Design of services & Intellectual Property Rights

Team 9, MEC-E3002

Frida Björklund, Henri Tuoma, Pietari Reijonen, Ilja Adel, Lauri Novio

What is Design of Services?



What is Design of Services?

If you would ask ten people what service design is, you would end up with eleven different answers – at least.

What is Design of Services?



- Aims to **innovate** or **improve**
- Services can include materials, people, infrastructure...

- Improving quality between service provider and end user
 - More useful, usable and efficient

Innovation is needed in creating a completely new service

1. Human-centered

User-centered, meaning the services should be viewed through the eyes of the customer

Customer participation is a necessity

Take into consideration that there are lots of different types of customers!



2. Co-creative

Everyone should be included in the service design processes

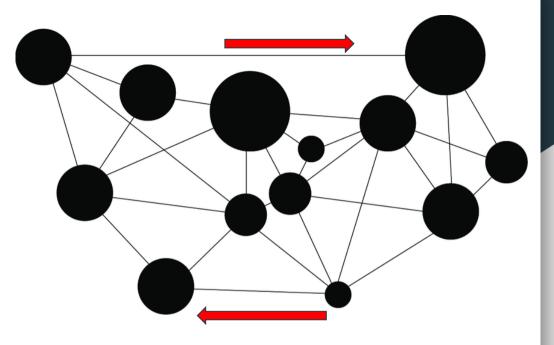
Engineers, designers, managers, customers...



3. Sequencing

Service should be seen as sequence of interrelated actions

Dynamic processes which should progress in a coherent way, ensuring feedback and communication at every phase



4. Evidencing

The process of gathering data to support the design process

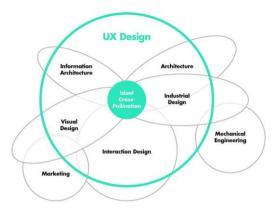
Helps build the product based on data and user insights instead of pure assumptions



5. Holistic

The importance of considering all aspects of a service and how it will affect all stakeholders

Customer journey mapping, ecosystem considerations, measuring impact,...



Services can be...

Tangible or intangible

- Physical or abstract





Example: Electric scooter rental

1. Human-centered: Removes the need for own scooter, easy to use

2. Co-creative: Feedback from all stakeholder groups

3. Sequencing: Timing, Process flow diagrams

4. Evidencing: Continuous monitoring

5. Holistic: Implications for all stakeholder groups



Example: Food delivery service

1. Human-centered: Easy to use service for food ordering/platform for

courier partners

2. Co-creative: Feedback from stakeholders

3. Sequencing: Timing

4. Evidencing: Feedback/continous monitoring

5. Holistic: Good user experience throughout the service for

both customers and partners



https://upload.wikimedia.org/ wikipedia/commons/b/b0/Wol t-app-icon-2019.png

Intellectual property rights

Utility Model

Trade Secret

Patent

Design Right

Copyright

Trademark

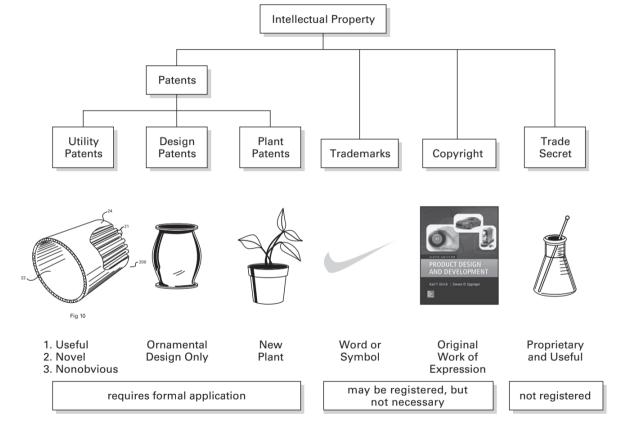


EXHIBIT 16-2 Taxonomy of types of intellectual property relevant to product design and development.

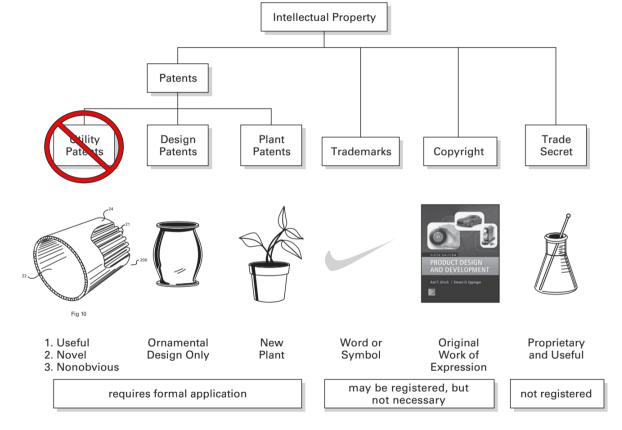


EXHIBIT 16-2 Taxonomy of types of intellectual property relevant to product design and development.

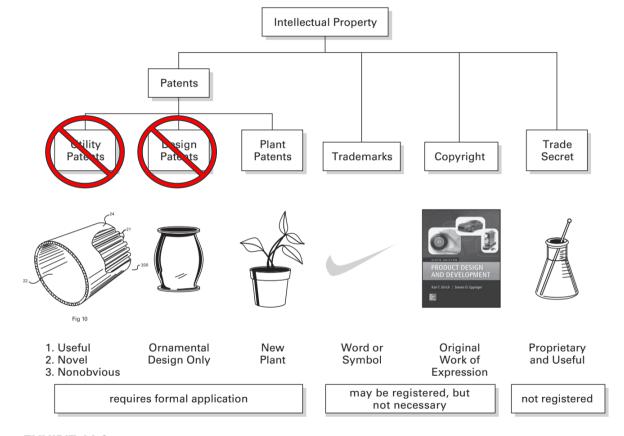


EXHIBIT 16-2 Taxonomy of types of intellectual property relevant to product design and development.

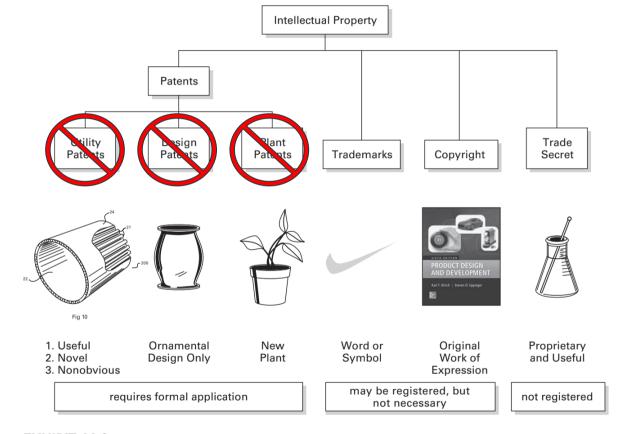


EXHIBIT 16-2 Taxonomy of types of intellectual property relevant to product design and development.

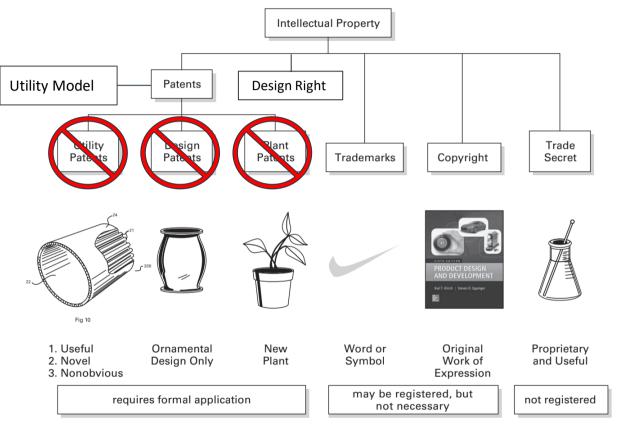
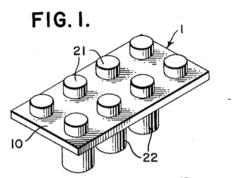
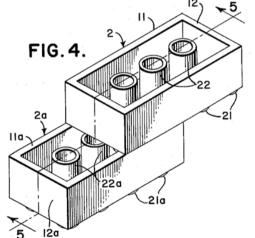
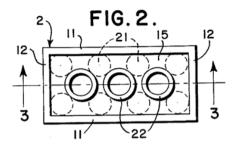
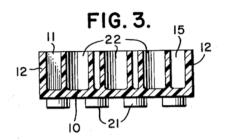


EXHIBIT 16-2 Taxonomy of types of intellectual property relevant to product design and development.

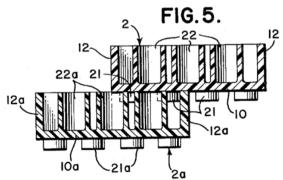


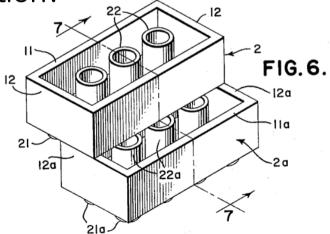






What do you gain by patenting your invention?





G.K. Christiansen. 1961. Toy building brick. US Patent 3005282.

Patents

- "A patent is a legal title granting its proprietor the right to prevent third parties from commercially using an invention without authorisation." [1]
 - An offensive right, you must monitor your competitors to challenge patent infringements
- Patents are public, making the invention available and free to use after patent term expires
 - Published application offers a defensive right: The invention is no longer novel
- Granted patent is only an expense!

Patents: Strategy

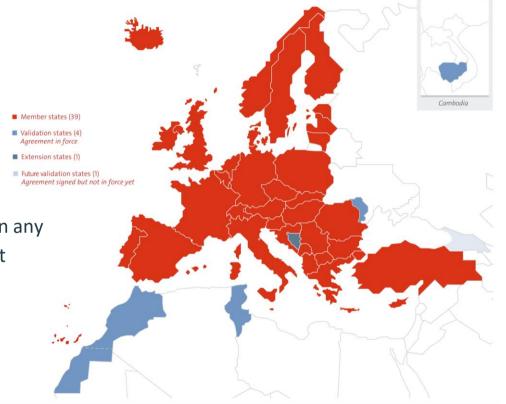
- Patent protection is always national!
 - O No such thing as a worldwide patent.
- Identify most important markets and manufacturing locations
- Paris convention: Priority can be claimed within 12 months of filing in any contracting state.



Japinderum. 2012. Paris Convention for the Protection of Industrial Property members. Licenced under CC BY-SA 3.0

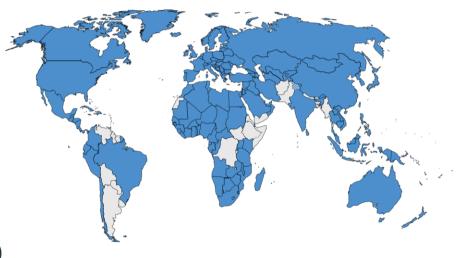
Patents: Strategy

- European Patent: A regional application
 - O Granted by EPO
- EP validation
 - Register a national patent in any European countries without further examination



Patents: Strategy

- Patent Cooperation Treaty (PCT):
 so called "international application"
 - Extends the time limit of national and regional filings to 30/31 months
 - Filed with a Receiving Office (practically any national office)
 - Examination by International
 Search Authority (f.ex. EPO or PRH)



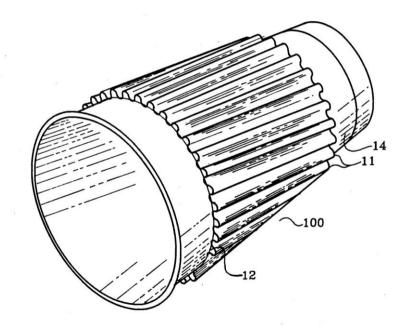
Patents: Application

- An invention must be:
 - o Novel
 - o Inventive
 - Industrially applicable

- Patent application contains:
 - Abstract
 - o Description
 - o Claims
 - O Drawings

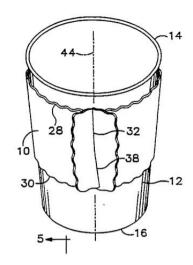
Patents: Examples

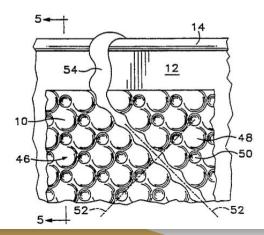
- US Pat. 5,205,473: Recyclable corrugated beverage container and holder
- "A recyclable, insulating beverage container holder, comprising a corrugated tubular member comprising cellulosic material and at least a first opening therein for receiving and retaining a beverage container, said corrugated tubular member comprising fluting means for containing insulating air; said fluting means comprising fluting adhesively attached to a liner with a recyclable adhesive."



Patents: Examples

- US Pat. 5,425,497: Cup Holder
- "A cup and holder combination comprising: a cup for holding hot or cold liquids; and a holder defined by a band mounted on and encircling the cup, the band having an open top and an open bottom through which the cup extends and an inner surface immediately adjacent the cup with a plurality of discrete, spaced-apart, approximately semi-spherically shaped depressions distributed on substantially the entire inner surface of the band so that each depression defines a non-contacting region of the band creating an air gap between the band and the cup, thereby reducing the rate of heat transfer through the holder."





Patents: Examples





Thank you!

Questions or comments?