



HEI MAKERS

SECTION #4 PROTECTING YOUR IDEA

Technological Entrepreneurship Module



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4.1. INTELLECTUAL PROPERTY

- Aim of the topic is to understand the importance of protecting an idea or product with legislation.
- Expected learning outcomes: Obtained knowledge of IP protection

Duration	?? academic hrs
Author / Lecturer	Name Surname, organisation
Delivery methods	Individual / Teamwork / P2P
Evaluation methods	Test / Report / Feedback / Exam etc.

WHY DO WE CARE ABOUT IP?

Encourages innovation - by rewarding inventors and entrepreneurs to generate solutions for global challenges

Drives economic growth and competitiveness

Sets your business apart from competitors

Be sold or licensed, thus providing an important revenue stream

Form an essential part of marketing or branding (increase valuation of the company)

WHAT IS INTELLECTUAL PROPERTY?

IP is an intangible asset that refers to:

- Creations such as musical, literary, and artistic works;
- Technical inventions and;
- Symbols, names, images, and designs

The designated owners by law will have the exclusive rights to benefit from the creation or invention by stopping others from using and benefiting without permission.

TYPES OF IP

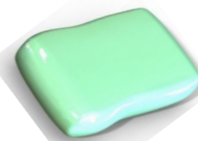
- PATENTS – HOW THINGS WORK



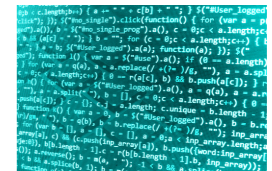
- TRADE MARKS – BRAND NAMES AND LOGOS



- DESIGNS – HOW THINGS LOOK



- COPYRIGHT – ARTISTIC AND LITERARY WORKS



- TRADE SECRETS/KNOW-HOWS



- OTHERS: GEOGRAPHIC INDICATION (CHAMPAGNE); SEMINCONDUCTOR LAYOUT

4.2. PATENTS AND CONFIDENTIALITY

- Aim: To learn more in-depth strategies for approaching legislative requirements for products and services.
- Expected learning outcomes: Understanding the terms associated with patents, confidentiality and why it is important to protect your business idea.

Duration	?? academic hrs
Author / Lecturer	Name Surname, organisation
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PATENTS



WHAT IS A PATENT?

A Patent Is...

- a technical innovation (a technical solution to a technical problem) that is new (not made available to the public) and not obvious to a skilled person in the art.
- a 20 year monopoly in exchange for contributing to the world's knowledge; non-renewable.
- like any property right, patent right can be sold, leased, hired or purchased.
- capable of being used but is not necessarily useful
- not necessarily a good invention...

EXAMPLE 1

Method of concealing partial baldness

No. US402227B,

filing date: 23 December 1975

1. A method for styling hair to cover bald areas using only the individual's own hair, comprising separating the hair on the head into several substantially equal sections, taking the hair on one section and placing it over the bald area, then taking the hair on another section and placing it over the first section, and finally taking the hair on the remaining sections and placing it over the other sections whereby the bald area will be completely covered.

U.S. Patent

May 10, 1977

4,022,227



FIG. 1



FIG. 2

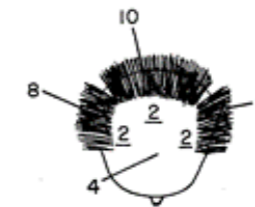


FIG. 3



FIG. 5



FIG. 4



FIG. 6

EXAMPLE 2

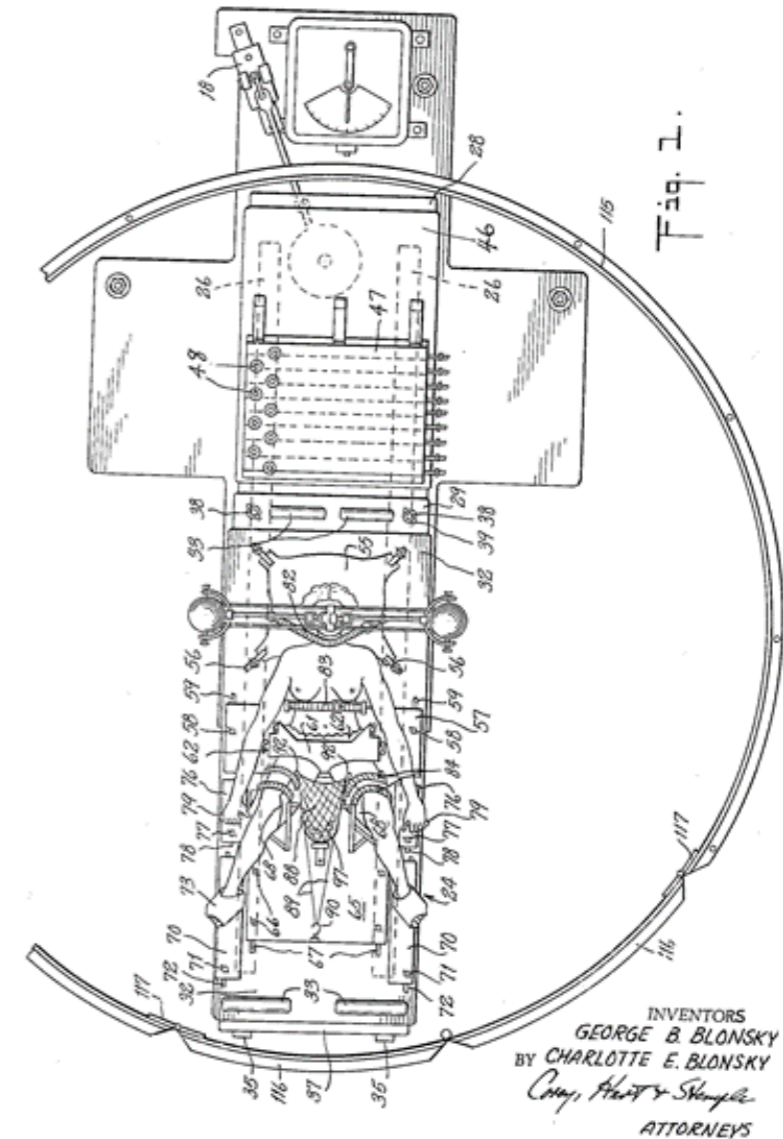
- Apparatus for facilitating the birth of a child by centrifugal force

- US3216423B

- 15 January 1963

- 1. Child delivery apparatus comprising a *centrifuge*...

Nov. 9, 1965 G. B. BLONSKY ET AL 3,216,423
APPARATUS FOR FACILITATING THE BIRTH OF
A CHILD BY CENTRIFUGAL FORCE
Filed Jan. 15, 1963 4 Sheets-Sheet 1



PATENT REQUIREMENTS

Novel – at least one feature must be new

Inventive – not a simple variant

Sufficiently described – so one skilled in the art can create the invention

Cannot be excluded subject matter

- E.g. rules, discoveries, gene sequences, maths, software, diagnosis, therapy, aesthetics, business

CONFIDENTIALITY

Confidential information can be in different forms.

Consider:

- Notebooks;
- Discussions;
- Product demonstrations;
- Academic publishing;
- Grant application;
- Receiving confidential information that can preclude you from filing a patent.

SOME PATENT NUMBERS

- Patents cost €10k-100k
- Takes 3-10 years to grant
- Up to 20 year lifetime from filing
- 2.7 million patent applications filed worldwide in 2014
- 59% of US patent applications rejected
- Medtronic paid \$1.35 B for a medical patent related to spinal surgery
- Samsung sued by Apple for \$1B for design and invention infringement



READING A PATENT

- Title + abstract
- Background
- Detailed description
- Drawings
- Claims



(11) **EP 2 730 223 A1**

(12)

EUROPEAN PATENT APPLICATION

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14.05.2014 Bulletin 2014/20

(51) Int Cl.:
A61B 5/16 ^(2006.01) **A61B 5/00** ^(2006.01)
G06K 9/62 ^(2006.01) **G06N 5/04** ^(2006.01)

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PL PT RO RS SE SI SK SM TR**
Designated Extension States:
BA ME

(71) Applicant: **Samsung Electronics Co., Ltd
Gyeonggi-do 443-742 (KR)**

(72) Inventor: **Lee, Ho-Sub
Seoul (KR)**

(74) Representative: **Grünecker, Kinkeldey,
Stockmair & Schwanhäusser
Leopoldstrasse 4
80802 München (DE)**

(30) Priority: **09.11.2012 KR 20120126804**

(54) **Apparatus and method for determining user's mental state**

(57) An apparatus for determining a user's mental state in a terminal is provided. The apparatus a data collector configured to collect sensor data; a data processor configured to extract feature data from the sensor data;

and a mental state determiner configured to provide the feature data to an inference model to determine the user's mental state.

CLAIMS

A box comprising:

a base;

one or more side walls; and

optionally a cover configured to cover said box; and

wherein the one or more side walls are substantially perpendicular to the base.



TRADE MARKS



IDENTIFY THIS BRAND


































IDENTIFY THIS BRAND

Give a value to this brand



MOST VALUABLE BRAND

Rank							Brand Value  (USD \$ Millions)	
2016	2015	Logo	Name	Country	2016	2015		
1 	1		Apple		145,918	128,303		
2 	3		Google		94,184	76,683		
3 	2		Samsung Group		83,185	81,716		
4 	8		Amazon.com		69,642	56,124		
5 	4		Microsoft		67,258	67,060		
6 	5		Verizon		63,116	59,843		
7 	6		AT&T		59,904	58,820		
8 	7		Walmart		53,657	56,705		
9 	11		China Mobile		49,810	47,916		
10 	15		Wells Fargo		44,170	34,925		
11 	14		Toyota		43,064	35,017		
12 	9		McDonald's		42,937	52,909		
13 	10		GE		37,216	48,019		

4.3. TRADEMARKS AND COPYRIGHTS

- Aim: Finding out about alternative methods of protection for your idea and how they are different from IP.
- Expected learning outcomes: Being able to select the appropriate method of protection for your product on the basis of what has been learnt.

Duration	?? academic hrs
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WHAT IS A TRADE MARK?

A trade mark is a sign which can distinguish your goods and services from those of other traders. It can be a combination of colour, a sound, logo, word or combination of these.



3M



WiFi®
CERTIFIED



orange™



 **ИНВЕНТЯ**™

TRADE MARK REQUIREMENTS

- Distinctive for the goods and services that you are applying for
- Unique and not confusingly similar to any registered marks in the same goods or service
- May need to demonstrate that the mark be in commercial use (in US and some European countries)
- Registered ® vs Unregistered ™

CONSIDERATIONS

- Unlike patents, trade marks can be filed anytime;
- May have a 'first to use' protection;
- There is no public disclosure bar;
- Important to ensure third party clearance (i.e. not infringing on an already registered trademark); and
- The use of the trade mark is not infringing on an unregistered mark (e.g. dilution of brand)
- A trade mark search is essential!!

ARTISTIC COPYRIGHT



WHAT IS COPYRIGHT?

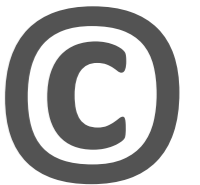
Copyright is an IP right which relates to the 'fixed' expression, not the idea itself. Copyright protects:

- Sound recordings
- Films
- Broadcasts
- Music
- Artwork
- Literary work
- Web sites
- Architectural designs
- Computer software
- Map

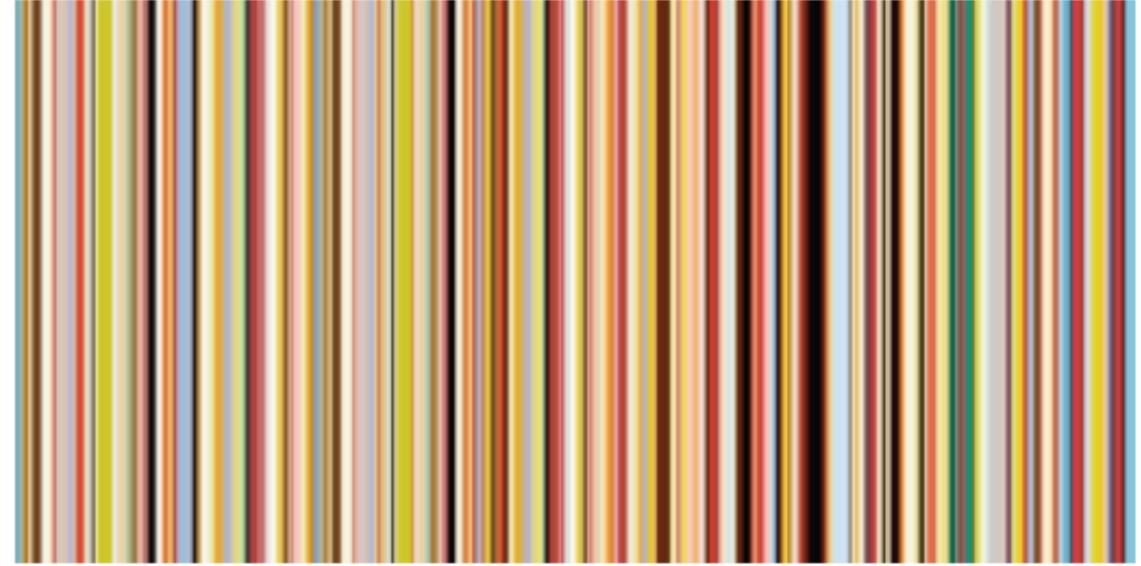


COPYRIGHT AND RELATED RIGHTS

- In general, copyright is enforced 70 years after the death of the author
- For a work to be deemed copyrightable, it must be an original work of authorship
- It must be original and creative, which means it must be independently created rather than copied from other works
- Copyright arises automatically upon the creation of a work
- Additional rights may be provided if the work is registered with the U.S Copyright Office (allow seeking of statutory damages)



REGISTERED DESIGNS



WHAT IS REGISTERED DESIGN

Design rights relate to the physical appearance of an item. This IP right is not concerned with how the item works but concentrates on the overall appearance resulting from the features of the product or the way it looks. Contributory features to a product's appearance include:

- Lines
- Contours
- Colours
- Shape
- Texture
- Material
- Semiconductor layout (UK, AU, CA, JP and US)



FIG. 19

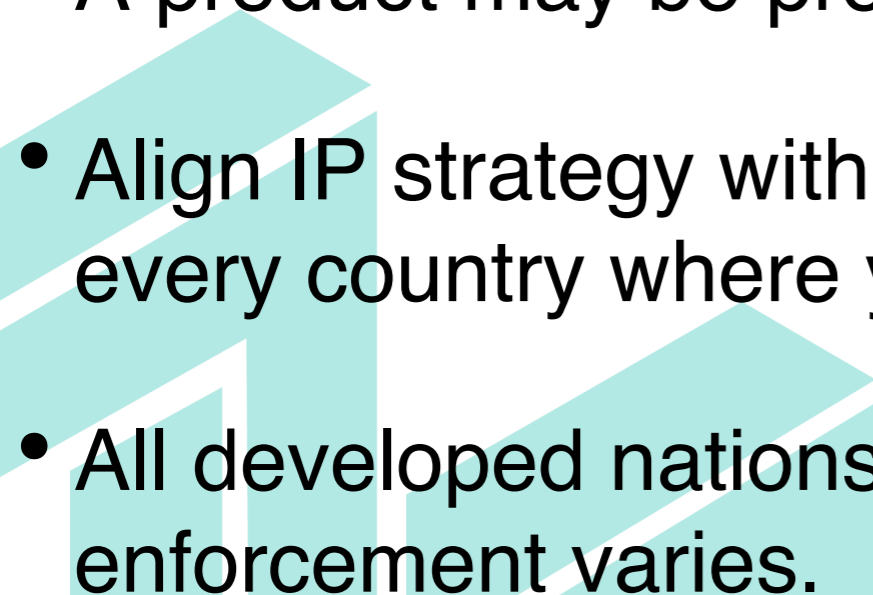


FIG. 23



FIG. 24

CONCLUSION

- Patent, Trademark, & Design laws have provisions to stop others.
 - A product may be protected by more than one type of IP.
 - Align IP strategy with business strategy - must register in every country where you need protection.
 - All developed nations have similar IP laws, although enforcement varies.
- 
- A large, stylized teal graphic on the left side of the slide, consisting of several overlapping, angular shapes that resemble a modern architectural or abstract design element.

FURTHER LEARNING

How to Protect Your Ideas – Patents!

<https://www.youtube.com/watch?v=EO1bE3PT39M>

Copyrights, Trademarks, Patents & Trade Secrets: Protecting Your Idea - How To Start A Business:

<https://www.youtube.com/watch?v=PAVbXGXeIsY>

