OUTLINE

- Types of Intellectual Property and their characteristics
- Elements of a Patent document so that you know what to look for

Better ways of searching for Patent documents
What kinds of useful information you can mine (i.e. research) and use

Relevant databases:
- Lens.org
- WIPO Global Design Database

The implications of what you learnt for your design work

Intellectual Property (IP) types

- Copyright
- Trademark
- Patent:
  - Utility patent
  - Design patent/registered design/industrial design
  - Plant varieties/plant patent
- Trade secret
- Layout-design of an integrated circuit
- Geographical indication
Copyright and Trademark

**Copyright**
- Protects the expression of ideas
- Covers literary works, photographs, paintings, films, music, radio broadcasts, or programming codes
- Gives the authors/creators the exclusive rights to reproduce, adapt, publish or perform the works
- Can last for up to 70 years


**Trademark**
- Protects the brand of a business’ goods or services
- Covers a company’s name, logo or signature
- Prevents others from using the same words, symbols, or other graphical info in their products/company’s name
- Can last indefinitely as long as it is renewed every 10 years


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**Patent**

“A right granted to the owner of an invention that prevents others from making, using, importing or selling the invention without his permission” – IPOS

**Utility Patent**
- Protects the invention’s function
- Can be in the form of process (i.e. how it works), material composition, or a new & useful improvement of an existing product
- Prevents others from making, using, or selling the invention

- Wireless charging
- Slide to unlock
- Touch screen

**Design Patent**
- Protects the external appearance of an invention/product
- Can be in the form of new design/ornamental features or composition of a product
- Prevents others from making, using, or selling the design

- Curved edge
- Surface finish
- Colour
How can you use patent?

• Avoid inventing the same product
• Market opportunity (what’s the trend?)
• Find out about your competitors (or potential employers)

• Learn the “secrets” / technical knowledge behind existing products
• Learn the evolution history behind a particular product

• If you’re granted a patent, you have the exclusive rights to manufacture and sell your product (territorial rule applies)

Elements of a patent document

1. Title
3. Inventors’ names
4. Date filed & date of patent
   i. Opportunity?
   ii. Why is there a gap between filing and the date of patent?
5. Classification no.
6. INID code
Patent Search

a demo using free databases

Databases that you can use

NUSL subscribed

Free online
- Lens
- Google Patents
- WIPO database

Country Specific
- USPTO
- IPOS
- ....

Different patent databases have different content and date coverage. Make sure you choose the appropriate one!
KNOWN PATENT SEARCH

If you have:
- Patent no.
- Name of inventor(s)
- Name of assignee(s)

http://www.techtimes.com/articles/47738/20150422/history-selfie-stick%2C%20aly.htm

Basic search in Lens
www.lens.org
Accessing patent document in Lens

UNKNOWN PATENT SEARCH

If you have:
- product name
- Keywords from the title
- Classification nos. especially IPCR + USPC

Things that can help you:
- Title
- Abstract
- Claims
Tips for keyword brainstorming

In describing your product or service ‘invention’, it is important to think broadly and creatively!

Keep the following questions in mind:

• What does the invention do?
• What is the end result?
• How does it work?
• What is it made of?
• What is it used for?
• What problem(s) does it solve?

Broaden search (by using Boolean Operator)
Identify Keywords & Expand Your Search to include other (better) words

<table>
<thead>
<tr>
<th>Concept 1: Water-resistant</th>
<th>Concept 2: Speaker</th>
<th>Concept 3: Mobile device</th>
</tr>
</thead>
<tbody>
<tr>
<td>Liquid-resistant</td>
<td>Audio device</td>
<td></td>
</tr>
<tr>
<td>Waterproof</td>
<td>Acoustic device</td>
<td></td>
</tr>
<tr>
<td>Swim-proof</td>
<td>Sound apparatus</td>
<td></td>
</tr>
</tbody>
</table>

"water resistant" OR "liquid resistant"

speaker* OR "audio device"

We’re interested in the results found here.
Broaden search (additional syntax)

Truncation*

Use * to include plural form and variations of the root word

speak*
  = speak, speaks, speaker, speakers, speaking

speaker*
  = speaker, speakers

Limit search (additional syntax)

Phrase search “”

Use quotation marks “” to search the exact phrase

audio device (e.g. audio controlling device, device for blocking audio, ...)
  VS.
  “audio device”
Prioritise search (additional syntax)

Parenthesis ( ) in order to maintain the mathematical logic of Boolean operations

("water resistant" OR "liquid resistant")
AND
(speaker* OR "audio device")

Structured search (with boolean logic)

("water resistant" OR "liquid resistant") AND (speaker* OR "audio device")
Refine results
Using Refine Search panel

Analyse results
By clicking on the Chart Values
Save your search queries
By registering for an account

Searching for design patents only
Using structured search in Lens
Lens’ coverage for design patents/design rights

What about other countries?

WIPO design patent database

Refine results

Using classification system

- Patent classification is a system that groups patent documents together based on the similarities of their technical features or contents
- Each patent document can be assigned multiple classification codes

Most commonly used:
- International Patent Classification (IPC), for utility patents
- Locarno Classification (LOC), for design patents

locarno Classification scheme (Industrial Design relevant!)

How to find Locarno classification code

Find out the Locarno classification number
http://www.wipo.int/classifications/locarno/en/
Finding the relevant Locarno classification code

The full Locarno classification code will be **14-01-A0227**

Check the individual “hits” and see if they are relevant

However, some databases are only able to search the broader classification

Search design patents using Locarno number

A world-wide collection of patents from participating nations
Guides & Links


• Industry Liaison Office. Information for researchers (http://enterprise.nus.edu.sg/technologycommercialisation/for-researchers)