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Introduction to Patent Searching

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McMaster ▪ Industry Liaison Office

Outline

- First lecture
  - Basics of Intellectual Property
  - Intellectual Property rights at McMaster
  - The Commercialization Process
  - How MILO can help
  - Entrepreneurship
- ⇨ Second Lecture
  - More Details on Patents and Patent Searching
- Third Lecture
  - More things to know if you want to license your technology or start a company

Recap from Monday

- **Patents** – inventions
- **Copyrights** – written works, recordings, movies, software, pictures
- **Trademarks** – brand names, phrases, logos, web addresses, distinctive designs or symbols
- **Trade Secrets** – formula, processes, designs, information not known to the public

Why Search Patents?

- Patentability
  - Under the rules (particularly novelty), is this idea already known?
- Infringement (Freedom to Operate)
  - Does this discovery infringe the exclusive rights that someone else has been granted?
- State of the Art
  - What is out there? Find key experts.
  - Market research. What is still left?

Anatomy of a Patent

- On the cover page
  - Patent number
    - A number given by the patent office that identifies the patent
  - Inventors
    - The person or people who made an inventive contribution to the claims
  - Filing Date
    - The date the patent was filed (may not be the priorty date!)

Anatomy of a Patent

- On the cover page (continued)
  - Related Applications
    - Relevant for determining priority dates
  - Classification Codes
    - The codes used to sort patents in the patent office
  - References
    - Patent and non patent documents (you need to report what you know)
  - Abstract
    - A summary

Anatomy of a Patent

- Drawings
  - Typically Black and white line drawing were possible
  - Very little text (no caption) just figure numbers
- Background of the invention
  - describes prior art and need for the invention
- Summary of the Invention
- Brief Description of the drawings
  - Similar to a caption in a report
  - eg. Figure 1 shows…

Anatomy of a Patent

- Detailed Description
  - Here is where the invention is described
  - Must disclose best method AND provide sufficient information to support the claims
- Claims
  - This is what counts and determines what rights you have if the patent issues
  - Typically has at least one primary claim and several dependent claims

Searching Strategies

- Simple searches (USPTO example)
  - Name (inventor, company)
  - Patent Number
  - Keyword
- More complicated searches
  - Keywords may generate too many irrelevant hits, try multiple unique words or keyword + name
  - Classification codes
  - Need a strategy to be effective

Classifications

- Used to assist searches
- Two major systems
  - United States Patent Classification (UPC)
  - International Patent Classification (IPC)

How to identify correct classifications?

- Generate catchwords
- Searching IPC and UPC classifications for catchwords
  - http://www.wipo.int/classifications/ipc/ipc8
  - http://www.uspto.gov/go/classification/

Step One Methodology

- Take notes or develop a checklist
- Search on keywords
- If results are small might be able to just review patents
- Note UPC and IPC codes in a few relevant patents
- Any keywords, other patent references or other relevant information
- Completion of summary report or printing of first pages

Step Two Methodology

- Use of a form
- Which UPC, IPC codes?
- Any references to include?
- Additional keywords

Step Three and Four

- Step Three
  - Keep recycling Step Two as needed
- Step Four
  - Analysis of results
  - Are there any aspects of the invention that are novel (assuming patentability search)

Analysis of Results

- Novelty
  - What do we need to see?
  - All elements of our invention in searched invention
- Obviousness
  - Elements leading to obviousness may be in more than one patent

Searching

- Basic interfaces
  - Espacenet (Europe) – gb.espacenet.com
  - USPTO (United States)– uspto.gov
  - CIPO (Canada) –cipo.gc.ca
  - WIPO (PCT) – wipo.int
  - Google Patents – www.google.com/patent
- But don't just search patents (check scientific literature, internet, etc.)

Practice Searches

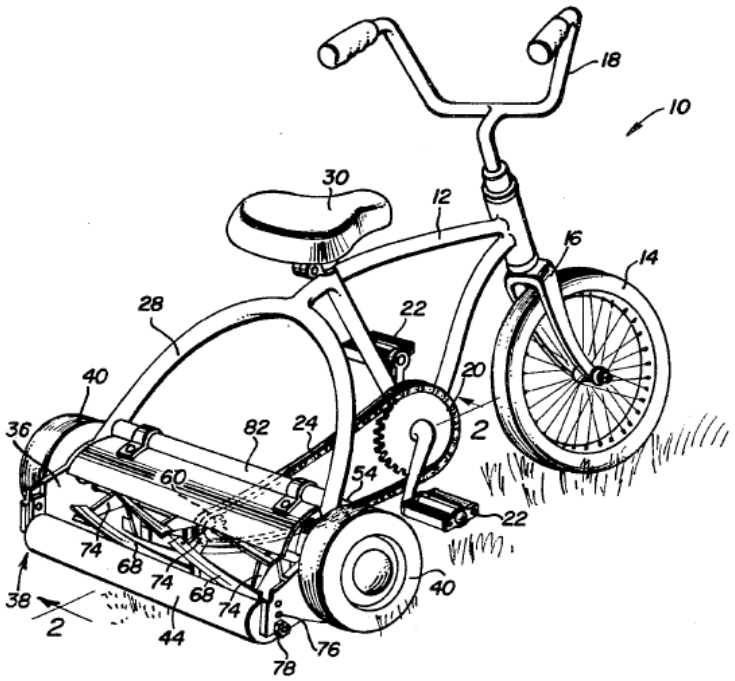
- Simple searches
  - Identify all patents owned by a particular company
  - Identify patents by a particular inventor
  - Search a particular number
- Consider the use of these as competitive intelligence

Competitive intelligence

- Consider:
  - Pick a company that you want to know more about competitively
  - What patent information do you want to know about them?
  - Maybe you want to hit them up to license your technology or give you a job when your done…

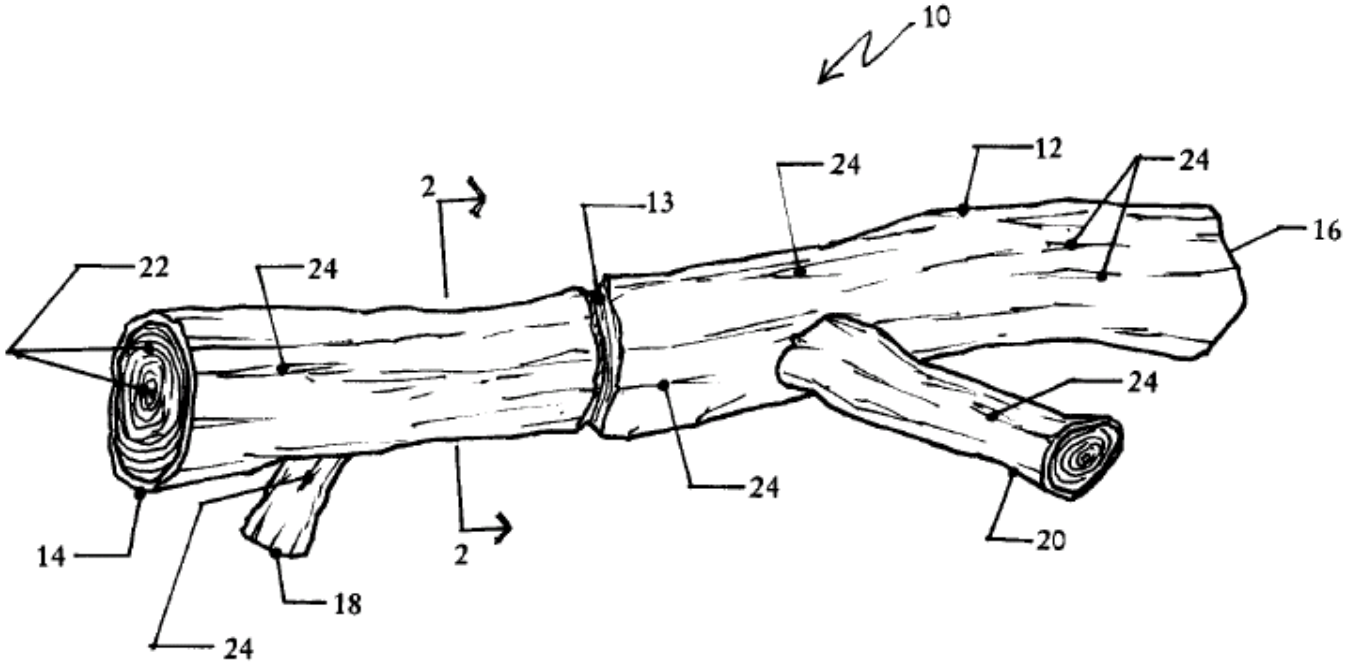
Patent Examples

- US 4,455,816 Pedal Operated Mower



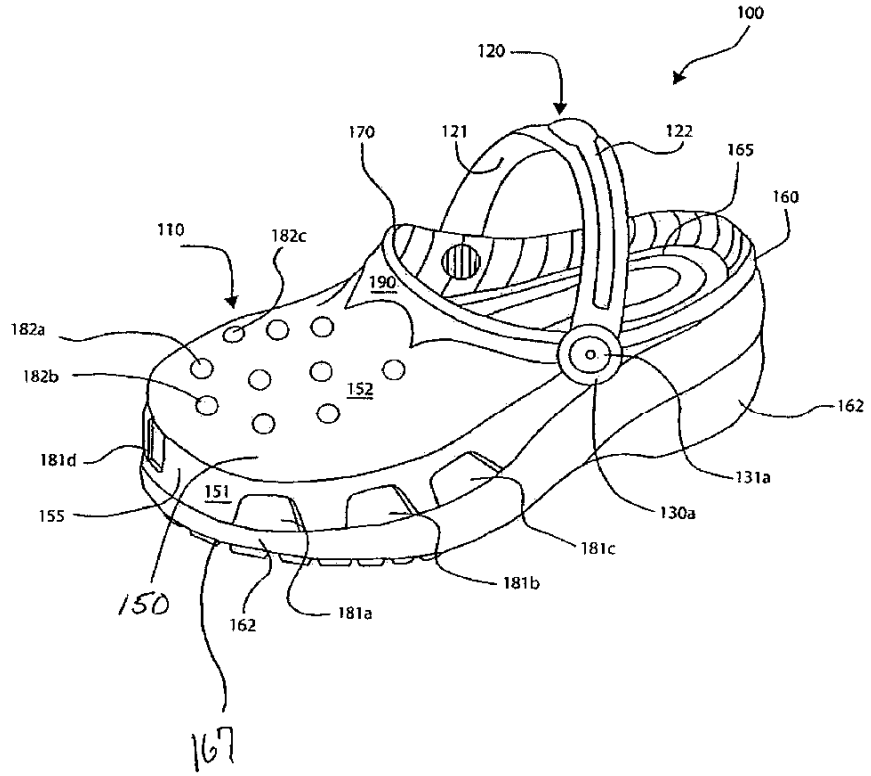
Patent Examples

- US 6,360,693 Animal Toy




Patent Examples

- US 6,993,858 Breathable Footwear Pieces



Patent Examples

- US 5,960,411
  - Method and system for placing a purchase order via a communication system
  - A “a business method” patent

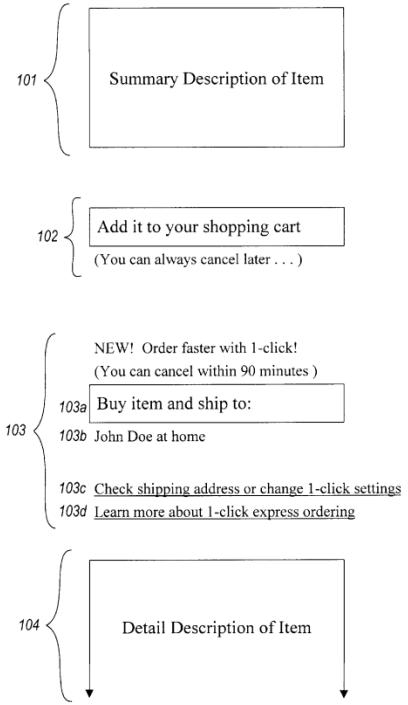


Fig. 1A

Next Steps

- Try a patent search on your project
  - Identify prior art
  - See who is doing business in areas similar to your project
  - Determine how your project/technology is unique
  - Decide whether you are interested in filing a patent
  - Determine when and how you would like to file (with an agent, on your own)

Questions?

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