



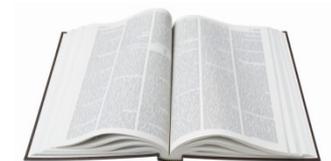
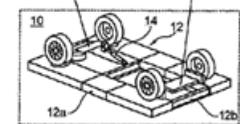
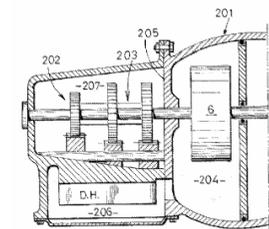
# Introduction to IP

**Intellectual Property Teaching Kit**

# GENERAL INTRODUCTION

# The different types of IP (I)

Legal right	What for?	How?
Patents	New inventions	Application and examination
Utility models	New inventions	Application and registration
Copyright	Original creative or artistic forms	Exists automatically



## The different types of IP (II)

Legal right	What for?	How?
Trade marks	Distinctive identification of products or services	Use and/or registration
Registered designs	External appearance	Registration
Trade secrets	Valuable information not known to the public	Reasonable efforts to keep secret

The Google logo, consisting of the word "Google" in its characteristic multi-colored font.

# One product - many IP rights

## Trade marks

- NOKIA
- Product "208"
- Start-up tone

## Copyright

- Software
- User manuals
- Ringtones
- Start-up tone
- Images



## Patents and utility models

- Data-processing methods
- Operating system
- Operation of user interface

## Designs

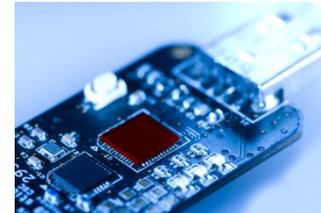
- Form of overall phone
- Arrangement and shape of buttons
- Position and shape of screen

## Trade secrets

- Some technical know-how kept "in-house" and not published

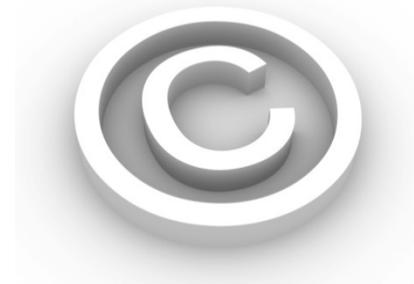
# The importance of intellectual property (I)

- IP is an essential business asset in the knowledge economy
  - Sandvik AB: innovative high-technology tools and steel technology
  - ARM Holdings: licenses its technology to microprocessor companies
- IP protects small innovative firms
  - W. L. Gore & Associates: GORE-TEX®
  - Dolby Laboratories: invented noise-reduction technology

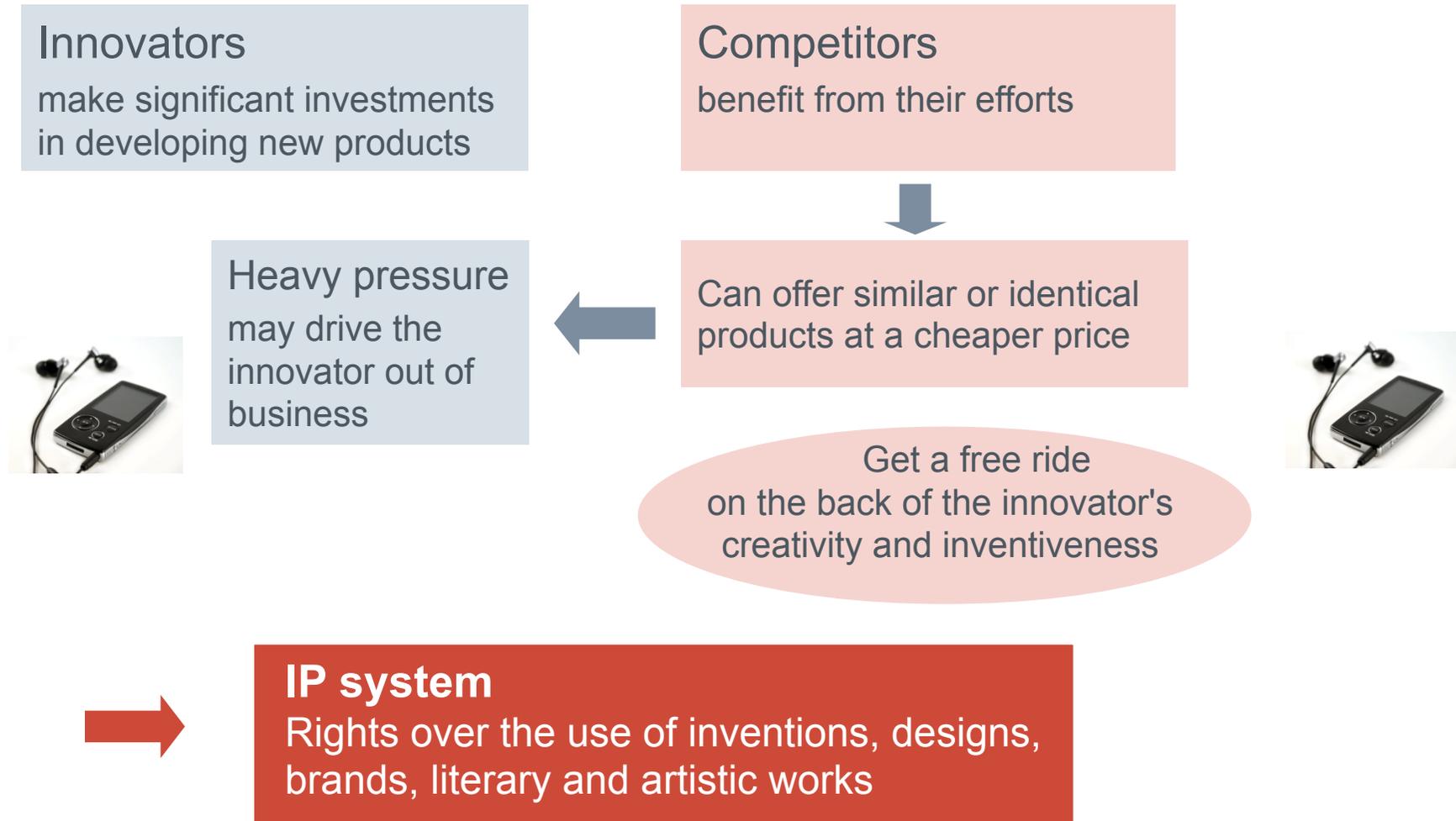


## The importance of intellectual property (II)

- IP is needed to enable the release of IP into the public domain under controlled conditions.
  - General Public License (GPL): Linux
  - Creative Commons License
- IP helps guarantee standards for public benefit by means of licensed trade marks.
  - Fairtrade International (FAIRTRADE)
  - Forest Stewardship Council (FSC)



# The IP System



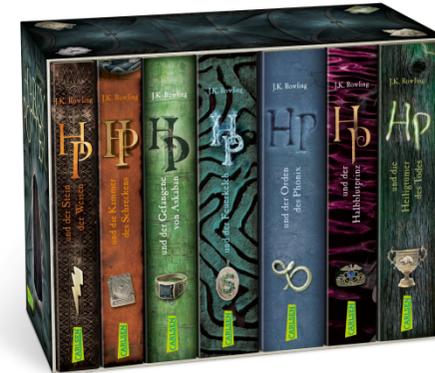
## Examples of valuable intellectual property



Coca-Cola®



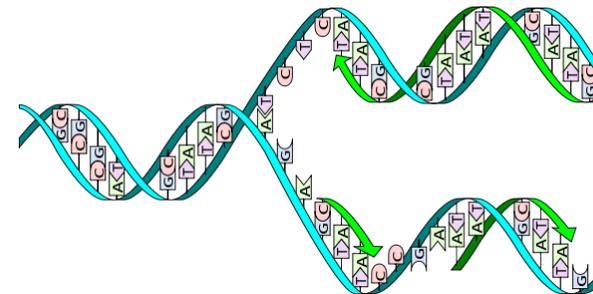
Apple® iPod touch®



Harry Potter



Polaroid® instant camera



DNA copying process

# PATENTS

# What is a patent?

(19)  (11)  EP 1 535 121 B1

(12) EUROPEAN PATENT SPECIFICATION

(45) Date of publication and mention of the grant of the patent: 25.08.2010 Bulletin 2010/34 (51) Int. Cl.: G05B 19/02 (2006.01) G05B 19/00 (2006.01)

(21) Application number: 03728962.6 (86) International application number: PCT/US2003/015459

(22) Date of filing: 16.05.2003 (87) International publication number: WO 2003/103553 (04.12.2003 Gazette 2003/49)

(54) SYSTEM AND METHOD FOR AUTOMATICALLY SETTING UP A UNIVERSAL REMOTE CONTROL  
SYSTEM UND VERFAHREN ZUM AUTOMATISCHEN EINRICHTEN EINER UNIVERSELLEN FERNBEDIENUNG  
SYSTEME ET PROCÉDE PERMETTANT DE RÉGLER AUTOMATIQUEMENT UNE TELECOMMANDE UNIVERSELLE

(84) Designated Contracting States: AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PT RO SE SI SK TR • LILLENES, Robert, P. Cypress, California 90630-4841 (US) • ARLING, Paul, D. Irvine, CA 92620 (US)

(30) Priority: 20.05.2002 US 151625

(43) Date of publication of application: 01.06.2005 Bulletin 2005/22 (74) Representative: Stephen, Robert John Olswang LLP 90 High Holborn London WC1V 6XX (GB)

(73) Proprietor: UNIVERSAL ELECTRONICS, INC. Cypress, CA 90630-4841 (US) (56) References cited: EP-A-1 198 069 EP-A2-0 780 990 WO-A-00/17739 WO-A-01/09150 WO-A-01/65967 US-A-5 410 326 US-A-5 646 608 US-A-5 742 730 US-A-6 104 334

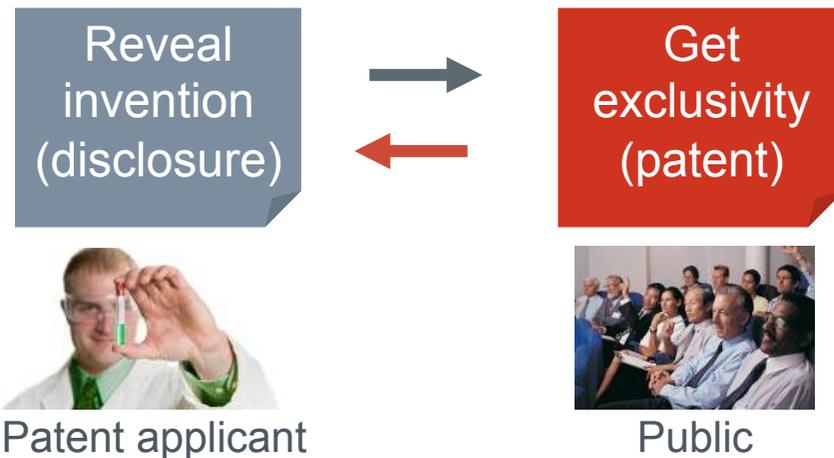
(72) Inventors: • HAYES, Patrick, H. Milision Viejo, CA 92691 (US) • CONWAY, Jr., James, N. Laguna Beach, CA 92651 (US)

EP 1 535 121 B1

Note: Within nine months of the publication of the mention of the grant of the European patent in the European Patent Bulletin, any person may give notice to the European Patent Office of opposition to that patent, in accordance with the Implementing Regulations. Notice of opposition shall not be deemed to have been filed until the opposition fee has been paid. (Art. 89(1) European Patent Convention).

Printed by zmw, 75001 PARIS (FR)

- A legal title which grants the holder
  - the exclusive right to prevent others from making, using or offering for sale, selling or importing a product that infringes his patent without his authorisation
  - in countries for which the patent was granted
  - for a limited time (up to 20 years).
- In return for this protection, the holder has to disclose the invention to the public.



Patents are granted in nearly every country in the world!

# What exactly can be patented?

Patents protect inventions which solve technical problems:

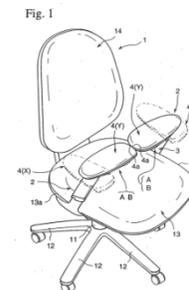
- chemical substances, pharmaceuticals



- processes, methods, uses



- products, devices, systems



For an invention to be patented, it must usually be

- ✓ **new** to the world (i.e. not available to the public anywhere in the world)
- ✓ **inventive** (i.e. not an "obvious" solution), and
- ✓ susceptible of industrial application

In most countries, patents are not granted for business methods or rules of games as such, or for methods of treatment, diagnostics and surgery on the human or animal body.



# DATABASES

# What is a database?

- A database is a collection of independent works, data or other materials arranged in a systematic or methodical way and individually accessible by electronic or other means.

# Scope of protection

- Directive 96/9/EC on the legal protection of databases
  
- Copyright protection
  - Structure
  - Originality
  - Authorship
  - Limited protection
  
- *Sui generis* protection
  - Contents
  - Investment
  - Maker
  
- Computer programs excluded

# Rights and limitations

- Copyright
  - Restricted acts
  - Exceptions
  
- *Sui generis* right
  - 15 years
  - Prevent:
    - Extraction
    - Re-utilisation

# TRADE MARKS

## What is a trade mark?

- A trade mark is any sign, capable of being represented graphically, which distinguishes the goods and services of one undertaking (company or organisation) from those of another
- Many different types: word, figurative, colour, shape
- Absolute grounds for refusal
  - Distinctiveness
- Relative grounds for refusal
  - When peaceful co-existence of marks is impossible

# Routes for registration

- National
- International
- EU
  - European Union Trade Mark

# Scope of protection

- Exclusive right, but
  - principle of speciality
  - principle of territoriality
  
- Potentially perpetual (renewal every ten years)
  
- Risk of loss of protection if:
  - not used after five years
  - found to be invalid
  
- Allowed uses

# DESIGNS

# What is a design?

- A design is the outward appearance of the whole or parts of a product resulting from its features.
- A product is any industrial or handicraft item.
- Requirements for protection
  - Novelty
  - Individual character
- Some exclusions

# Registered and unregistered design rights

- National
- International
- EU
  - registered Community design
  - unregistered Community design

# Scope of protection

- Exclusive right
- Principle of territoriality
- Duration
  - registered design rights: maximum 25 years
  - unregistered design rights: 3 years
- Allowed uses

# **GEOGRAPHICAL INDICATIONS**

# What are geographical indications?

- Geographical indications identify a good as originating in the territory of a country or a region or locality in that territory, where a given quality, reputation or other characteristic of the good is essentially attributable to its geographical origin.
- Protection under EU legislation

Protected geographical indication (PGI)	Protected designation of origin (PDO)
 The logo for Protected Geographical Indication (PGI) is a circular emblem with a blue outer ring containing the text "PROTECTED GEOGRAPHICAL INDICATION" and twelve yellow stars. The center features a yellow field with a blue stylized landscape of hills and a sun.	 The logo for Protected Designation of Origin (PDO) is a circular emblem with a red outer ring containing the text "PROTECTED DESIGNATION OF ORIGIN" and twelve yellow stars. The center features a yellow field with a red stylized landscape of hills and a sun.

## Difference between PGIs and PDOs

- Stricter conditions apply to PDOs:
  - Link between place name and product is essentially or exclusively due to the particular geographical environment.
  - All stages from production, processing and preparation are located in the defined geographical area.

# UTILITY MODELS

# What is a utility model?

(19)  Deutsches Patent- und Markenamt 

(10) DE 20 2012 006 551 U1 2012.09.27

(12) Gebrauchsmusterschrift

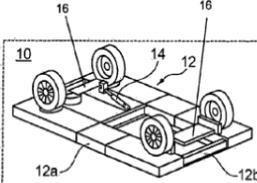
(21) Aktenzeichen: 20 2012 006 551.3 (51) Int Cl.: G09B 9/042 (2012.01)  
 (22) Anmeldetag: 06.07.2012  
 (47) Eintragungstag: 06.08.2012  
 (43) Bekanntmachungstag im Patentblatt: 27.09.2012

(73) Name und Wohnsitz des Inhabers:  
 AUDI AG, 85045, Ingolstadt, DE

Die folgenden Angaben sind den vom Anmelder eingereichten Unterlagen entnommen

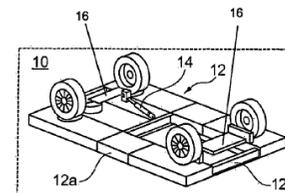
(54) Bezeichnung: Fahrsimulator zur Bewegungssimulation eines Kraftfahrzeugs

(57) Hauptanspruch: Fahrsimulator (10) zur Bewegungssimulation eines Kraftfahrzeugs, umfassend eine Bodenplatte (12) auf der ein Versuchskraftfahrzeug abstellbar ist, sowie mehrere an der Bodenplatte (12) angeordnete und mit dem Versuchskraftfahrzeug in Wirkverbindung stehende Aktoren (14) zur Simulation von Vertikal- und/oder Längs- und/oder Querbeschleunigung und/oder Nick- und/oder Rollwinkel des Versuchskraftfahrzeugs, wobei die Aktoren (14) über mindestens eine am Unterboden des Versuchskraftfahrzeugs befestigbare Adapterplatte (16) mit dem Versuchskraftfahrzeug in Wirkverbindung stehen.



- A utility model grants the holder the exclusive right to prevent third parties from:
  - exploiting an invention (e.g. making, using, offering for sale)
  - without authorisation in the country where the utility model was registered for a short period (3 to 10 years).
- The holder has to disclose the invention to the public.

Reveal invention (disclosure)



Get protection (utility model)

# Scope of protection compared with patents

## Utility models

- Registered territorial IP right
- Available in limited number of countries
- No central filing in Europe
- Protection for 3 -10 years
- Search reports in some countries only
- Registered and published after a few months
- Generally no substantive examination (novelty, inventiveness)
- Reviewed only in revocation or infringement proceedings

## Patents

- Registered territorial IP right
- Available in most countries
- Central filing possible (e.g. EPO for Europe)
- Protection for up to 20 years
- Search reports standard
- Application published after 18 months
- Substantive examination (novelty, inventive step)
- Grant or refusal after substantive examination procedure

# PLANT VARIETY RIGHTS

## What are plant variety rights?

- Exclusive exploitation rights for new plant varieties
- Four requirements for protection:
  - novelty
  - distinctness
  - uniformity
  - stability
- Right holder = breeder
- Obtained through registration

# Scope of protection

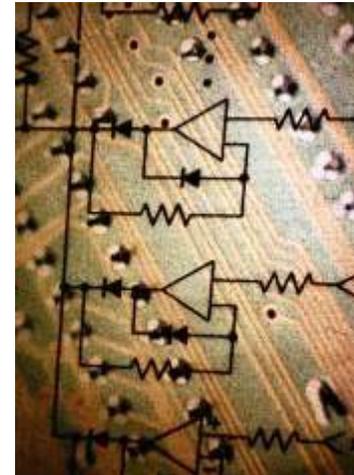
- Duration
  - At least 20 years
  - At least 25 years for varieties of vine and tree species
  
- Subject-matter
  - Propagating material
  - Harvested material
  
- Acts subject to authorisation
  
- Exceptions

# **SEMICONDUCTOR TOPOGRAPHY RIGHTS**

# What are semiconductor topography rights?

Semiconductor topography rights protect layout designs of integrated circuits.

- Three-dimensional components and layers and their interconnections
- Copying relatively easy
- Reverse engineering accepted practice



## Substantive requirements

- Original, i.e. the result of the creator's own intellectual effort
- Not commonplace

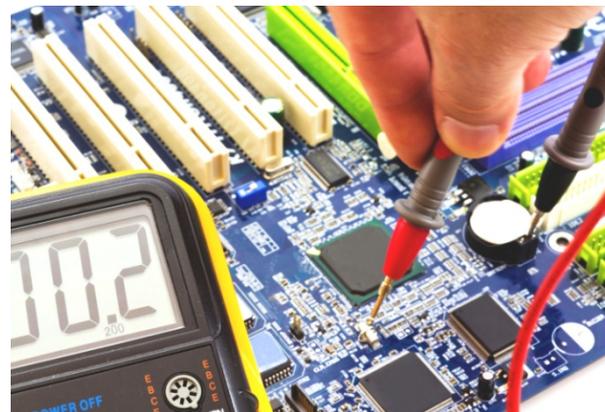
## Formal requirements

TRIPS member states may prescribe:

- registration
- disclosure of electronic function
- registration fee
- commercial exploitation

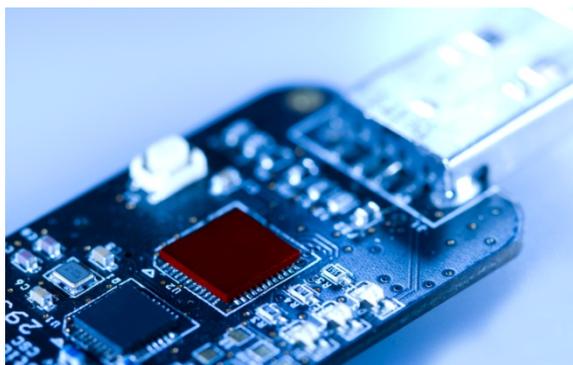
## Scope of protection

Rights prevent others from reproducing, selling or importing part or all of the protected design and of products incorporating it



## Duration of protection

10-15 years from the date of creation of the layout design



## Exceptions and limitations

- No infringement if for private use, research or teaching
- Reverse engineering to foster innovation
- Independent creation of an identical design
- Innocent infringement

# **COPYRIGHT**

# What is copyright?

- Copyright protects any production of the human mind, such as literary and artistic works.
  - This production must be an expression and not a mere idea.
  - The expression must be original.
- Copyright creates a special legal relationship between authors and their work.
- It confers legal protection for a limited period of time.

# Scope of protection

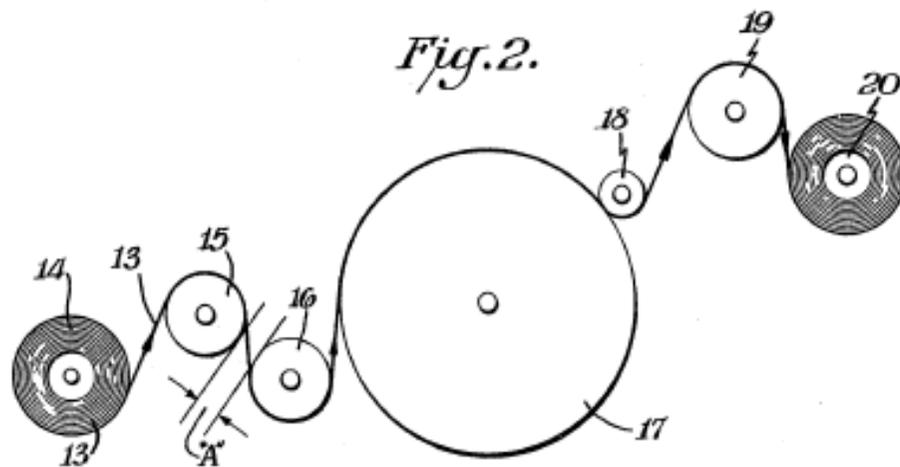
- Economic rights
  - relate to the economic exploitation of the work
  - are freely transferable or licensable
- Moral rights
  - relate to a moral interest of the author
  - are always retained by the author
- Exceptions and limitations
- Infringement and remedies

# TRADE SECRETS

# What are trade secrets?

- Information that
  - is not generally known or easily discovered
  - has a business, commercial or economic value (actual or potential) because the information is not generally known
  - is subject to reasonable efforts to maintain secrecy
  
- Unlimited life, provided the information does not become public knowledge.

## Scope of protection



Products/processes  
where reverse  
engineering is  
difficult

Images from [www.coca-cola.com](http://www.coca-cola.com)

# Means of protection

## Practical

- Limited access to information
- "Need to know"
- Encryption of data
- Monitored entry to installations

## Contractual

- Restrictive covenants in employment contracts
- Non-disclosure agreements

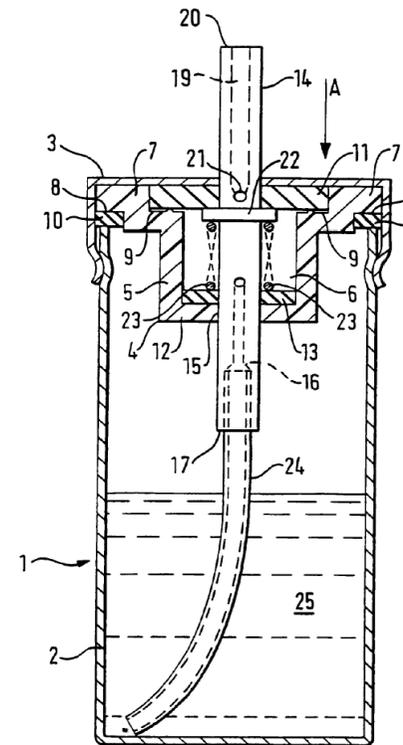
# **IP in the real world**

A practical exercise to help you decide what IP to use and when

# An anti-allergy sprayer and spray

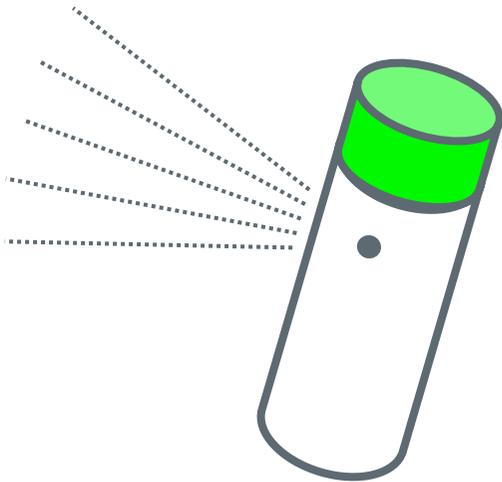


**NEBU-ALLERG**



## Which elements can be protected?

- Medicinal product
- Nozzle
- Pumping system
- Sprayer can



- Brand name:
  - "NEBU-ALLERG"

- Logo



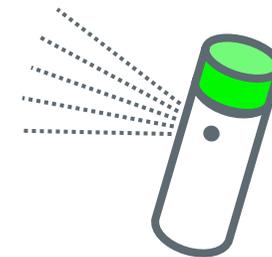
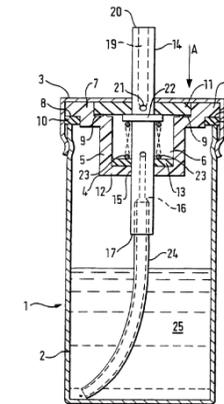
- Slogan:
  - "Press green for go!"
- Domain name
- Advertising material

# Patents and designs (I)

## Medicinal product

### Patents for

- the active ingredient?  
(the "chemical X")
- the method of making X?  
*Better as a trade secret?*
- the formulation?  
(combination of X with other ingredients)
- ~~– the method of use?  
(i.e. treatment of allergies using X)~~



## Patents and designs (II)

### Nozzle

- patent
- utility model

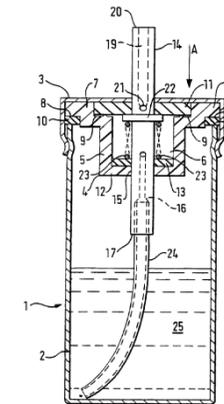
### Pumping system

- patent
- utility model

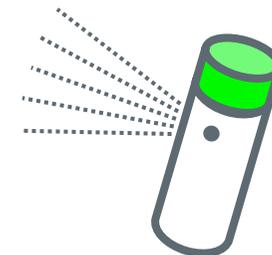


### Sprayer can

- designs: registered and unregistered
- trade mark



*But who owns all this IP?*



## Trade marks, copyright and domain names

- Brand name: NEBU-ALLERG **trade mark** ®
- Logo: **trade mark** ®
- Slogan: "Press green for go!" **trade mark** ®
- Advertising material: **copyright** ©
- Domain names:
  - [www.nebu-allerg.com](http://www.nebu-allerg.com)
  - [www.thegreenbutton.com](http://www.thegreenbutton.com)



*Who owns all this IP?*

## What next?

- Patents - search for free in Espacenet's 90+ million documents
- Trade marks and designs - search for free in eSearch plus
- Seek professional advice
  - Is your invention novel, inventive and patentable?
  - Do you risk infringing other people's rights?
  - Who could you license it to?
  - Who could you license from?
  - Who are your potential customers, suppliers and competitors?



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Free access to  
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**TMview**