

CASE

CASE WESTERN RESERVE UNIVERSITY

# Intellectual Property

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# Overview

- Introduction
- Speaker Background
- Technology Transfer Overview
- What is Intellectual Property
- Patents: A Primer
- IP Ownership and Rights
- The Importance of IP

# Speaker Background

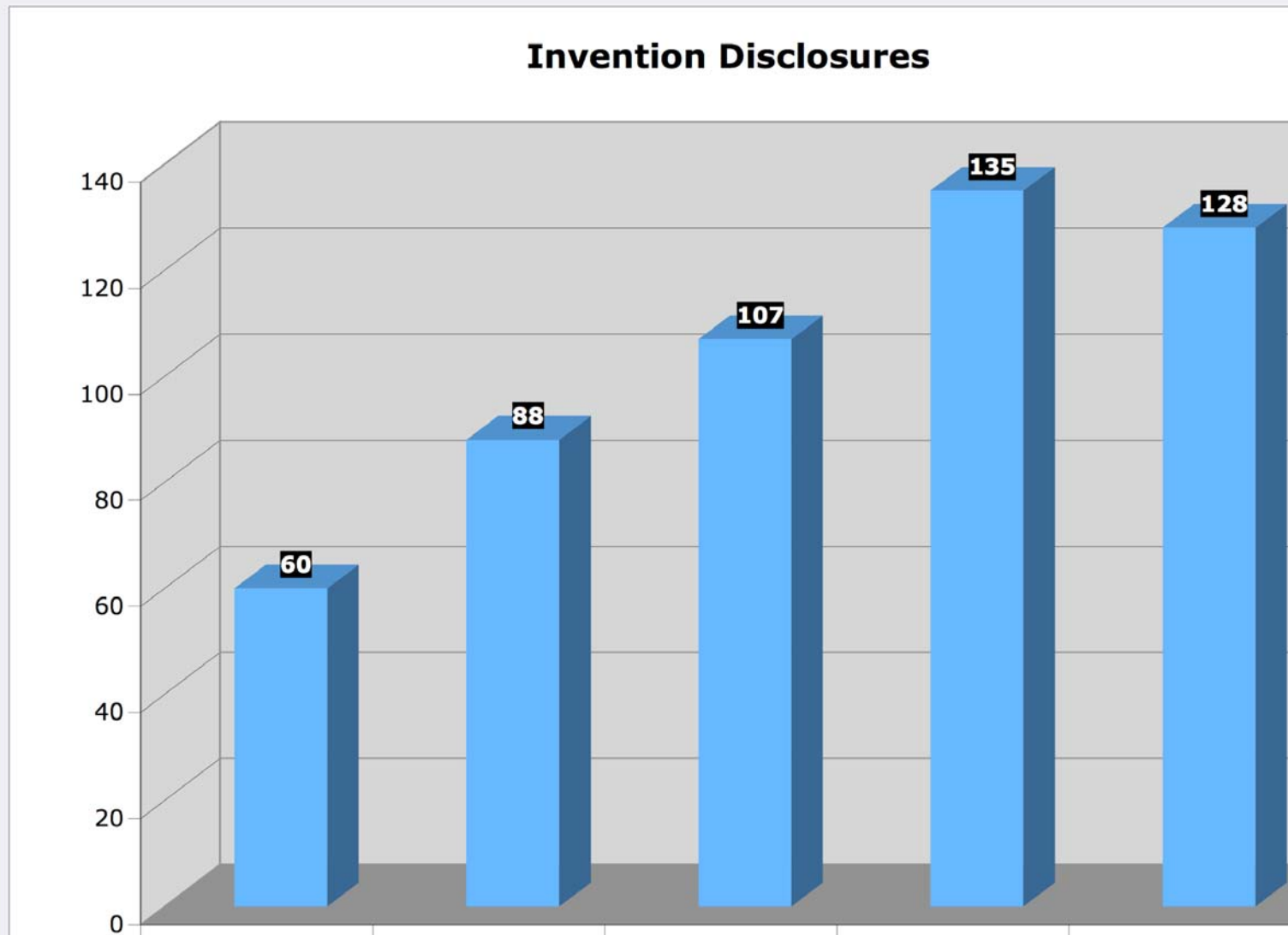
## ➤ Nick Frollini

- Assistant VP for Technology Transfer
- Managing Director, Case Technology Ventures
- Adjunct Lecturer, WSOM
- Joined Case in October 2001
- Trained as an industrial engineer/economist (Carnegie Mellon)
- Past eight years in technology commercialization and business creation
  - Redleaf Group, Director, M&A

# Technology Transfer

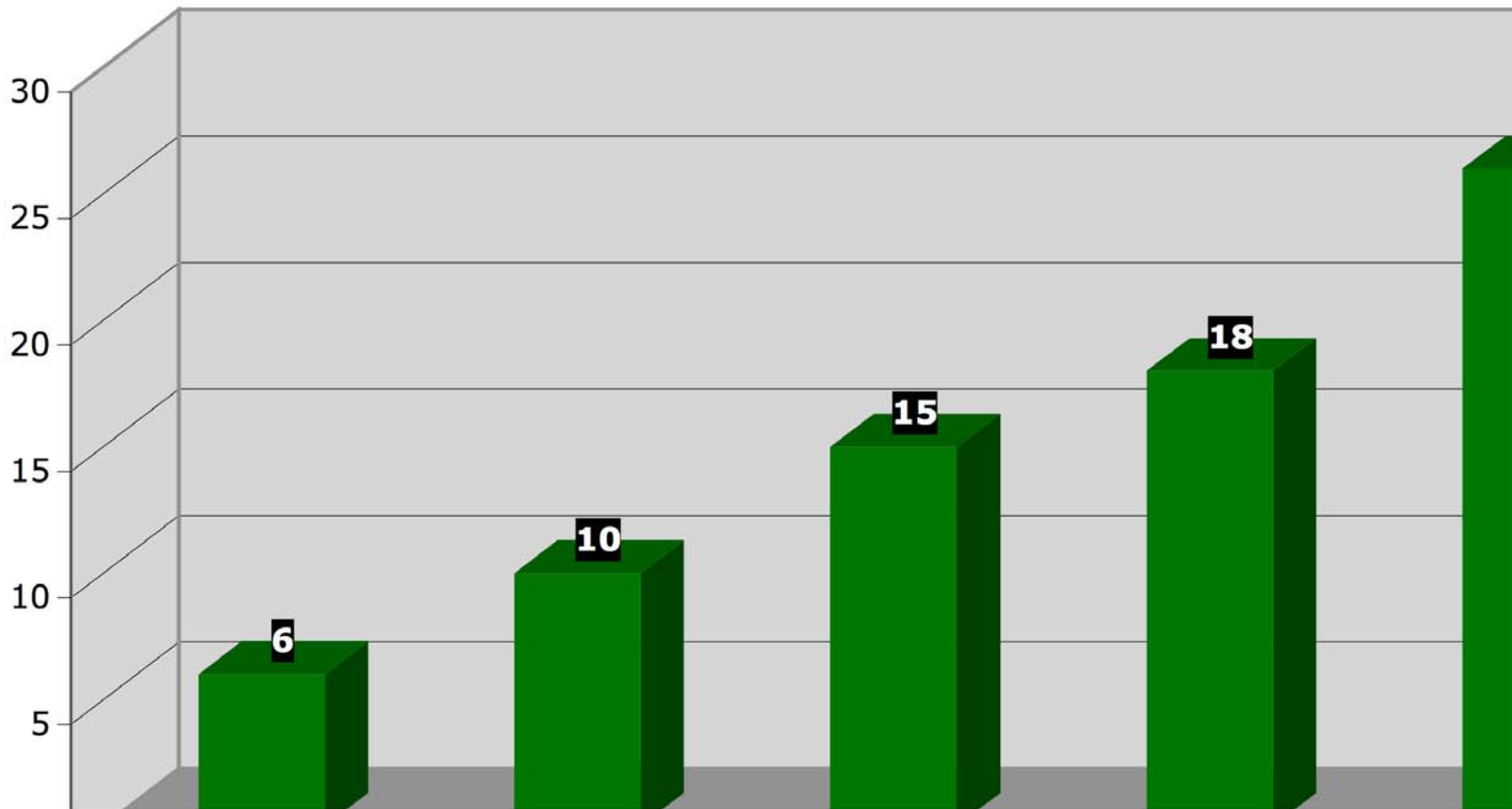
- What is technology transfer?
  - Process of taking ideas out of the laboratory and putting them into commercial use.
- How is that done?
  - Creating new companies.
  - Licensing IP to existing companies.

# Tech Transfer @ Case: Results

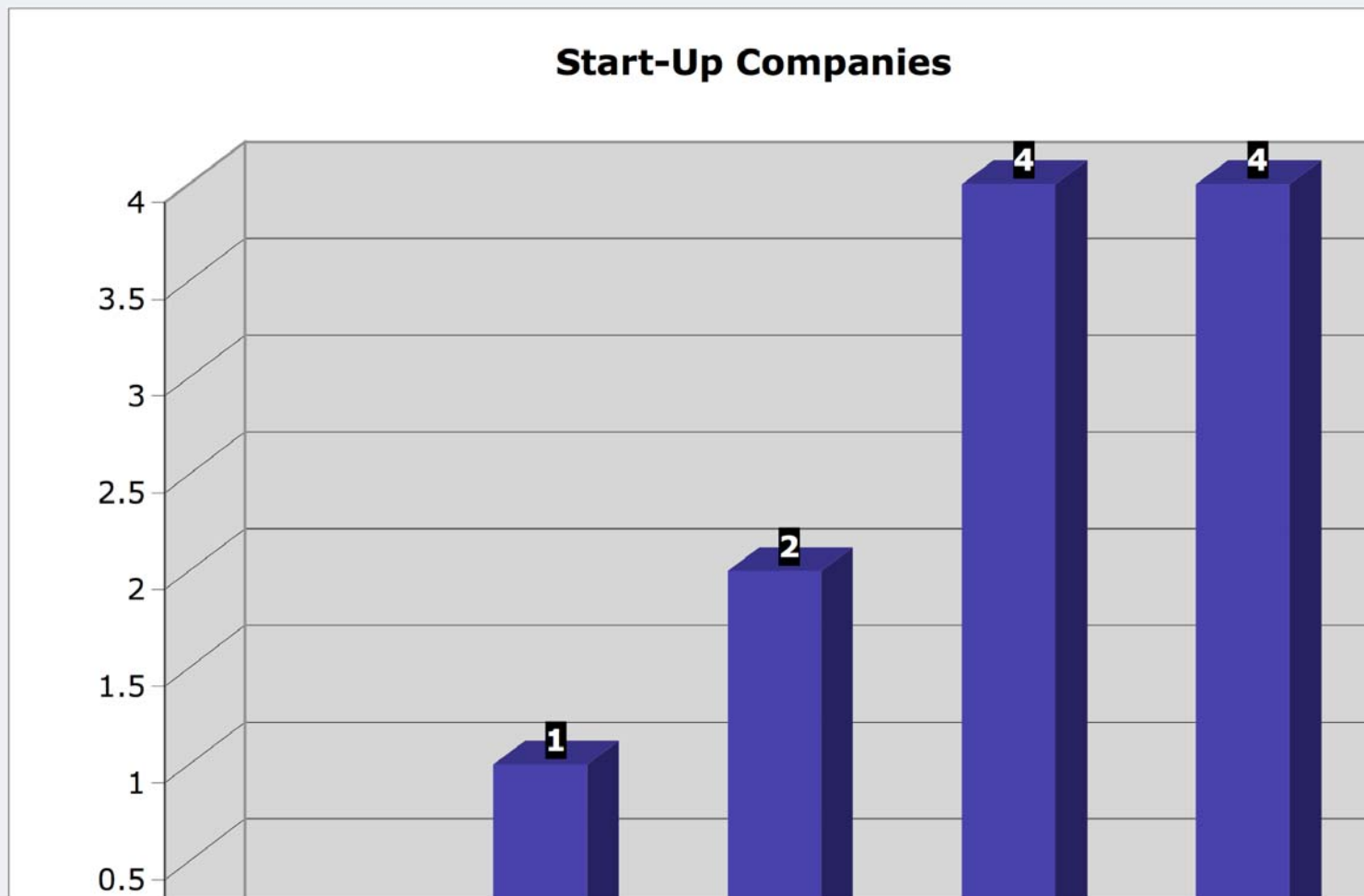


# Tech Transfer @ Case: Results

**Deals (Licenses, Options, and Related)**

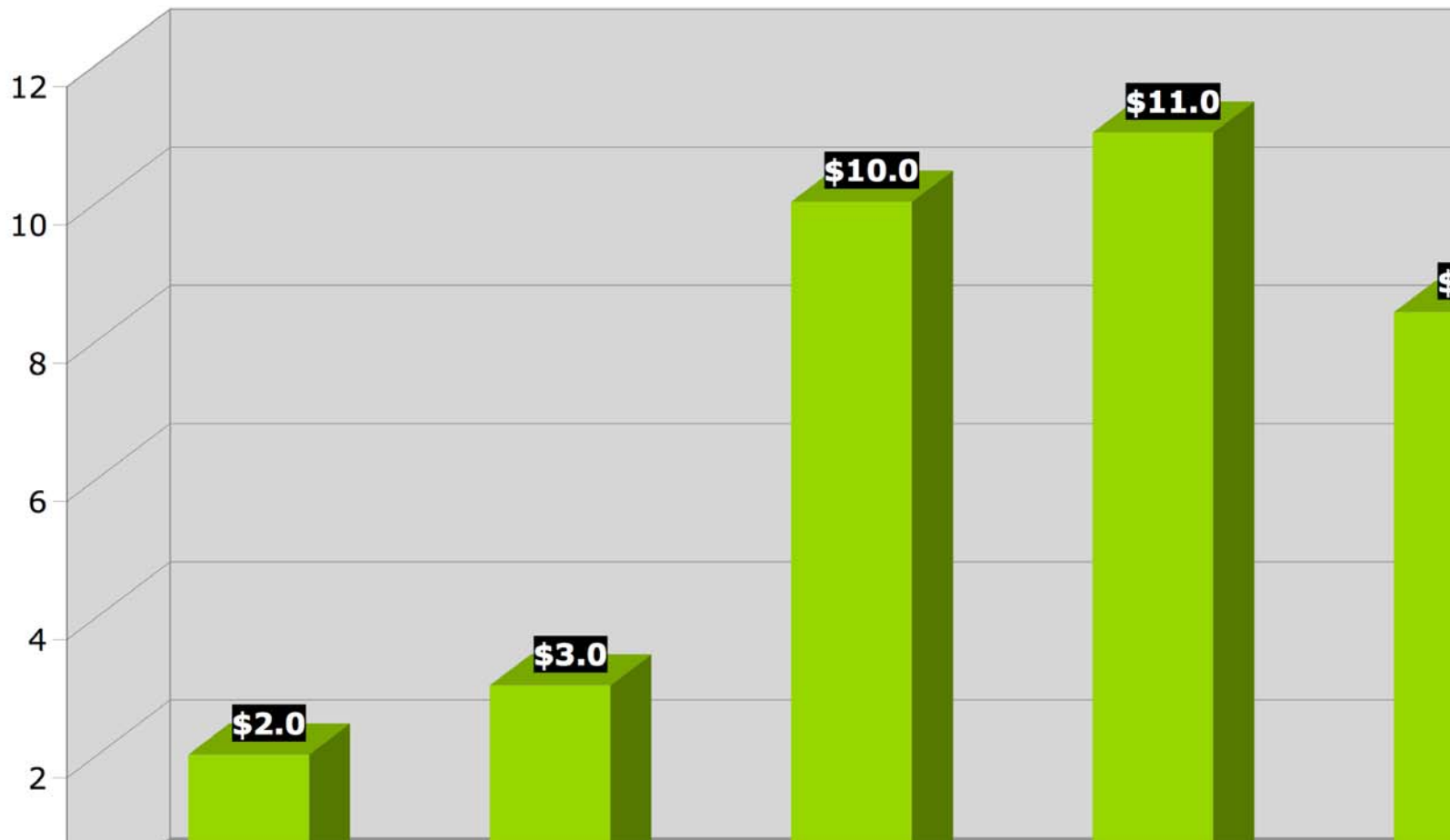


# Tech Transfer @ Case: Results



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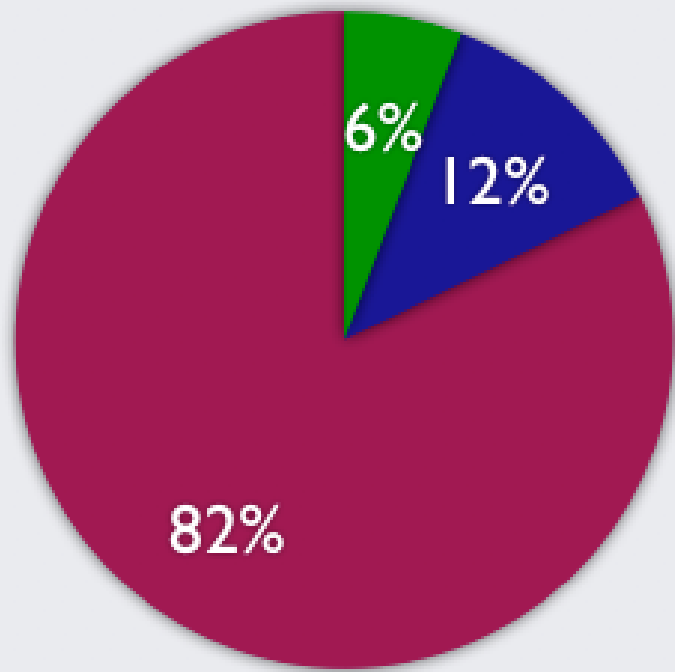
Licensing Income (\$ MM)



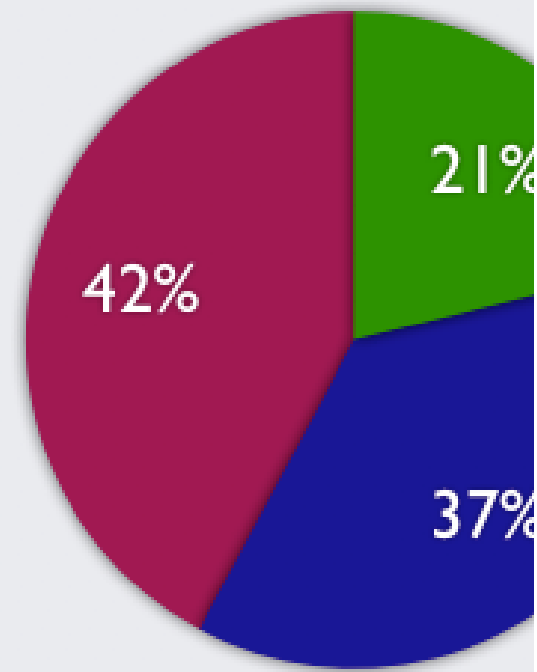


# Engineering Dominates External Research Funding vs. External Funding

External Research Funding



New Invention Disclosures



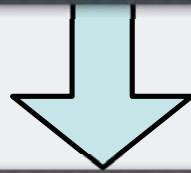
● College of Arts & Sciences

# Significance Dominates @ 0.05 *Conventional disclosures per \$1MM in F*



# What is the Process?

Receive/Solicit Ideas from Case People (Invention Disclosure)



Phase One - Evaluation

Technical or Scientific Merit

Commercial Merit (Pre-Marketing)

Intellectual Property



Phase Two - Commercialization

Additional R&D Work

Sell Licenses

Obtain

# Intellectual Property (IP)

- We've mentioned it a number of times, but... what the heck is

# Intellectual Property (IP)

- An intangible asset
  - You can't always see it, touch it or taste it, but...
- It may have substantial value
- You can sell it
- You can assign it
- You can license it

# Types of IP

## ➤ Copyrights

- Written works, including software
- Term: author's life plus 70 years, or 95 years from publication or 120 years from creation

## ➤ Trademarks

- Logos, slogans, etc.
- Term: 10 years, renewable

## ➤ Trade Secrets

- Secret company information (the formula for Coca-Cola)  
Term: unlimited

## ➤ Patents

# Patents: What Are They?

- Contract between the inventor and the government
  - What do you get?
    - A limited monopoly -- you can exclude others from making, using, selling, importing the invention
  - What does the government get?
    - You must disclose how to make the invention; when the patent expires the invention enters the public domain

# What isn't a patent?

- The right to practice an invention
- Other patents may 'dominate' your patent



# Types of Patents

- Utility (most common)
- Design (how something look
- Plant (yes, a plant)

# What can be patented?

- Process
- Machine
- Manufacturing process
- Composition of matter
- Business method
- Computer software
- Organism
- Genetically engineering materials
- Asexually produced plants
- Trees

# What cannot be patented?

- Natural phenomena
- Natural laws
- Abstract ideas
- Perpetual motion machines

# What constitutes an invention

- Conception (more than just a vague idea)
- Reduction to practice (prototype)
- Note:
  - In the U.S., the first person to invent something is entitled to the patent
  - In the rest of the world, the first person to file a patent application is entitled to the patent

# limits on patentability

- You can't obtain a patent if...
  - The object sought to be patented already in common use
  - It is obvious to one skilled in the art
  - It was described in a printed publication more than one year before the date of application (U.S.)

# Patent Process

- An application (and fees) is filed at the US PTO
- An examiner (eventually) reviews the application
- Negotiations/discussions are held with the patent application (patent prosecution)
- A patent may be issued with claims

# Ownership and Rights

- Who owns your invention?
  - **It might not be you if...**
    - You are a researcher at a university
    - You work for a company
    - You are a graduate student
    - You are an undergraduate student on a co-op or internship

# Ownership and Rights

- People make money from IP selling, assigning, or licensing rights to that IP in exchange for compensation
  - License agreement
    - Patent
    - Copyright (software -- EULAs)
    - Trademark (merchandising)



# The Importance of IP

- Big business...
  - Character merchandising alone is a business in the U.S.
  - Universities bring in millions from licensing revenue
    - Ever hear of Gatorade?
  - Allows companies to maintain market positions
    - Amazon's One-Click patent

# Patent litigation...

- Is also a big business...
  - SCO - suing numerous users of Linux for alleged copyright infringement
  - Eolas - sued Microsoft for infringement of a patent related to web browser plug-ins, and was awarded \$52 million in damages
  - Apple vs. Apple - The Beatles' record company is suing Apple Computer

# osing and Q&A

- Thanks for your attention...
- I hope this has given you a bit of insight into IP issues
- We now have time for some questions...