# Intellectual Property

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Intellectual property: the basis for many new products, service, and ventures

- Intellectual property
  - patents,
  - copyrights,
  - trademarks and
  - trade secrets.
- Key Asset Access
- Proof of concept –Selling the product in advance
   (Use the ILinc Success magazine article that related how we did this for millions.)

#### The Four Key Forms of Intellectual Property (IP)

- Patents
- Copyright
- Trademarks
- Trade Secrets

- Detailed information may be found in my text on Technological Entrepreneurship
  - http://www.jackmwilson.net/Entrepreneurship/TE/TE-Chap4-IntellectualProperty.pdf
- I also have several cases that illustrate these principles
  - http://www.jackmwilson.net/Entrepreneurship/Cases/Case-CRISPR-MITvsUC-IP.pdf
  - http://www.jackmwilson.net/Entrepreneurship/Cases/Case-Napster-Ethics-Legal.pdf

# **Patents**

Patents are often the first thing that scientists or engineers think of when dealing with intellectual property.

- Patents
  - A patent is a grant from the federal government conferring the rights to exclude others from making, selling, or using an invention for the term of the patent as many as 20 years.
- To obtain a patent, an invention must:
  - Be novel
    - It must be something that is completely new. If others have done it before and disclosed that, then it cannot be patented.
  - Not be obvious to a person of ordinary skill in the field
    - This is often the point around which patents disputes start. If one can show that an idea
      would be obvious to anyone skilled in the field then it cannot be patented. Sometimes
      that can be in heavy dispute.
  - Be useful
    - You cannot patent something that does not have an obvious immediate use.
- Prior to 2013 you had to be the first to invent.
   Now you need to be the first to file.

#### Three forms of patent protection

There are three basic forms of patent protection that are each designed to do something a bit different.

#### The Utility Patent:

- Duration is 20 years from the date of the original application.
- It is awarded for any new or useful process, machine, manufacture, or composition of material or any new and useful improvement thereof.

#### The Design Patent

- The duration is 14 years from the date the patent is awarded.
- It is awarded to protect the invention of a new, original, and ornamental design for manufactured products.

#### The Plant Patent

- The duration is 20 years from the date of the original application
- It protects any new varieties of plants than can be reproduced asexually.

### What Can You Patent?

### You can patent any:

- Process
- Machine
- Manufacture
- Chemical formula
- Design
- Plants

#### The Business Method Patent

In 1998, a Federal Court ruling assigned the US Patent and Trademark Office (USPTO) with the responsibility of issuing patents for unique **automated technologies** that process data or generate revenue (i.e. business models, methods, processes—including computer software).

Suddenly, e-commerce features such as subscription-based access, targeted advertising networks, portal sites, online auctions, virtual malls, and even forums were now considered business models, methods, and processes that could be patented.

The Business Method Patent has become a very important form of patent in the eCommerce and other internet mediated business interactions. A business method patent is a patent that protects an invention that is or facilitates a method of doing business.

- This includes new types of e-commerce, insurance, banking, tax compliance etc.
  - This is a relatively new type of patent and continues to be the subject of controversy and litigation.
- Here are a few important examples:
  - Amazon.com's one-click ordering system,
  - Priceline.com's "name-your-price" business model
  - Netflix's method for allowing customers to set up a rental list of movies to be mailed to them.

#### Advantages to patents

### There are some definite advantages to having a patent

- Provides a monopoly right for the life of the patent
- Raises the cost of imitation
- Helps to raise capital by demonstrating competitive advantage
  - Investors like to see that the intellectual property behind a new venture is protected so that someone else cannot come along and easily enter the same market.
- Prevents a second party from using the invention as a trade secret
- Cross-licensing (with potential royalties or joint profits)

#### Disadvantages of patents

- Requires disclosure of the invention
  - This means that others can see how you did it.
- Provides only 14-20 year monopoly
  - When a drug goes off patent, then the generic imitations quickly eliminate the original market.
- Can be circumvented
  - By looking at your disclosure, a competitor might find a way to invent around your patent.
- Difficult and costly to defend
- Less effective for most types of technology
  - Can be irrelevant if technology is fast moving
- Requires world-wide patent application
  - And the rules are different and the process is costly, but failure to do so means that you may lose the market in that country.

Remember that it is more costly to defend and enforce a patent than it is to obtain a patent.

#### **Trademarks**

A trademark is any word, name, symbol, or device used to identify
the source or origin of products or services and to distinguish those
products or services from others.



ApplePay
iPad
iPod
iPhone
But not iWatch!







## Coca Cola keeps its formula in a vault –Trade Secrets



### Trade Secrets (Coca Cola formula for example)

- A piece of knowledge that confers an advantage on a firm and is protected by non-disclosure
- Protect a competitive advantage without disclosing how an underlying technology works
- There are some disadvantages
  - Must be kept hidden to remain valuable
  - Doesn't provide a monopoly right
  - To enforce and claim damages in court, must show a loss of competitive advantage
- What qualifies for trade secret protection
  - Is not known outside the company
  - Is known only inside the company on a "need to know" basis
  - Is safeguarded by stringent efforts to keep the information confidential
  - Is valuable and provides the company a compelling competitive advantage
  - Was developed at great cost, time, and effort
  - Cannot be easily duplicated, reverse engineered, or discovered.
- If you don't take active steps to protect it, then you lose it.

### Copyrights

### Copyrights

 A copyright is a form of intellectual property protection that grants to the owner of a work of authorship the legal right to determine how the work is used and to obtain economic benefits from the work.

### What is Protected by a Copyright?

- Literary works
- Musical compositions (and derivative works)
- Dramatic works
- Pantomimes and choreographic works
- Pictorial, graphic, and sculptural works

#### **Key Asset Access**

- Today many companies are dependent upon things like
  - Facebook
  - Amazon Web Service –the Cloud
  - IBM Watson
- Hootsuite is a tool to manage twitter accounts.
  - <u>https://hootsuite.com/#</u>
  - Twitter could block access or go into competition.
  - Partnerships are often key to such relationships.
  - Larger companies often cut off potential competitors to their own products.

## What other factors do we need to pay attention to?

- What other resources will I need; how can I get them?
- What obstacles exist; how can we prevent or overcome them?
- What new challenges will be created; and dealt with?
- How can I encourage commitment to the plan?
- What feedback about the plan is needed?