Introductions

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University Technology Transfer

Law

Business

Science
University Technology Transfer

Intellectual Property Management

Entrepreneurship Innovation

Technology Acceleration
Types of Intellectual Property
<table>
<thead>
<tr>
<th>Types of Intellectual Property</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patent</td>
<td>Protects ideas, concepts, inventions, function, compositions of matter, and design</td>
</tr>
<tr>
<td>Copyright</td>
<td>Protects expression and communication of ideas reduced to a tangible form</td>
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<tr>
<td>Trademark</td>
<td>Protects identifying symbols, used in trade to indicate origin or distinguish products and services</td>
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<tr>
<td>Trade Secret</td>
<td>Protects proprietary material which, if kept secret provides a commercial advantage to the owner</td>
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<tr>
<td>Right of Publicity</td>
<td>Protects an individual’s image and name from being misappropriated</td>
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# Types of Intellectual Property

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- Provides a monopoly on the invention that is claimed in the patent
  - Utility patent 20 year monopoly
  - Design patent 14 year monopoly
  - Plant patent 20 year monopoly
- You don’t have to practice your invention, but you can stop others from practicing it
- Requirements for Patentability
  - Useful
  - Novel
  - Non-Obvious
- Advantages of Patent:
  - Clear Protection Position
- Disadvantages of Patent:
  - Costly
## Types of Intellectual Property

### What is Patentable?
- Composition of Matter
- Machine/Device
- Method/Process
- Item of Manufacture
- An Improvement Technology

### What is NOT Patentable?
- Laws of nature
- Physical phenomena
- Abstract ideas
- Products of nature that are not altered by human intervention

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- Protection of an original work of authorship fixed in a tangible medium
- Protects the expression of the idea, not the idea itself
- Copyrights are a SET of rights:
  - Reproduction
  - Distribution
  - Adaptation
  - Performance
  - Display

**Advantage**
- Cheap to Register & Maintain

**Disadvantage**
- Potentially Difficult to Enforce
Types of Intellectual Property

- Copyrightable works include the following categories:
  - literary works
  - musical works, including any accompanying words
  - dramatic works, including any accompanying music
  - pantomimes and choreographic works
  - pictorial, graphic, and sculptural works
  - motion pictures and other audiovisual works
  - sound recordings
  - architectural works

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Types of Intellectual Property

- Copyright Considerations
  - Patentability
  - Ownership
  - Coding Language
  - Open Source
  - Executables

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<td>Disadvantage</td>
<td>Less Valuable at Early Stage</td>
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- Word, symbol, name, device, color or combination thereof that identify the origin of goods or services
  - Trademarks – identify goods
  - Servicemarks – identify services
  - Trade dress – identifies the look of the brand
- Designed to protect the CONSUMER and prevent confusion in the marketplace
- Most likely are only going to be part of an agreement that includes other intellectual property (ex. patents or copyrights)
- Register the trademark before starting any marketing activity
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- Information that is generally not known and is not discoverable, which, if kept secret, provides an economic advantage to the owner.
- Examples:
  - Formula for KFC chicken
  - Chanel No. 5
  - Coke Recipe
  - Software distributed in Object Code form
  - Customer lists
  - Formulas
  - Business plans
  - University, as a public institution, cannot have these – we must disclose information.
- May be the only IP available.
- Monetization is difficult unless you can tie it to other IP.
Protection of Intellectual Property
Patents

- Requires full disclosure (enablement) so that someone of ordinary skill in the art could practice it
- 3 main sections
  - a cover page which presents bibliographic information,
  - a specification, which describes the invention and the best way of making or using it, and
  - claims, which define the scope of the invention from which the patent owner has the right to exclude others
Legal Requirements for Patenting

The Invention Must Be ALL of the Following:

• Useful
  • the invention has “utility” or has “industrial application”
• Novel
• Non-Obvious
  • to one of ordinary skill, taking into account what was known in the technical field at the time (the “prior art”)
Statutory Bars to Patenting

**US Applications**
- A US patent is barred if any of the following occurs before the application is filed:
  - Invention is patented or described in a printed publication anywhere in the world
    - Unless the publications are made by the inventors, in which case there is a one year grace period whereby the inventors own publications cannot count as prior art against their application
  - Invention is in public use
  - Invention is offered for sale

**Foreign Applications**
- Require absolute novelty
- Patent application must be filed before ANY enabling public disclosure, public use, or offer for sale
What Constitutes a Public Disclosure?

- Abstract
  - on-line or in print
- Poster presentation
- Public presentations
  - e.g. thesis defense, conference presentation
- Published and shelved thesis
  - potential art even if nobody has taken it off the shelf
- Manuscript
- Awarded Grants
- Public use
- Offer for sale
How do you get a copyright?

• Federal Copyright protection is inherent in creation of a work
  • You create it, you get it
  • Marking with © is not required (but is a good idea)
• Federal registration is optional, but required if you are going to sue for copyright infringement
• Registration gets you additional benefits if you sue for infringement (statutory damages and attorney fees)
How long does a copyright last?

• For new works (post 1978):
  • Personal works = Life of the author + 70 years
  • Works for hire = Lesser of 95 years from publication, or 120 years from creation
• Protections can go back further, but get complicated!
Myths about Copyright

• If it doesn't have a copyright notice, it's not copyrighted
• If I give credit I don't need permission
• Since I'm only using a small portion of the original work, I don't need permission
• I don't need permission because I'm going to adapt the original work
• If I don't charge for it, it's not a violation
• If it's posted on the internet it's in the public domain
• If you don't defend your copyright you lose it
• If I make up my own stories, but base them on another work, my new work belongs to me.
• I can always obtain permission later
• I can mail myself something to prove the date I copyrighted it
How do you get a trademark?

• Start using it! ™ (common law mark)
• Federal registration possible ® (federally registered mark)
• US recognizes rights based upon usage, most other countries base rights upon registration
• Trademark must be used in interstate commerce (or used within 1 year of filing) before it can be federally registered
• As long as you use it, you have it
How do you lose a trademark?

- Use of a trademark as a verb or a noun to mean a generic version of the product or service
  - Just GOOGLE it...
  - Just TIVO it...
  - Give me a KLEENEX...
- Under U.S. law, genericide is a form of abandonment. A mark will be deemed to be “abandoned” if: (1) its use has been discontinued for three years with intent not to resume such use; or (2) when the mark becomes the generic name for the goods or services on or in connection with which it is used
- Kills a trademark forever – very difficult to recapture
  - escalator, aspirin, granola, etc...
Protecting Trade Secrets

- Need to be kept under lock and key
- Once out, value is lost
- Can be used as a marketing tool (ex. Coca-Cola)
- Tremendously valuable as long as private!
- Commonly used with software (object code vs. source code)
Commercialization of Intellectual Property
Commercialization Options

Manufacturing & Distribution
- “Self-Publishing”
- Most institutes don’t carry the liability!
- Greatest risk/reward

Sale or Assignment
- May lose out on ability to conduct additional research
- May lose out on future rights
- Might be the only option in some cases

Licensing of IP Rights
- Most common institutional commercialization option
- Provides all necessary commercial rights
Open Source

The Open Source Definition

Open source doesn't just mean access to the source code. The distribution terms of open-source software must comply with the following criteria:

1. Free Redistribution
2. Source Code
3. Derived Works
4. Integrity of The Author's Source Code
5. No Discrimination Against Persons or Groups
6. No Discrimination Against Fields of Endeavor
7. Distribution of License
8. License Must Not Be Specific to a Product
9. License Must Not Restrict Other Software
10. License Must Be Technology-Neutral

No provision of the license may be predicated on any individual technology or style of interface.
Why do Technology Transfer?

• Academic research and creativity is critical to a nation’s innovation and R&D capacity
• The patent system is the vehicle which permits much delivery of the resource to the public
• It is in the public interest to place stewardship of research results in the hands of institutes and small business
• Strong incentive for research collaborations with industry
• Financial support to faculty and institution
• It is often the law
Technology Assessment
Come see us! (virtually ;)

UH Technology Bridge

CONNECTING
PEOPLE + IDEAS

Get Connected