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An Introduction to Intellectual Property

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Outline

Purpose: to inform you about the role of IP at UBC,
in companies, and in your own business

- ▣ Patents
- ▣ Copyright
- ▣ Trade-mark
- ▣ Trade secrets
- ▣ Licenses
- ▣ IP based Start-Ups



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Patents

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- Contract between the inventor, the assignee, and the state
- Full disclosure in return for a time & geographically limited monopoly to use, make, and sell
- Terms are state specific but subject to international conventions
- Typically 20 year term
- Costs roughly \$10 to 15k per country plus fees

United States Patent [19]		[13] Patent Number:	5,513,100
Parker et al.		[45] Date of Patent:	Apr. 30, 1996
[54]	VELOCITY CONTROLLER WITH FORCE FEEDBACK STIFFNESS CONTROL	4,874,998	10/1989 Hollis, Jr. 318/568.11
		5,019,761	5/1991 Kraft 364/190
		5,046,022	9/1991 Conway 395/94
[75]	Inventors: Niall R. Parker, Abbotsford; Peter D. Lawrence; Septimiu E. Salsudean, both of Vancouver, all of Canada	5,086,401	2/1992 Glassman et al. 901/8
		5,116,180	5/1992 Fung et al. 395/95
		5,206,930	4/1993 Ishikawa et al. 395/95
		5,341,459	8/1994 Backes 395/95
[73]	Assignee: The University of British Columbia, Vancouver, Canada	<i>Primary Examiner</i> —Roy N. Envall, Jr. <i>Assistant Examiner</i> —Thomas B. Brown <i>Attorney, Agent, or Firm</i> —C. A. Rowley	
[21]	Appl. No.: 74,645		
[22]	Filed: Jun. 10, 1993	[57]	ABSTRACT
[51]	Int. Cl. ⁶ G06F 19/00	A force feedback velocity control measures the forces adjacent the end point of an arm being controlled and adjusts the stiffness of a manual controller in any one direction by	
[52]	U.S. Cl. 364/167.01; 395/95; 318/568.18; 318/568.22; 901/9		

- Conditions for a patent
 - Patentable subject matter
 - New
 - Useful
 - Non-obvious



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Non-patentable Matter

- ❑ Idea
- ❑ Scientific Principle
- ❑ Abstract Theorem
- ❑ Method of doing business
- ❑ Medical Treatment
- ❑ Invention with Immoral or Illicit Purpose
- ❑ Software ?





Copyright

- Copyright protects memorandums, letters, books, CD's, software, website content, paintings, music, sculptures, films... any embodiment of an "idea"
- Copyright lasts for 50 years after the death of the author and is granted world wide automatically (146 countries)





Eligibility Requirements

- ▣ Originality
 - The creator benefits from copyright
- ▣ Fixation
 - The idea must be “written down”
- ▣ Nationality
 - Residency of qualifying country

Copyright: “commercial” rights

- ▣ Right to reproduce
- ▣ Right to perform
- ▣ Right to 1st publication
- ▣ Right of adaptation
- ▣ Right of translation
- ▣ Right of telecommunication

Copyright may be
waived, assigned or
licensed in whole or in
part

Copyright notice is NOT required

© The University of British Columbia, 2005

Fair dealing exemption

- ▣ Allows copying and use
- ▣ Must be less than “substantial”
- ▣ In CA, for research, private study, criticism, review or news reporting *





Moral Rights: “personal rights”

- ▣ Right of paternity
 - Claim authorship
 - Remain anonymous
 - Use a pseudonym
- ▣ Right of integrity
- ▣ Right of association

Moral Rights can only be waived by the original author. They cannot be sold or assigned.

Who Owns the Copyright?



- ▣ The creator
- ▣ The employer
- ▣ The contractor



Open source licenses

- ▣ General Public License (GPL), Lesser GPL, Apache License, Berkeley License, ... there are probably 100's of open source licenses
- ▣ License terms apply when software is “distributed”
- ▣ Attribution, endorsement, liability, right to distribute are usually addressed



- ❖ Critical IP components: patents, copyright, trade marks, trade secrets
- ❖ IP rights are “traded” through licenses, which can take many forms...
- ❖ Today, most businesses must pay great attention to the IP rights they need to produce and sell their product.

- ❖ **READ CAREFULLY. IF YOU DON'T KNOW, ASK!**



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Types of Intellectual Property

- ▣ **Patents**
- ▣ **Copyright**
- ▣ **Trademarks**
- ▣ **Trade Secrets**
- ▣ **Integrated Circuit Topography**
- ▣ **Industrial Designs**
- ▣ **Plant Breeders Rights**





What is Intellectual Property?

The principal rights governing the ownership and disposition of technology are known as “intellectual property” rights which are derived primarily from legislation granting patent, copyright, trademark and integrated circuit mask work protection



Part 3: TM Trademarks

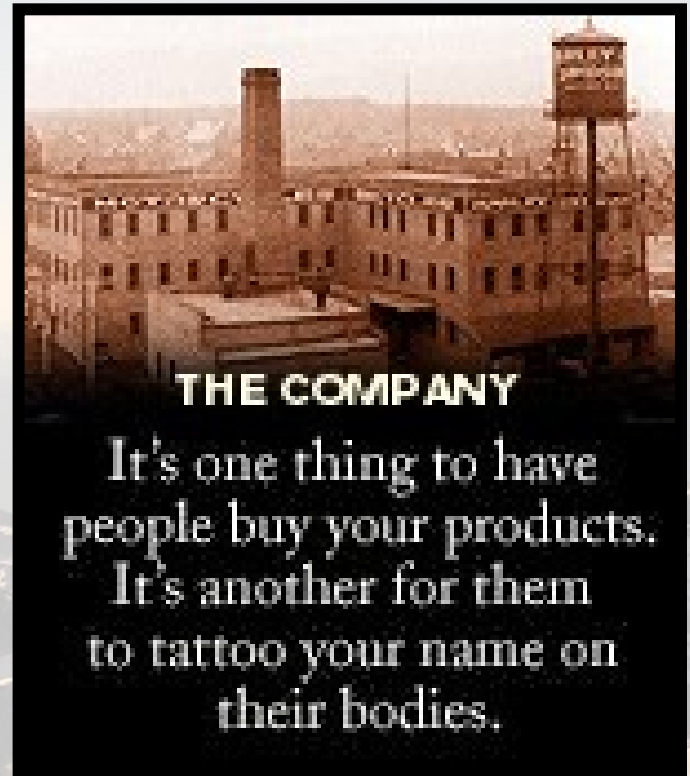
- ❖ A trade-mark is a word, a symbol, a logo, a picture, a design of goods, or a combination of these, used to distinguish the wares or services of one person or organization from those of others in the marketplace.
- ❖ Three categories of Trademarks
 - Words and symbols
 - Certification marks
 - Distinguishing guise

™ Registering A Trademark

- ❖ Costs roughly \$1,500 in Canada
- ❖ Country specific
- ❖ 15 year term (renewable)
- ❖ TM note required
- ❖ E.g.:



Harley Davidson Motorcycles™



Relevance of Intellectual Property

- ❑ IP is an asset and new currency of a knowledge based economy
- ❑ Kodak infringement on Polaroid patents - \$925 million
- ❑ Intermittent windshield wiper infringement cost Ford \$10.1 million
- ❑ Legal dispute between RIM and NTP cost RIM over \$600 million in settlement fees alone

Part 1: Question about Patents

- Question: Frank has been granted a US Patent on his invention, a widget. Does Frank have the right to use, make and sell his widget in the US?



Public Disclosure

A patent must be novel.

- If enabling, then public disclosure can bar patent filing including:
 - Public talks
 - Formal printed publications
 - Internet publication
- Can be protected through confidentiality agreement (also known as secrecy or nondisclosure agreements)



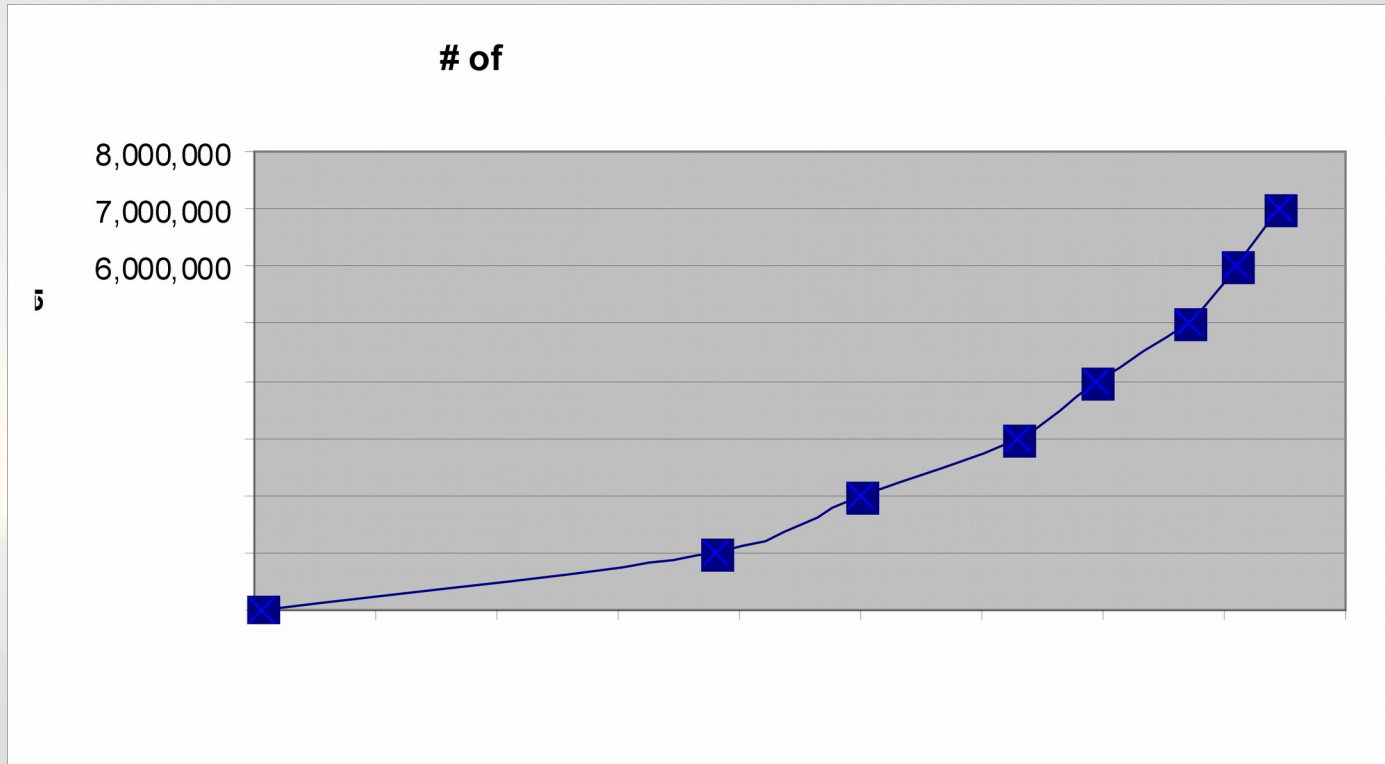


Why patent?

- ❑ Encourages individuals to disclose inventions
- ❑ Where large investments are required, patents provide some assurance that investor can recoup costs
- ❑ Potentially limits diffusion and exploitation of knowledge
- ❑ Concern that patents restrict access of under developed countries to new technologies
- ❑ Can you recover the costs of patent prosecution?

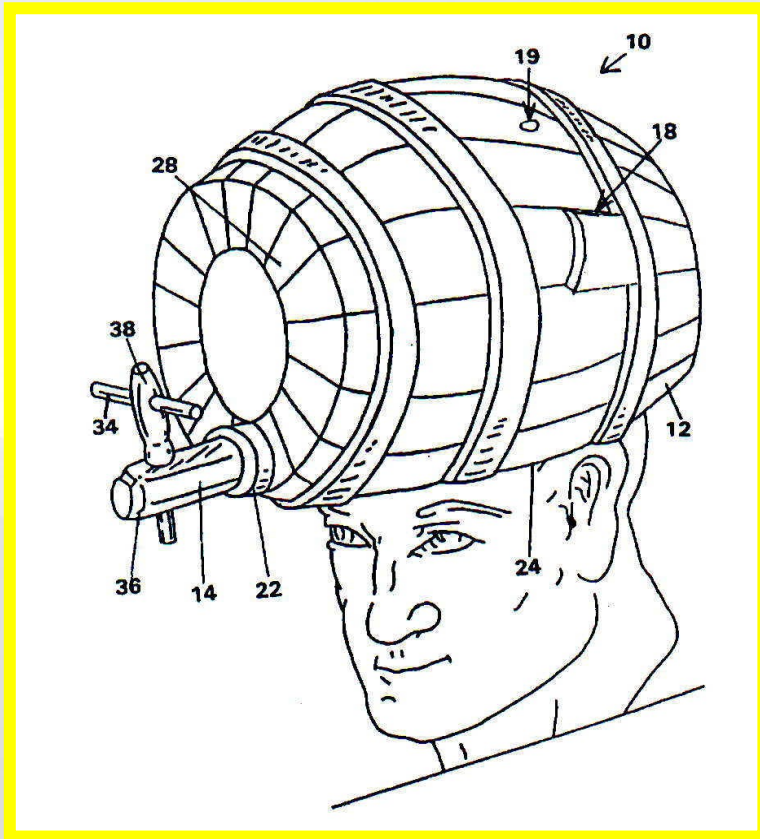


Patent Value



Some anecdotal studies suggest less than 1% of patents recoup their patent costs

US 5,966,743 - Substance dispensing headgear



A headgear for dispensing a substance has a container to carry the substance. A spigot is secured to the container. The spigot can be opened to dispense the substance by gravity, suction, pressure or levity flow. A hat-like recess is formed within the bottom wall of the container sized for wearing on an individual's head, and for maintaining the container in a freestanding condition during hands-free ambulation of the individual.

Question about Patents

- Question: Frank has been granted a US Patent on his invention, a widget. Does Frank have the right to use, make and sell his widget in the US?
- Answer: Not necessarily. Frank may require patent rights held by another patent holder (Frank's invention is an *improvement* on another invention). He requires a *license* from the other patent holder.

Qualcomm vs. Broadband

- ❖ Qualcomm: inventor of CDMA cell phone technology
- ❖ May 2005: Broadcom sues Qualcomm for patent infringement
- ❖ January 2007: Broadcom wins jury verdict against Qualcomm on 3 patent infringement
- ❖ May 2007: judge awards Broadcom \$19m
- ❖ Aug 2007: judge doubles award for intentional infringement" and Qualcomm imports to US are banned
- ❖ Sep 2007: (different) judge lifts ban on cell phone import after TMobile, Motorola, Samsung complain

Moral Rights



Title: **FLIGHT STOP**

Artist: **MICHAEL SNOW**

Subject: 60 life-size Canada geese. Completed 1979



- ❖ Copyright in compilation works
- ❖ Accessing copyrighted material on the WWW
- ❖ Assignment of copyright to journals
- ❖ Special restrictions tied to sources of research funding
- ❖ Different rights and responsibilities as a function of employment status (faculty, staff & students)
- ❖ Managing moral rights - attribution and integrity
- ❖ Differences in Canadian and U.S. Law



Digital Copyright Issues

- ❖ Copyright principles & laws apply to digital media & works published on the Internet
- ❖ Most material available on the Internet is protected by copyright, e.g. text, images, photos, music, videos, software
- ❖ Incorporating such materials into an on-line curriculum, website or otherwise reproducing may require copyright clearance





Copyright Notices

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Da Vinci code and copyright

- 1982: Michael Baigent and Richard Leigh publish “The Holy Blood and the Holy Grail.”
- 2003: Dan Brown publishes “The Da Vinci Code” about Holy Blood and a Holy Grail
- 2006: Baigent and Leigh sue for copyright infringement in UK court; allege “The Da Vinci Code misappropriated major themes and ideas” (Peter Lattman, WSJ, February 6, 2007 online)

Trade-mark dispute

- ❖ iphone: Apple unveils its first cellular phone, branded as the i-phone
- ❖ Cisco Systems claims to own trade-mark to iphone in the US, sues Apple
- ❖ Cisco and Apple settle out of court: turns out Cisco had weak claim to trade-mark because it had not actively used the trade-mark after filing in 1999



Part 4: Trade Secrets

- ▣ Not legislatively based
- ▣ No time limit
- ▣ Require a due diligence process
 - Secure storage
 - Access and distribution control
 - Active prosecution of violators
- ▣ Information is protected through confidentiality agreements
- ▣ Examples – Microsoft Windows source code





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Part 5: Licenses

- ❑ A license grants the Licensee certain rights to IP held by the Licensor
- ❑ The Licensor may be the owner of the IP rights, the creator, or a previous Licensee of these rights
- ❑ The Licensee is the “person” receiving these rights
- ❑ Types of licenses: commercial, academic, ‘open source’
- ❑ Examples of common software licenses: MS Word shrink-wrap, iTunes executable click-through license



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Open source: Lesser GPL

- ▣ Applies to “libraries” of code
- ▣ Requires distribution of source code of library and object code of other modules
- ▣ Licensee (user) must be able to modify/improve LGPL library and recompile it with other modules.
- ▣ LGPL does not apply to other modules
- ▣ More commercialization friendly than GPL





Open source: Berkeley, others

Berkeley BSD license: protects attribution, no warranty and allows redistribution

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Creating an IP Umbrella

- ◆ Protect Software through a combination of:
 - Patents
 - Copyright
 - Trademark
 - Trade Secret

