

Lightening intro to intellectual property law

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Based in part on original notes by Randy Davis

“If nature has made any one thing less susceptible than all others of exclusive property, it is the action of the thinking power called an idea, which an individual may exclusively possess as long as he keeps it to himself; but the moment it is divulged, it forces itself into the possession of every one, and the receiver cannot dispossess himself of it. Its peculiar character, too, is that no one possesses the less, because every other possesses the whole of it. He who receives an idea from me, receives instructions himself without lessening mine; as he who lights his taper at mine, receives light without darkening me. That ideas should be freely spread from one to another over the globe, for the moral and mutual instruction of man, and improvement of his condition, seems to have been peculiarly and benevolently designed by nature . . .”

Thomas Jefferson

Why haven't we had to deal with this before?

- “We are at a critical moment in the history of our future ...”
 - Larry Lessig (1999)

Which of these can lead to trouble?

- making copies of a program and selling them
- making copies of a program and giving them away
- writing (from scratch) a program that performs largely like another one, and selling it
- writing (from scratch) a program that uses the ideas in another one
- writing a program that uses a technique that you learned in class

Three basic means of “protecting” intellectual property

- Copyright
- Patent
- Trade secret

Trade secret

- Definition
 - Any information that
 - provides a competitive advantage
 - is kept secret
- Limits
 - Essentially none; unlimited lifetime
- Abridged by
 - Stealing the information
 - Unauthorized passing on
- Legally avoided by
 - Independent discovery
 - Emergence into the public domain
 - Reverse engineering [What happens with software?]

The Fundamental Mechanism: A Time-limited Monopoly

US Constitution, Article 1, §8:

“The Congress shall have the power ...

To promote the Progress of Science and the Useful Arts, by securing for limited Times to **authors** and **inventors** the exclusive Right to their respective **Writings** and **Discoveries**.”

Patent basics

- Definition
 - Application of an idea to create something novel, useful, and non-obvious (prior art)
 - Machines, processes, new forms of matter
 - Covers only the claims specified
 - Provides Right to exclude others from making, selling, using
 - Requires adequate disclosure
- Limits
 - 20 years from date of filing
 - Excludes: math formulas, natural laws, mental steps
- Obtained by:
 - Application to US PTO; expensive, claims examined
 - Can be challenged later
- Abridged by: Any use of application
- Avoided by: Careful search

[Patent example](#)

Copyright basics

- Definition
 - Original work of authorship, fixed in a tangible medium
 - Covers entire work
- Limits
 - Life of author + 70 yrs, or 95 yrs from publication (for corp)
 - Covers expression, not underlying idea
 - Excludes: “...any idea, procedure, process, system, method of operation, concept, principle ...”
- Obtained by: automatic (since 1988)
- Abridged by: copying (literal and non-literal)
- Legally avoided by: independent creation

Access + similarity => infringement

More on copyright (USC Title 17)

- Specifically enumerated rights ([Chapter 1, §106](#))
 - Reproduction
 - Prepare derivative works
 - Distribution
 - Public performance and display
- First sale doctrine limitation ([Chapter 1, §109](#))
- Fair use defense ([Chapter 1, §109](#))
 - Consider
 - Nature of the use
 - Nature of the work
 - Amount of the work used
 - Impact on potential market for the work

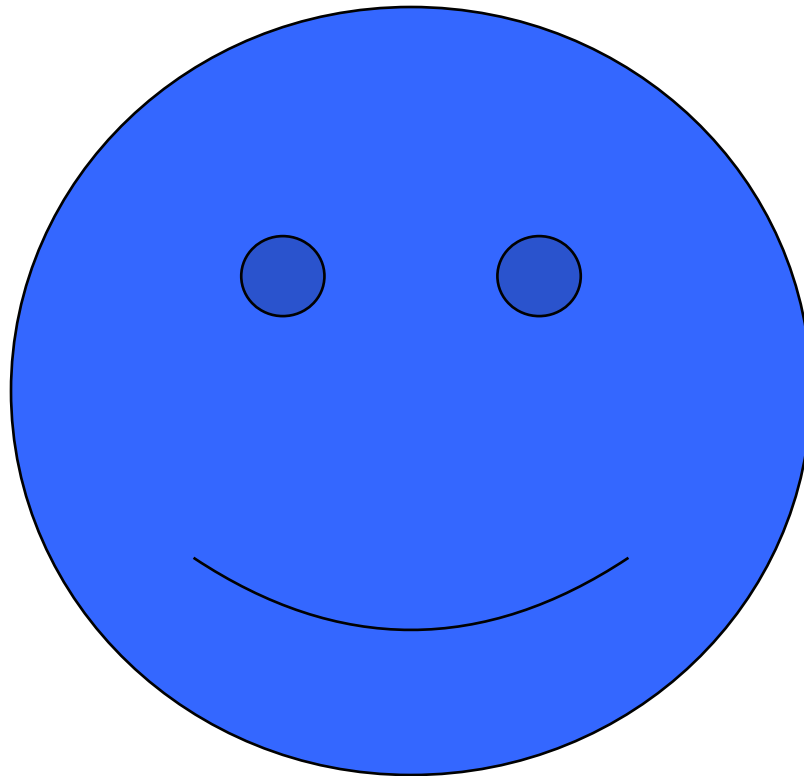
Increasing duration of copyright

Year enacted	Max copyright term
1790	28 years (14 + 14 renewal)
1831	42
1909	56
1962	59
1965	61
1967	62
1968	63
1969	64
1970	65
1971	66
1972	68
1974	70
1976	life + 70, or 75 (corp)
1998	life + 70, or 95 (corp)

Patents and Copyrights

	COPYRIGHT	PATENT
Scope	all of work	specific claims
Disclosure	avoidable	unavoidable
Standard	originality	novelty
Infringement avoided by	independent creation	licensing

Insufficient originality



Sufficient originality



Derivative work

