresenting its relationship with First Union and misleading customers.”
- Feb 28, 2000, First Union drops the legal action against SCS since SCS agreed to meet First Union’s Internet Aggregation standards



eBay vs. Reverse Auction

- Jan 2000, Ebay filed suite against Reverse Auction, Inc.
- Reverse auction would copy eBay's users' email addresses, user ides and feedback ratings
- Then they sent the users email falsely warning that their eBay id would expire soon
- They offered to let them use their id and feedback rating on the Reverse Auction website
- The Federal Trade Commission also brought an action against RevereAuction for unfair and deceptive aspects of the ReverseAuction operation



Ebay vs. BiddersEdge, Inc

- Jan 2000, Ebay also brought suite against BiddersEdge, Inc.
- BiddersEdge aggregated auctions from multiple auction sites and then linked users to do the bidding on the individual sites
- Claims against BiddersEdge included
 - Trespass to personal property for interference with Ebay's computer systems
 - Violation of the Computer Fraud and Abuse Act for unauthorized access to a protected computer
 - Unfair business practices, false advertising, injury to business reputation, federal trademark dilution and unjust enrichment
- May 24, 2000, the courts granted Ebay a preliminary injunction based on a finding that the trespass claim had sufficient likelihood of success
 - Bidder's Edge's activities were sufficiently outside the scope of the use permitted by Ebay as to be unauthorized
 - To the extent these activities imposed even a small burden on Ebay systems, the court found that Ebay could show that it was deprived of the ability to use that portion of its own property for its own purposes



Ticketmaster vs. Microsoft

- Microsoft was linking directly to ticket information for its Seattle Sidewalk web site
 - Microsoft showed their own ads on the page with the ticketmaster information
 - The user was linked to Ticketmaster to buy the ticket
- The case was settled.



Discussion

- The Internet is still the wild west of intellectual property
- Few court cases have actually been decided since most of the relevant cases have settled outside of court
- If you want to build a data aggregation application for commercial purposes, think about business models that help the parties that you want to aggregate data from instead of competing with them