

Intellectual Property Rights

–

What is it and how to manage it in collaborative settings

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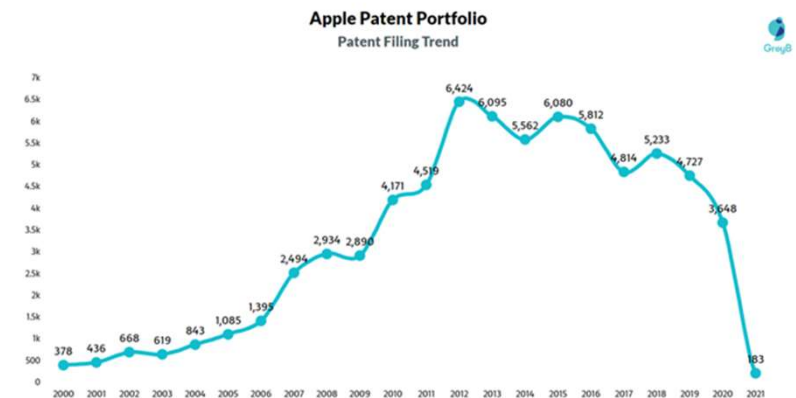
Agenda

- Intellectual Property Rights – the basics
- Types of Intellectual Property rights
- Managing Intellectual Property Rights in open and collaborative settings

The importance of intellectual property (I)

- IP is an essential business asset in the knowledge economy
 - Between 5 and 10% of modern economies' investment is on “intangibles”
- IP is a huge part of modern tech firms success
 - Apple currently has a total of 72,054 patents globally
 - BMW: 25,185 patents worldwide
- IP protects small innovative firms and enables them to grow
 - BionTech: 200 owned patent families
 - W. L. Gore & Associates: GORE-TEX®
 - Dolby Laboratories: invented noise-reduction technology

How Many Patents did Apple File Every Year?

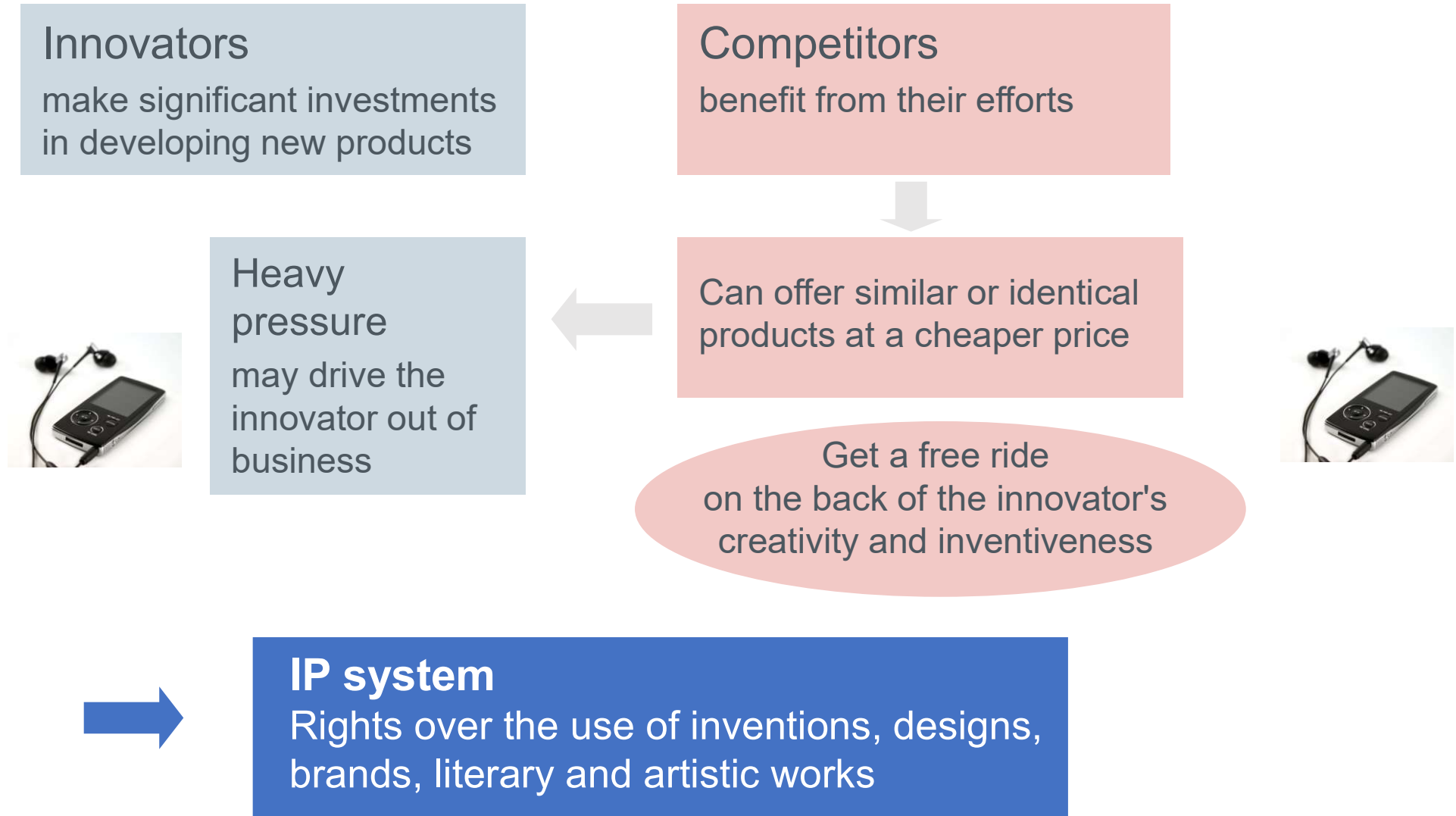


The importance of intellectual property (II)

- 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



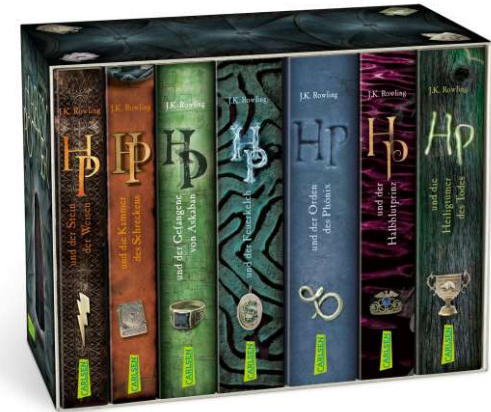
Examples of valuable intellectual property



Coca-Cola®



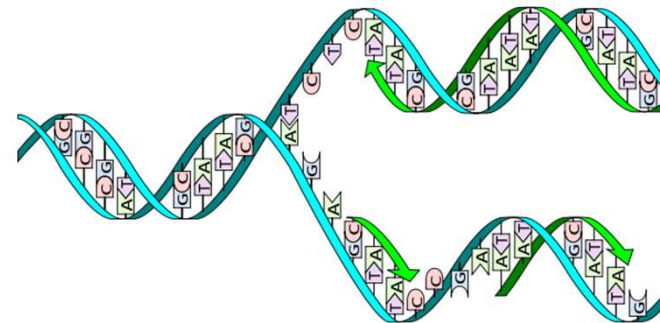
Apple® iPod touch®



Harry Potter



Polaroid® instant camera



DNA copying process

Agenda

- Intellectual Property Rights – the basics
- Types of Intellectual Property rights
- Challenges in Managing Intellectual Property Rights in open and collaborative settings

The different types of IP (I)

**Legal
right**

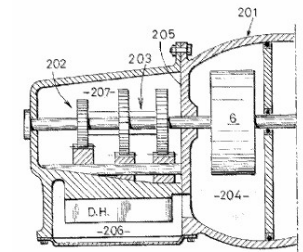
What for?

How?

Patents

New inventions

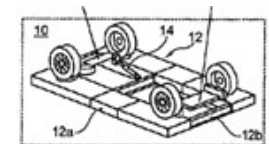
Application and
examination



Utility
models

New inventions

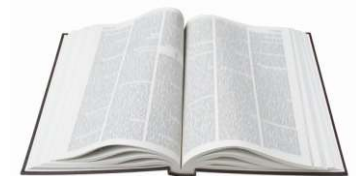
Application and
registration



Copyright

Original creative or
artistic forms

Exists
automatically



Presentation largely based on the EPO Intellectual Property Teaching Kit

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



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

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 2003/100553 (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 PROCEDE PERMETTANT DE REGLER 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 151635

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

(73) Proprietor: UNIVERSAL ELECTRONICS, INC. Cypress, CA 90630-4841 (US)

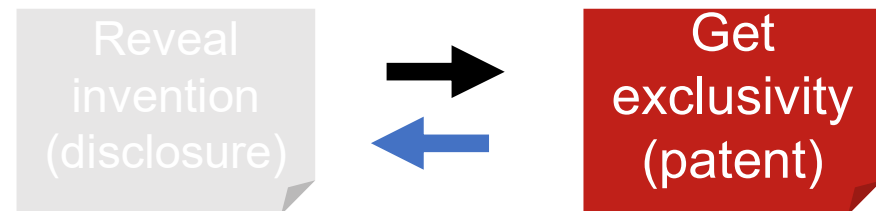
(72) Inventors:
 • HAVES, Patrick, H., Mission Viejo, CA 92691 (US)
 • CONWAY, JR., James, N., Laguna Beach, CA 92651 (US)
 (56) References cited:
 EP-A- 1 198 069 EP-A2- 0 780 990
 WO-A-00/17738 WO-A-01/29150
 WO-A-01/69567 US-A- 5 410 326
 US-A- 5 646 608 US-A- 5 742 730
 US-A- 6 104 334

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. 99(1) European Patent Convention).

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- 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.



Patent applicant



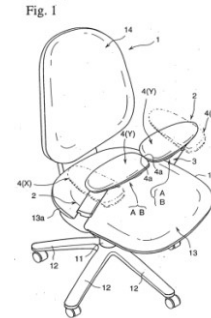
Public

Patents are granted in nearly every country in the world!

What exactly can be patented?

Patents protect inventions which solve technical problems:

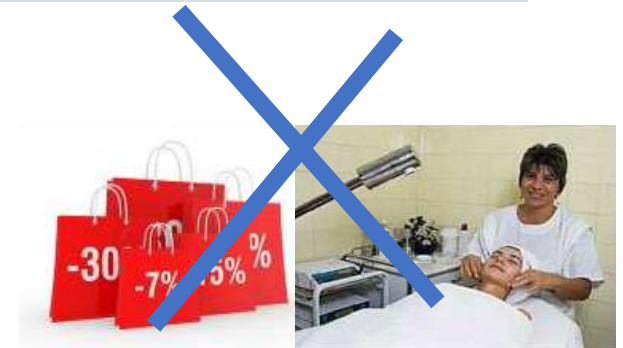
- chemical substances, pharmaceuticals
- processes, methods, uses
- products, devices, systems



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.



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

Non-distinctive example:



Distinctive example:



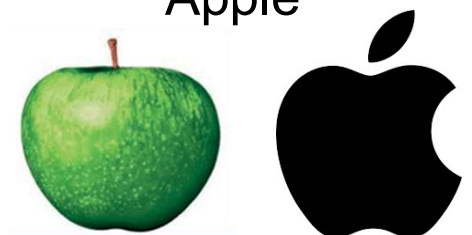
Non-distinctive example



Distinctive examples:



Apple



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

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

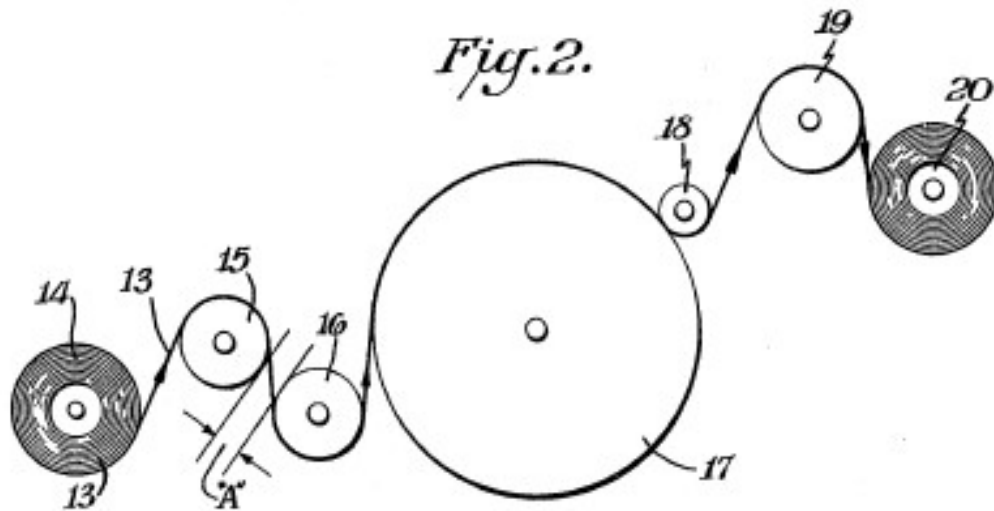
- Economic rights
 - relate to the economic exploitation of the work
 - are freely transferable or licensable
- Moral rights
 - relate to a moral interest of the author
 - are always retained by the author
- Exceptions and limitations (e.g. non-profit educational purposes)
- Infringement and remedies

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

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

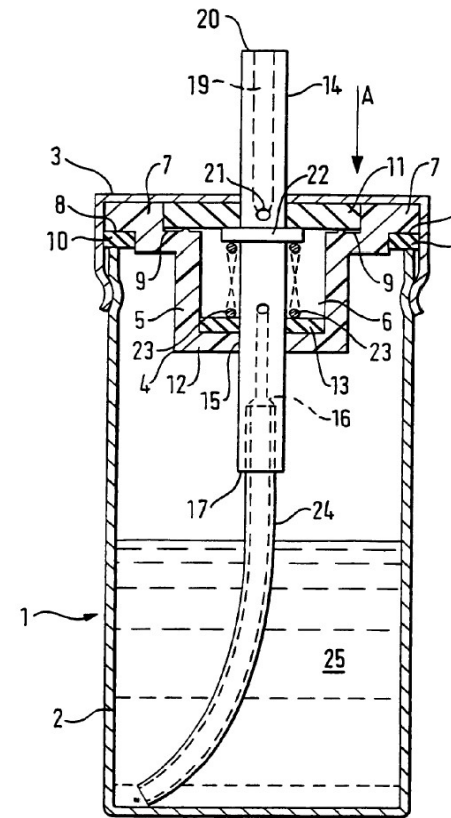
IP in the real world

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

An anti-allergy sprayer and spray

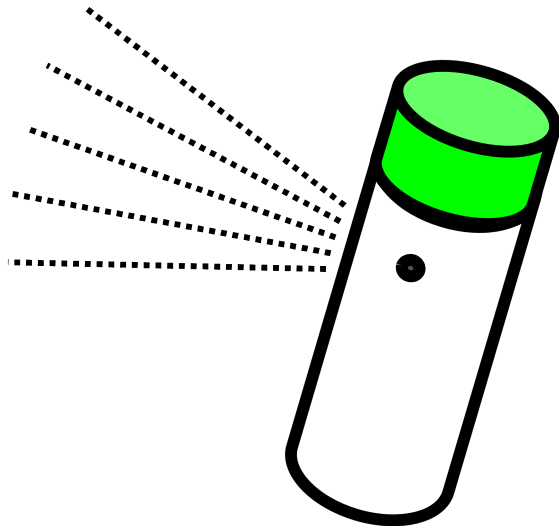


NEBU-ALLERG



Which elements can be protected?

- Medicinal product
- Nozzle
- Pumping system
- Sprayer can



- Brand name:
 - "NEBU-ALLERG"



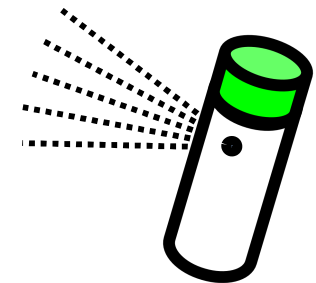
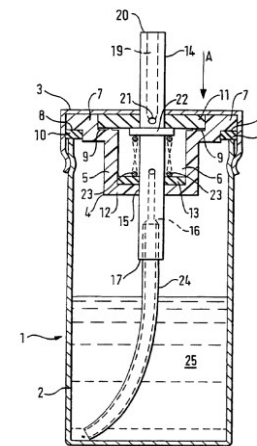
- Logo
- Slogan:
 - "Press green for go!"
- Domain name
- Advertising material

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

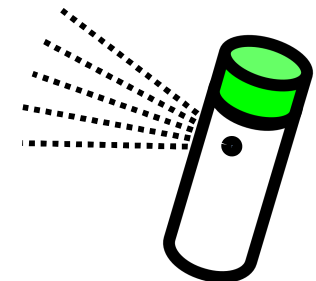
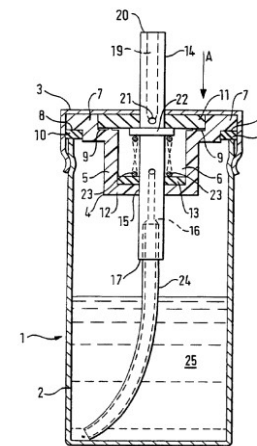
- patent
- utility model

Pumping system

- patent
- utility model

Sprayer can

- designs: registered and unregistered
- trade mark



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
 - www.thegreenbutton.com



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- Intellectual Property Rights – the basics
- Types of Intellectual Property rights
- Managing Intellectual Property Rights in open and collaborative settings

Open innovation – Cooperative Settings and Intellectual Property Rights

- The significance of collaboration to create innovations has increased manifold

- Reasons

- Rising R&D costs
- Increasing complexity of products and services
- Shorter product life cycles, increasing price pressure
- Risks associated with R&D increased

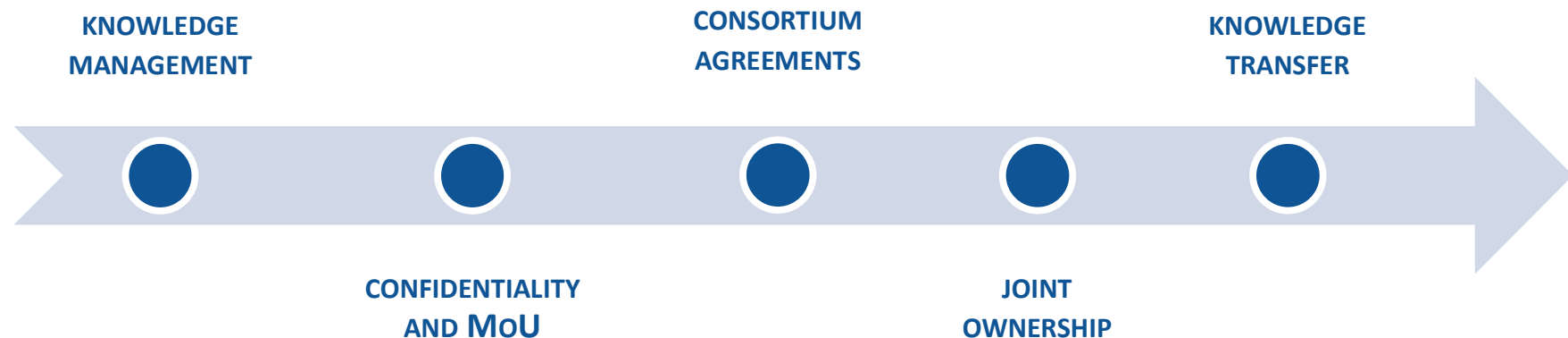
→ Open Innovation and cooperation is a need that must be dealt with from an IP perspective

An IP look at Open Innovation (II)

- IP is paramount and enabling Open Innovation
 - Acts as „glue“
 - Enables business models
 - Must be managed

There is hardly anything „open“ (open source, etc.) perceivable without an underlying IP system

An (very rough) process chain for protecting IP in cooperations



IP in collaborations

There are 2 major issues when collaborating with external partners:

5.1. Allocating ownership of intellectual property in a Partnership

5.2. Managing Technology Transfer

Allocating ownership of intellectual property in a Partnership

- Splitting the Intellectual Property Rights
- Joint Ownership in IPR

1) Splitting the IP Rights

A key issue...

- determines the subsequent Technology Transfer
- determines the profitability of the project



The priorities in cooperation related to IP diverge:

- academic: desire to publish, be owner of the IPR
- Industrial: secrecy and commercialisation; unique user of the IPR

In principle, there are different options:

- Each partner own what it has generated
- One partner (e.g. the academic) owns the intellectual property and gives a license (exclusive or not) to the other partner (e.g. the private company)
- The sponsor (if any) owns all results and can protect them with IP Rights

2) Joint Ownership in IPR

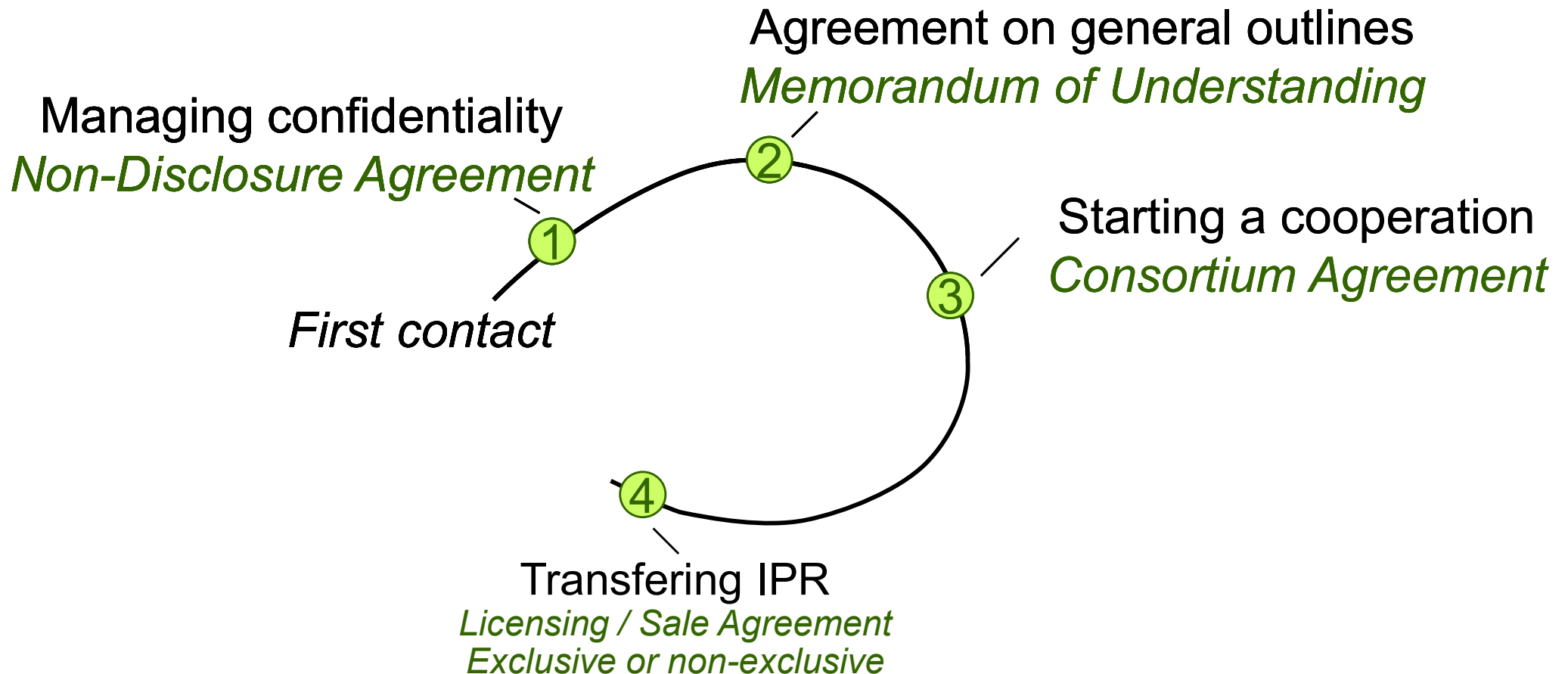
Implications of joint ownership

- **right to exploit the intellectual property for your own benefit** without accounting to the others
- But cannot grant a licence or assign interest in the intellectual property without the consent of the other owners

→ **you can use the intellectual property yourself, but cannot authorise others to use it without the consent by all co-owners**

→ **Beware: Patent experts/attorneys are often quite critical about co-patenting**

3) Contractualisation of a Transaction – Instruments



3) Contractualisation of a Transaction (3)

Memorandum of Understanding

- Describes a **convergence of will** between the parties in a **less formal** way than other forms of contract
- **Preliminary** to a classical bilateral or multilateral agreement between parties, can be a useful way **to state the key terms** of a transaction as agreed during the negotiation process **before entering** into the final contract
- It can be **binding or non-binding** (vs a contract is a legally binding promise or agreement)

3) Contractualisation of a Transaction (4)

Consortium Agreements

- Consortium agreement = collaboration agreement
- **Agreement among organisations** planing to work together, in order to **regulate internal issues** related to work organisation, intellectual property (intellectual property), liability and other matters of their interest.
- Key questions:
 - *Who owns the **foreground intellectual** property?*
 - *Who has the right to exploit it?*
 - *What happens to **background intellectual** property?*
 - *What happens to **sideground intellectual** property?*

3) Contractualisation of a Transaction

Technology Transfer Agreement

- **Contract to sale or license IPR**
- **IPR and Know-how are granted into license to permit the licensee to manufacture a product and/or to put into practice a process**
- **This can become very complex!!**

→ always involve specialists (technology transfer office, specialised patent attorney)



Agenda



Summary

- There are many different options to protect your valuable intellectual property
 - ↳ Possibly, but not necessarily by IP Rights
- You have learned about the basic concepts of patents, trademarks etc.
- Managing and setting up licensing schemes of IP is highly important, but an art in itself. Get support from IP professionals!