Intellectual Property Basics

Primary types of intellectual property:

I. Copyright - original works of authorship
II. Patent - functional inventions
III. Trademarks
IV. Trade Secret

I. Copyright Basics

What is the purpose of copyright?

General Principles:

Copyright protection subsists in original works of authorship.

Author of work is owner of copyright
- no mark or notice required (U.S. signatory to Berne Convention 1989)
- must be fixed in a tangible medium of expression .... data sets and software meet this requirement and thus may be "works"
How long?

Generally, copyright extends for life of last surviving author plus 70 years

If author is employee & work created within scope of employment (i.e. "work made for hire"), employer is owner.
(works of legal entities: shorter of 95 years from publication or 120 years from creation)

"Work for Hire" Problem Areas:

If independent contractor hired to develop software and the contract is silent on ownership, who owns?
  • Contractor likely owner (Community for Creative Non-Violence v. Reid)
  • Same for datasets?

Can contractor successfully claim co-authorship in a company's database that contractor has made substantial contributions to?
  • Possible

Solutions:

a) Detail rights in the copyright of all parties in the written contract for employment

b) Obtain assignment of copyright before work begins
   i) Must be in writing
   ii) Ownership reverts after 35 years unless otherwise agreed upon
U.S. Copyright Law Objectives:

- encourage expression of ideas in tangible form so that ideas become accessible to others
- restrict the use of creative works in society as an incentive for authors to bring forth their knowledge, information and ideas
- protection subsists in original works of authorship and author is owner of the copyright upon creation

Protections Provided

Allows copyright holder to bar others from:
- making copies of the work
- creating derivative works
- performing or displaying the work in a public manner

Independent creation of a substantially similar work is permitted. (Contrast with patent)

Registration of Copyright

- not required but has benefits

1. Must register to bring action for infringement
2. Registration provides documentation of your creation
3. Prima facie evidence of validity of the copyright

To claim statutory damages and attorney's fees, registration must be within three months of publication or prior to infringement. Otherwise, only actual damages available. Three years from infringement in which to bring action.
Copyright Damages

Traditional Actual Damages
504(a)(1) Copyright Act
“the copyright owners damages and any additional profits of the infringer…”

Statutory Damages
504(c) - copyright owner may elect instead statutory damages

1999 DMCA
• behavior unproven as “willful” - statutory damages are “not less than $750 or more than $30,000” per infringement
• behavior “willful”, damages not more than $150,000 per infringement

Supreme Court Decision (1998)
- amount of statutory damages now a jury issue if one of parties so requests

Registration is easy:
Send short application, fee and two copies of published work to Copyright Office, U.S. Library of Congress
Limitations:

- Copyright protects only expression, not facts
  - The expression protected must be product of intellectual creativity and not merely labor, time, or money invested
  - Protected elements of the resulting work are precisely those that reflect creativity and no more

Copyright may be had in compilations of facts but only if "authorship" exists in the "selection, coordination, or arrangement"
- Only a modicum of creativity required
- Protection extends only to author’s original and creative "selection, coordination, or arrangement"
- "Thin protection" (although thin, does protect against wholesale copying)

Ideas, systems and principles are not protected by copyright.

The primary objective of copyright law is not to reward authors, but to promote science and useful arts.
Respondent Rural Telephone Service Company is a certified public utility providing telephone service to several communities in Kansas. Pursuant to state regulation, Rural publishes a typical telephone directory, consisting of white pages and yellow pages. It obtains data for the directory from subscribers, who must provide their names and addresses to obtain telephone service. Petitioner Feist Publications, Inc., is a publishing company that specializes in area-wide telephone directories covering a much larger geographic range than directories such as Rural's. When Rural refused to license its white pages listings to Feist for a directory covering 11 different telephone service areas, Feist extracted the listings it needed from Rural's directory without Rural's consent. Although Feist altered many of Rural's listings, several were identical to listings in Rural's white pages. The District Court granted summary judgment to Rural in its copyright infringement suit, holding that telephone directories are copyrightable. The Court of Appeals affirmed.

Held:
Rural’s white pages are not entitled to copyright, and therefore Feist’s use of them does not constitute infringement.

Further Doctrines:

1. Meger Doctrine under U.S. Law
   - facts not copyrightable
   - if there is only one or a limited number of ways of expressing the facts, the “expression is one with the facts” and not copyrightable
   - if permissible to copy indirectly, permissible to copy directly (e.g. Feist)
2. Computer Assoc. vs. Altai (p. 423 Perritt)
   - software test for infringement of originality

   If we were to apply test to datasets:
   A. identify unprotectable elements of data set
      - facts, processes, systems, etc.
      - “expressions dictated by efficiency considerations or external considerations” such as making data set compatible with other data sets or software (i.e. “standard” means “unoriginal”)
   B. remaining elements are “golden nuggets of expression”
      - were they copied?

Comports with Feist - facts expressed in standard form are quite ordinary and non-original

In the U.S. can you copy software in order to decompile to make another program interoperate with it? Yes

3. First Sale Doctrine

   … once a copyright owner sells a copy of his work to another, the copyright owner relinquishes all further rights to sell or otherwise dispose of that copy
   Bobbs-Merrill Co. v. Straus, 210 U.S. 339 (1908)

   - relevant in a world of electronic licensing?
4. Fair Use Exceptions under Copyright Act

…the fair use of a copyrighted work … for purposes such as criticism, comment, news reporting, teaching (including multiple copies for classroom use), scholarship, or research is not an infringement of copyright.

…factors to be considered include -
(1) the purpose and character of the use, including whether such use is of a commercial nature or is for nonprofit educational purposes;
(2) the nature of the copyrighted work;
(3) the amount and substantiality of the portion used in relation to the copyrighted work as a whole; and
(4) the effect of the use upon the potential market for or value of the copyrighted work.

- relevant in a world of electronic licensing?

Example: Use of Maps

Can I use a map or spatial dataset created by other private individuals in my dataset compilation without permission?

- Map may already be in public domain
- Elements of the map you wish to use may not be protected by copyright

Maps are primarily pictorial representations of geographic, physical and demographic facts organized to make the information portrayed more readily understandable.
Tension between Basic Principles:

Maps are explicitly protected by the Copyright Act

BUT

Facts are not protected and ideas, procedures, processes, systems and organizing principles are not protected

While the map as a whole might be protected, many maps contain primarily unprotected elements.

Question:

Can one take the copyrighted map of another (whether in paper or digital form) and copy or extract certain features (i.e. roads, buildings, streams, etc.) to create a new map?

Answer:

In a digital environment, if one extracts only facts and standard arrangements of factual information and perhaps adds one’s own “creative” features of color and style, copyright infringement is unlikely.

Do the following acquire protection from wholesale copying under copyright law? Contain any original expression?

- contour line
- digital orthophoto image
Does this mean that all is lost?
- “modicum” of creativity almost always reached
- other laws often will protect data sets
- self-help mechanisms appear to be working effectively
- information economics far more critical than property rights

Additional approaches suggested or being used to protect data sets
I. Legislative Proposals to Limit the Subject Matter of Copyright
   (1) Expel works of low authorship (e.g. databases, compilations, photos, etc) from copyright domain.
       Protect some with sui generis legislation
   (2) Protect marginal works that possess "minimal creativity" but narrow scope of rights protected
   (3) Protect marginal works that possess "minimal creativity" but broaden scope of rights protected
       (i.e. protect "sweat of the brow")
   (4) Protect the originality aspects of marginal works through copyright but add additional source of protection for rest of work
       (e.g. database legislation - unfair competition law at national level?)
II. Use Contracts or Extra-Copyright Regimes to Achieve Copyright Results

(1) Contracts/Licensing
If access to the database can be controlled, contracts afford broader scope of coverage and protection.
   a. If contract conflicts with copyright, conflicts of law rule would respect choice of the parties (i.e. contract controls over conflicting copyright provisions)
   b. If contract departs too drastically from copyright norms, court may hold contract in violation of public policy (i.e. "copyright misuse" - anticompetitive contractual conditions)

Additional Self Help Methods -
see Information Rules by economists Carl Shapiro and Hal Varian
   - lists many different ways to make money that don’t depend on retaining intellectual property in the information (i.e. alternative economic models)

(2) Copyright Equivalents
1992 Audio Home Recording Act - tax on blank tapes to compensate right holders
Copyright: Federal Government Records

US copyright law expressly forbids Federal agencies from imposing copyright

- Major difference from other nations

Title 17

§105. Subject matter of copyright: United States

Government works: Copyright protection under this title is not available for any work of the United States Government, but the United States Government is not precluded from receiving and holding copyrights transferred to it by assignment, bequest, or otherwise.

Definitions: A “work of the United States Government” is a work prepared by an officer or employee of the United States Government as part of that person’s official duties.

Why was this provision included in our national copyright law?

- fundamental belief that government copyright is the antithesis of "open access" whereby an informed citizenry can check official abuses
- individuals ought to be able to derive benefit from public goods - sound economics
- education is inherently good
What about state and local governments in the US?
- most state and local governments have the option of imposing copyright
- wise to do so?

Short Review
Generally:
To copy database which is property of another, need permission.
To re-publish database which is property of another, need permission.
To re-publish work in public domain, no permission required.
  a. works of U.S. government
     - typically okay (Caveat: If re-publishing significant amounts of U.S. information, need to provide notice to consumers)
  b. works of foreign, state, and local governments
     - may be copyrightable
  c. work of third parties under federal contract
     - may be copyrightable
Caveats:

Some government works not available under FOIA or open records laws.

Even if they are available from government, private ownership interests may exist in them.

How do you know if a data set, article, book or map is in the public domain?

II. Patent Basics

What is the purpose of patent?

- Federal government grants a patent to an invention for a limited period of time in exchange for public disclosure of the invention

Incentive:

invention owner gains control of the exploitation of the invention

<in exchange for>

expanding the common knowledge of the public in relation to that invention
Rights gained:
right to exclude others from making, using or selling the invention described and claimed in the patent

-in US, only federal government grants the right, no basis in state law
- each country grants patents
- no international patents

Classes of patents:
• utility patents - “any new and useful process, machine, manufacture, or composition of matter, or any improvement thereof.” 35 USC sec 101
• plant varieties
• designs for utilitarian devices

Term:
utility and plant patents - maximum of 20 years from date of application filing with US Patent and Trademark Office
design patents - maximum of 14 years from date of issuance
Requirements:

- Application must completely describe the invention
- Must disclose the “best mode” of the invention
- All details to duplicate or practice the invention must be described
- Cannot hide any key aspects

- Application is a fairly complex document that consists of a mix of technical and legal characteristics
- Aside from direct filings by original inventors, only individuals registered to practice before the PTO are entitled to represent owners in the prosecution of patent applications
- Must be filed in the name of the human inventor but invention may be assigned

One year deadline for filing. Triggered by:
  a) A public use or display of the invention
  b) A publicly available document describing the invention
  c) The sale, or offering for sale, of the invention, or
  d) An oral description of the invention presented in a public forum
In most nations, no public disclosure allowed prior to the filing.

Under certain patent conventions, possible to rely on a US patent filing date as the filing date in many other countries.

Once application filed with the PTO, has “patent pending” status.

Examiner at the PTO reviews the application and “prior art”.
- In most instances, examiner initially “rejects” the application based on the alleged teachings of prior art references deemed relevant by the examiner.
- Applicant permitted to respond by (1) modifying the scope of the invention and/or (2) addressing prior art arguments.
- Assuming examiner agrees, application issued.

Process typically 2-3 years
- Can’t initiate litigation to bar another from making, using or selling without first obtaining the patent.
- Can be applied retrospectively from date of filing.
### III. Trademarks

**General Principles**
- What does trademark protect?
- Who owns?
- How long?

**Objectives**
- Protections provided

**Limitations**

### IV. Trade Secret

**General Principles**
- What does trade secret protect?
- Who owns?
- How long?

**Objectives**
- Protections provided

**Limitations**