

Intellectual Property

Legal Protections:

- Trademark
- Trade secret
- Patent
- Copyright

The first item, Trademarks, can apply to domain names

The subsequent items can be applied to software.

- intellectual property laws protect creative works embodied in a physical form
- the value of an instance of a creative work must exceed the value of an instance of the medium upon which it is expressed
- \exists individual and social benefits to the protection of intellectual property – social benefits were the sole stated motivation in our Federal constitution
- When creators of creative works allow you access to that work, they are not deprived of it
- \exists people who reject some or all of the principles of intellectual property as currently expressed

Trademarks and Servicemarks

- Twofold purpose:
 - identify the source of products or services
 - distinguish the trademark owner's goods and services from those of others
- Trademarks protect: a word, phrase, symbol or design, or a combination of words, phrases, symbols or designs, that identifies and distinguishes the source of the goods of one party from those of others
- Servicemarks are the same as trademarks except that they identify and distinguish the source of a service rather than a product

- Duration: Rights in a federally-registered trademark can last indefinitely if the owner continues to use the mark or in connection with the goods and/or services in the registration and files all necessary documentation in the USPTO at the appropriate times. In general, the owner of a registration must periodically file.
- Based on *commerce clause* of Federal Constitution and embodied in the Lanham Act (Ch. 22 of Title 15 of US Code)
- Federal and/or state registration is not necessary to establish or maintain ownership rights, but it provides additional benefits:
 - constructive notice to the public of the registrant's claim of ownership of the mark;

- a legal presumption of the registrant's ownership of the mark and the registrant's exclusive right to use the mark nationwide on or in connection with the goods and/or services listed in the registration;
 - the ability to bring an action concerning the mark in federal court;
 - the use of the U.S registration as a basis to obtain registration in foreign countries; and
 - the ability to file the U.S. registration with the U.S. Customs Service to prevent importation of infringing foreign goods.
- Specific software issues:
 - Internet domain names

- use in Web pages of visible and non-visible trademarked words (OK if fair-use re. Playboy model case)
- related: links and deep links (hyperlinks)
- the Patent and Trademark Office has issued a special rule which permits filing a photograph of a computer screen as evidence of trademark use. (This rule is necessary because purchasers of computer programs often do not see the computer trademarks until the "trademark" comes up "on the screen" after installation of the computer software.)

Trade Secrecy Laws

- Allows companies the right to keep certain kinds of information secret
- Laws aimed specifically at protecting companies from losing their competitive edge
- Unlike the other forms of IP protection, trade secrets (TS) are generally covered by state, rather than Federal, laws – complicating jurisdictional issues may arise
- TS holder is protected only from unauthorized disclosure, use of the TS by others, and another person obtaining a TS by improper means

- An enforceable TS must satisfy all of the following criteria:
 1. TS must have novelty
 2. TS must represent an economic investment by claimant
 3. TS must have involved some effort in development
 4. company must show that it made *some effort* to keep the information a secret.
 5. TS information should not be easily acquired or duplicated by others via proper methods
- A TS cannot be successfully protected if it is widely distributed *unless* adequate security precautions were breached.

- A TS can protect any information including technical or non-technical data, formulas, compilations, programs, devices, methods, techniques, drawings, processes, financial data, customer lists, supplier lists, etc.
- The ease with which trade secret information can be uploaded to the Internet now creates new issues in trade secrets law.
 - destruction of secrecy can occur if trade secret information is widely disseminated on the Internet because, under such circumstances, the information is no longer a *secret*.
 - under such circumstances, liability for the unauthorized disclosure or use of such information on the Internet can attach not only to the person who uploaded the information but to all other

persons who knew or should have known that they were the recipients of unauthorized trade secret information

- trade secret protection programs must now include security measures to monitor Internet activities by employees and others with access to sensitive Company information
- because many Internet communications are insecure, TS rights are risked (confidentiality in other contexts such as attorney-client privilege is risked as well)
- Often coupled with copyright, and used in conjunction with special licensing agreements and employment contracts (from simple nondisclosure to a prohibition from working elsewhere in the industry for a specified limited time period)

- Both source and object code may be registered
- \exists no benefit to society from exposure to ideas protected by TSs

Patents

- Strongest form of protection
- Acquisition process is expensive, long, & uncertain
- Duration: 20 years from filing date – extensions possible under certain circumstances
- \exists 3 categories of patent:
 - utility
 - design
 - (asexual) plant
- For an invention to be patentable it must be:

1. statutory
2. new
3. useful
4. nonobvious

- Not applicable to SW until recently
 - In *Diamond v. Diehr*, 450 U.S. 175 (1981), the United States Supreme Court opened the door to patent protection for computer software by holding that a process for curing synthetic rubber using a mathematical formula in a programmed digital computer was proper subject matter for a patent
- In 1995 Patent & Trademark Office develops and adopts formal set of guidelines for

PTO examiners for consideration of software related inventions