Intellectual Property
Intellectual Property and Computers

- What is “intellectual property”?
- Is it different with computers?
- Why do such differences exist?
Types of Intellectual Property

- Patents
- Copyrights
- Trademarks

All represent intangible items that are deemed worthy of protection
Constitutional Provisions

The 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.

U.S. Constitution, Article I, Section 8
Goals

- Ensure that only the creator of something can sell something for a certain time period
- If the creation is good enough, there should be a market for it
- The prospect of revenue would serve as an inducement for creators
Interesting Questions

• What is an “inventor”? A “discovery”?
• What is an “author”? A “writing”?
• What is a “limited time”? 
The Rest of the World

- How does US law interact with the rest of the world?
- What if they define those terms differently?
- What if their time limits differ?
Trademarks

- “Protect words, names, symbols, sounds, or colors that distinguish goods and services from those manufactured or sold by others and to indicate the source of the goods. Trademarks, unlike patents, can be renewed forever as long as they are being used in commerce.” (from USPTO web site)
- Identifies certain brands
- Prevent confusion (deliberate or otherwise) about the brand
Defending Trademarks

- Companies must defend their trademarks or they can be lost
- Examples: “thermos” and “yo-yo“
- Might Google and Xerox face that problem?
Trademark Law is Complex

- Only Corning can make pink fiberglass insulation (774 F.2d 1116)
- They’ve been doing so since 1956, and had major advertising campaigns (featuring the Pink Panther) stressing the color
- (Yes, there are serious restrictions on when one can trademark a color...)
Limitations on Trademark Scope

- Trademarks are limited by geography—“Joe’s Frabjous Pizza” can exist in New York and San Francisco simultaneously.

- Trademarks are limited by field of discourse: Delta Airlines, Delta Faucets, Delta Porter Cable tools, etc.

- But “famous” trademarks are protected throughout the U.S.

- Key issue: will people be confused? Would “McBurgers” infringe McDonald’s trademark? Almost certainly.
Trademarks and the Internet

- What’s a geographic limitation?
- What about the DNS?
Trademarks and the DNS

- The DNS is a tree—there’s no way to search on two different limiting fields
- Only one company can have, e.g., delta.com
- JoesFrabjousPizza.com should resolve differently in New York than in San Francisco—and differently for food than for electronics
- It would be much harder to build a simple distributed database if one wanted to permit such queries
- “The DNS name space is a hierarchical name space derived from a single, globally unique root. This is a technical constraint inherent in the design of the DNS.” (RFC 2826)
- A few companies (such as Google) do do location-based DNS responses, but the granularity probably doesn’t match trademark law
DNS Lookups Are Context-Free

- A person looking for airline tickets won’t be confused by power tools
- But the DNS doesn’t know the user’s mental context
- Even your browser (and Google) don’t necessarily know it
- Many DNS lookups are done by and for automated processes far removed from explicit user requests
- The human notion of “confusion” simply doesn’t work
Are Domain Names Trademarks?

- Under certain circumstances, domain names themselves can be trademarked
- But—the commercial use has to be more than just the address
- “The mark is WWW.XYZ.COM for on-line ordering services in the field of clothing. Specimens of use consisting of an advertisement that states ‘visit us on the web at www.xyz.com’ do not show service mark use of the proposed mark.” (USPTO Examination Guide 2-99)
- amazon.com is a trademark, though
Infringing Trademarks via the DNS

- Who can register the domain mcdonalds.com?

- Before the hamburger company caught on, a journalist registered it—he asked people to email suggestions for the name via ronald@mcdonalds.com

- Yes, today that would likely be seen as infringement...
Cybersquatting

- Grab a trademarked name that you think someone might want, then offer to sell it to them

- Typosquatting—grab a name that’s a typographical error away from a common DNS entry

- Barred in the U.S. under 15 USC 1125(d): “A person shall be liable in a civil action by the owner of a mark . . . [if] that person has a bad faith intent to profit from that mark . . . [and] registers, traffics in, or uses a domain name that . . . is identical or confusingly similar” (lots more)

- In some cases, there is redress via ICANN’s Uniform Domain-Name Dispute-Resolution Policy
Internationalization Issues

- Who gets δελτα.gr?
- What American word would infringe cccp.ru? Recall that “CCCP” is the abbreviation for *Soyuz Sovetskikh Sotsialisticheskikh Respublik*, and has the (English) sound value “SSSR”
- The Cyrillic equivalent to the English CCCP is ΚΚΚΠ—does it infringe?
- Again—the issue is whether or not there is confusion
We Have Jurisdiction Problems Again

- The Internet doesn’t understand borders
- Different companies’ trademarks have different reaches
- Consumers don’t always know what countries’ sites they’re browsing
Should We Have Names in the DNS?

- The phone system has survived without mnemonic names
- Today, our phones have address books—but browsers have bookmarks
- Often, people use search engines to find places anyway
- Do we really need these problematic names? Many people think they’re more trouble than they’re worth
Trademarks and Advertising

- Google’s ads work by selling “keywords”
- “When people search on Google using one of your keywords, your ad may appear next to the search results.” (google.com)
- What if a company uses a competitor’s trademark as a keyword for its own ads?
An International Legal Issue

- LVMH (the owner of Louis Vuitton) filed suit against Google in France
- LVMH won there
- Google appealed to the EU’s European Court of Justice
- The court ruled in 2010 that (a) Google did not infringe simply by selling keywords, but must take down infringing ads after notification; (b) the advertisers could be liable; (c) Google could be liable if its business practices encourage infringement
- The suit was finally dropped in late 2014!
- Might other jurisdictions feel differently? If Google has to change www.google.fr, it’s one thing; need they change www.google.com as well?
Counterfeit Goods

- If eBay sells counterfeit trademarked goods, are they liable?
- Tiffany sued in the U.S.; eBay won
- “the law is clear: it is the trademark owner’s burden to police its mark, and companies like eBay cannot be held liable for trademark infringement based solely on their generalized knowledge that trademark infringement might be occurring” (576 F. Supp. 2d 463, 2008)
- eBay lost in France to LVMH; the two finally agreed on a joint anti-counterfeiting campaign
- In Germany “the high court said while EBay couldn’t be held liable for damages [to Rolex], it had to monitor its site to prevent fakes from being sold once it had become aware of the problem” (bloomberg.com)
Several Issues

- What are the plaintiffs’ real concerns?
- Trademark confusion?
- Counterfeit goods?
- Discount sales of luxury goods?
- All of the above?
Conduits or Creators?

- When are web sites passive conduits, as opposed to content owners?
- How much filtering is required?
- Does the law create a disincentive for partial filtering?
Trademarks and Free Speech

• Can you incorporate a trademark into a domain name critical of someone?

• Is farmersinsurancegroupstalks.com free speech or a trademark infringement?

• What about when peta.org took you to a page for “People Eating Tasty Animals”?
Criticisim is OK

“The following shall not be actionable as dilution by blurring or dilution by tarnishment under this subsection:
“(A) Any fair use, . . .
“(ii) identifying and parodying, criticizing, or commenting upon the famous mark owner or the goods or services of the famous mark owner.”
That Means that the .sucks Domain is Legal

• The whole purpose of the TLD is criticism

A domain MyMegaCorp.sucks doesn’t infringe the trademark of MyMegaCorp (but the content has to stick to opinion or documentable facts to avoid slander issues)

• However... Some see the existence of the TLD as a vehicle for extortion: companies will feel forced to buy their subdomain to protect it.

• Is that different from MyMegaCorpSucks.com?
Computers and Trademarks

- Technological choices don’t agree with historic trademark principles
- Trademarks are being used in new ways—typo-squatting couldn’t occur without the web, because people didn’t normally type trademarks
- Computers are conduits, and have no judgment