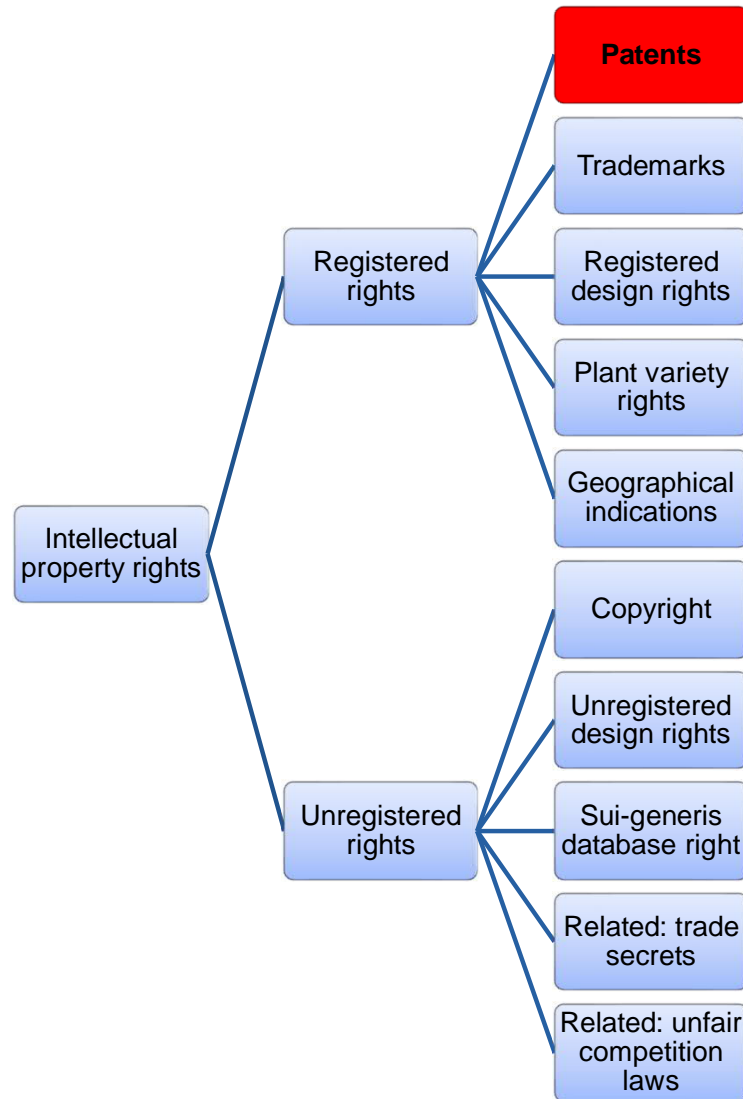


Intellectual Property: An Introduction

Module 02: How to Obtain IP Rights

Raphael Zingg
IPrime & ETH Zürich







I. Patents

1. Legal Requirements

INVENTION

- Technical teaching
 - Instruction on how to solve particular technical problem using technical means
- Repeatable
- Versus discovery
 - Property of known material vs. property put to use in invention
(Material withstands mechanical shock vs. railway component making use of property)
(Gene discovered to exist in nature vs. use of gene in making polypeptide or in gene therapy)

- Patents protect inventions fulfilling the following four criteria

New 	Non-obvious 
Industrially applicable 	Disclosed 

Art. 1 Swiss Patent Act

- (1) Patents for inventions are granted for **new** inventions **applicable** in industry.
- (2) Anything that is **obvious** having regard to the state of the art (Art. 7 para. 2) is not patentable as an invention.
- (3) Patents are granted without the guarantee of the State.

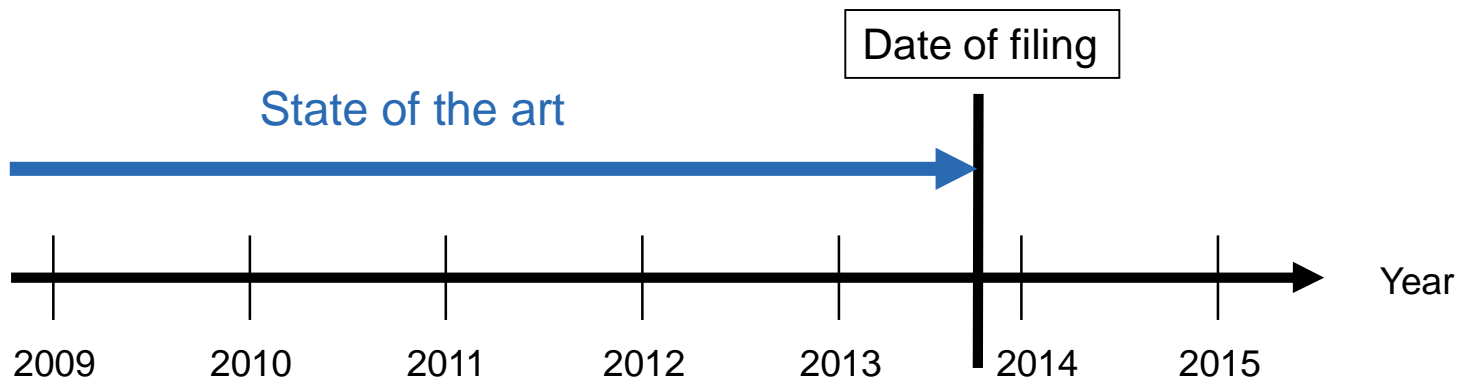
1. Novelty

- When is an invention new?
 - When it is not part of the state of the art
 - State of the art: everything made available to the public before the date of filing

Keep your invention confidential until you have filed your application!



Patent application



1. Novelty

– Timing

- Patent granted only when new at the date of filing the application
- The first to file a patent application will be entitled to the patent
 - First-to-invent rule in the U.S. until March 2013 (America Invents Act 2011)

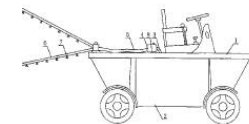
– Requirements

- The disclosure can be anywhere in the world and in any form
- Public disclosure before the filing of the patent application (anywhere in the world) will invalidate the patent
- Novelty judged in relation to “prior art”
 - Publically available
 - Mere hypothetical possibility of knowledge of the invention by experts sufficient
 - Typical question: Are all the components of the claim of the invention known? All it takes to destroy novelty is for a single prior art item to disclose all the features of the claimed invention.

1. Novelty

– Assessing novelty

- Claim: A pouring vessel comprising
 - a) a compartment for liquids (1),
 - b) a handle (2),
 - c) a lid, and
 - d) two spouts (5) extending from the compartment (1),
 - e) whereby the tops of the two spouts are arranged at the same height
- Prior art search revealed the following documents
 1. A teapot with one spout
 2. High efficiency distributor for fertilizer. Each rod has several nozzles for spraying liquid
 3. A filter handle with two spouts to be used with a coffee-maker
 4. An oil and vinegar bottle which reveals a second bottle inside. The two spouts are arranged to ensure the second bottle never drips while the first one is in use



1. Novelty

– Public prior use destroys novelty

- Patent claim on a sealing which consists essentially of a perhalogenated polymer, in particular PTFE filed December 14, 2010.
- “The defendant refers to two product catalogs of the Müller Group, a first allegedly from 2005 and a second allegedly from 2009”.
- The defendant states that from January 30, 1998 until the filing date, 15,985 cans and transport drums with stoppers with a full-PTFE seal were sold.



Abbildung 1: Ausschnitt aus S. 9 unten aus Produktkatalog Müller 2009

1. Novelty

Art. 54 European Patent Convention (EPC)

- (1) An invention shall be considered to be new if it does not form part of the state of the art.
- (2) The state of the art shall be held to comprise everything made available to the public by means of a written or oral description, by use, or in any other way, before the date of filing of the European patent application.
- (3) Additionally, the content of European patent applications as filed, the dates of filing of which are prior to the date referred to in paragraph 2 and which were published on or after that date, shall be considered as comprised in the state of the art.

[...]

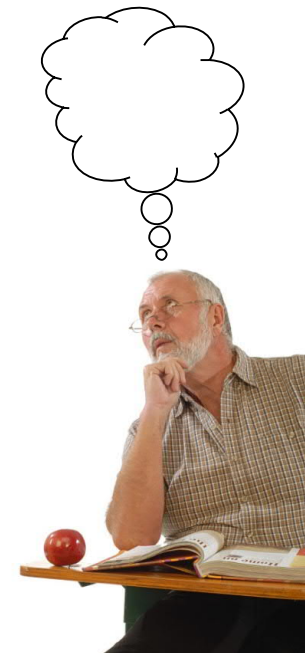
Timelines

- [..] **Novelty destroying events**
- [..] **Filing** patent application
 - No patent infringement suit yet
- [..] **Grant** patent
 - Patent infringement suit (no issued patent, no damages)
 - USA: “provision rights” to claim reasonable royalty for an infringement carried out after publication if actual notice and invention “substantially identical”
 - CH/EP: Claim for damages includes damages from the moment the infringer became aware of the patent application

1. Novelty

2. Non-obviousness

- Inventive step in the U.S.
- Judged by a fictional “person skilled in the art”
 - Skilled practitioner in the relevant technical field
 - Has access to the entire state of the art
 - Is capable of routine work
 - Rational thinking v. intuitive-creative
- He knows everything, but has zero imagination
- “It is settled that this man, if real, would be very boring – a nerd.”
- Judged in relation to “prior art”
 - (1) Determination of most similar, closest “prior art”
 - (2) Determination of objective task claimed invention is fulfilling
 - (3) Could-would test



1. Novelty

2. Non-obviousness

– Definitions

- Non-obviousness: an invention that an average “person skilled in the art” cannot only come up with by rational thinking. There is an “information gap” that the inventor solves in an intuitive, creative, associative way
- Obviousness: an invention that for an average “person skilled in the art” is logical, when systematically putting together “prior arts”

1. Novelty

2. Non-obviousness

- Potential indicators for “non-obviousness”
 - The invention satisfies a need that was not satisfied for a long time
 - The invention disproves a long as-true-believed principle
 - The invention surprises (e.g. unexpected outcome)
 - Expensive, time-intensive research was needed for the invention
 - Several steps are necessary to get to the invention starting from “prior art”
 - Simple answer to a problem that has often been worked upon
- Potential indicators for “obviousness”
 - Collection and interpretation of already existing information/solutions
 - Only size alterations
- Neutral factors
 - Whether or not invention can be used for economic success
 - Whether or not invention was an accident/chance/luck

1. Novelty

2. Non-obviousness

– Assessing non-obviousness

- Determine the closest prior art and common features
- Differences over D1: one v. two spouts, arrangement of the spouts
- Drawback of prior art: time-consuming
- Advantage & effect of the invention: time-saving
- Objective problem to solve: how to modify the teapot of D1 to reduce the time needed to fill multiple cups

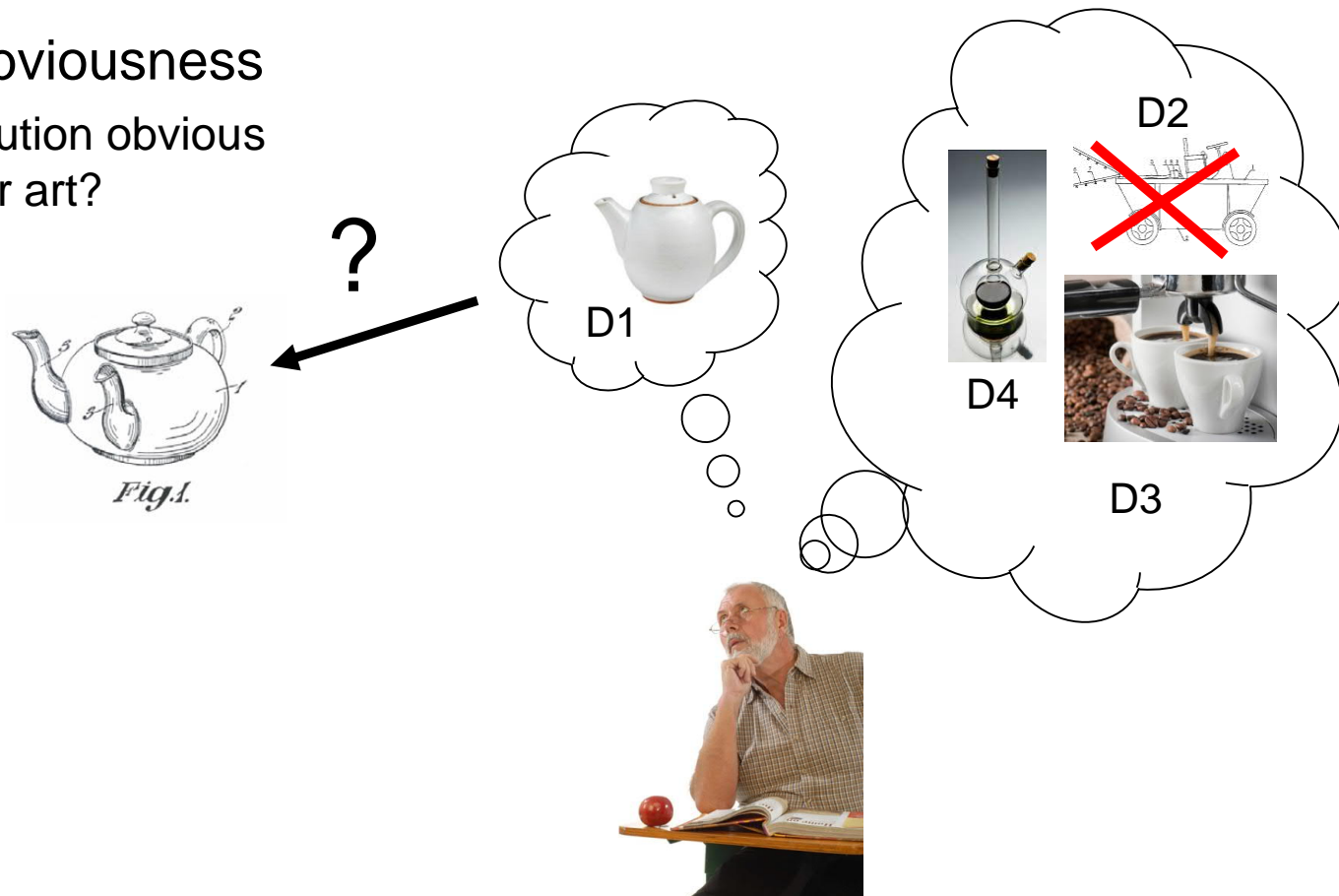


1. Novelty

2. Non-obviousness

– Assessing non-obviousness

- Is the claimed solution obvious in view of the prior art?



1. Novelty

2. Non-obviousness

3. Industrial application

- Possibility of being made or used in any kind of industry
 - Invention can be used to pursue a gainful, economic activity
 - Not sufficient if invention is only used for private use
- Wide interpretation
 - Mere discovery not sufficient
 - No aesthetic creations
 - No schemes for mental acts, playing games, business methods, programs for computers

1. Novelty

2. Non-obviousness

3. Industrial application

4. Disclosure

– Patent bargain

- Tradeoff between publishing invention and its protection
- Purpose: The information disclosed is published in the patent document so that everyone can benefit from it

– Disclosure can be anywhere in the world

- All material made available to the public anywhere in the world forms part of the state of the art, so disclosure in any form anywhere in the world can destroy novelty
- Written: even in a publication that no one might have read
- Oral: e.g. in a presentation or lecture

1. Novelty

2. Non-obviousness

3. Industrial application

4. Disclosure

– Requirements

- Sufficiency and clarity of the description: A detailed description of at least one way of carrying out the invention must be given
- The information disclosed must be sufficiently clear to a person “skilled in the art” (cf. Art. 83 EPC) (“sufficiency”)
- The information disclosed is published in the patent document so that everyone can benefit from it

1. Novelty

2. Non-obviousness

3. Industrial application

4. Disclosure

Article 55(1) European Patent Convention (EPC)

(1) For the application of Article 54, a disclosure of the invention shall not be taken into consideration if it occurred no earlier than six months preceding the filing of the European patent application and if it was due to, or in consequence of:

- (a) an evident abuse in relation to the applicant or his legal predecessor, or
- (b) the fact that the applicant or his legal predecessor has displayed the invention at an official, or officially recognised, international exhibition falling within the terms of the Convention on international exhibitions signed at Paris on 22 November 1928 and last revised on 30 November 1972.

■ “Don’ts” when considering filing a patent application

- Do not make any publication prior to filing
 - No article, press release, poster, proceedings or blog entry...
- Do not hold any lecture or presentation prior to filing
 - Except under a non-disclosure agreement (NDA)
- Do not sell products incorporating the invention prior to filing
- Keep the invention confidential
 - If necessary by using a non-disclosure agreement (NDA)
- Seek professional advice at an early stage
- Strategy
 - Company A discloses invention only when a patent registration is not worthwhile (mainly due to costs), but the company wants to keep using it so that no other company can file a patent and prohibit company A from using it



Patenting Nanorobots

— Product claim

• (a) Composition of matter

1. A DNA nanostructure nanorobot comprising:

a single stranded DNA scaffold strand of about 5,000 to 10,000 bases in length;

a plurality of staple strands of DNA, wherein each staple strands are about 20 to 40 bases in length, wherein each staple strand has a unique sequence and is hybridized to a specific position on the DNA scaffold strand, wherein the plurality of staple strands hybridized to the DNA scaffold form a sheet having a top surface and a bottom surface; and

one or more fastener strands of DNA, wherein the one or more fastener strands of DNA is capable of fastening the sheet into an origami structure

(b) Device

1. A nanorobot, comprising:

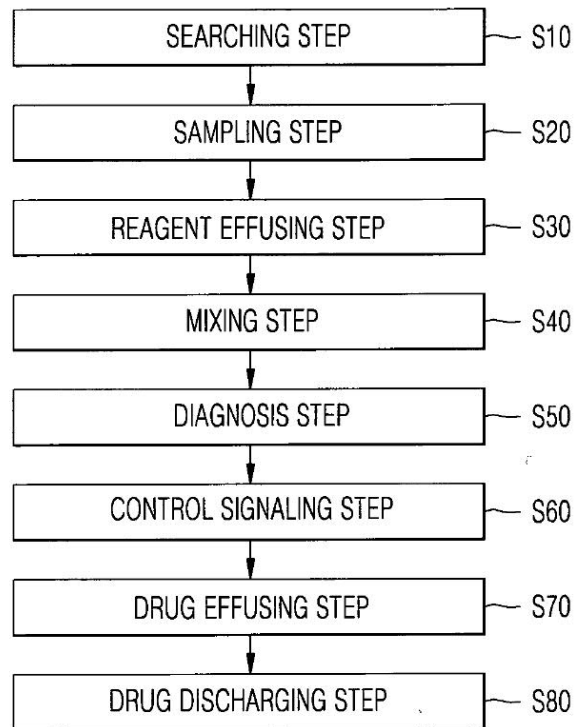
a load part, configured to load a labeling reagent;

a power part, configured to generate power according to an environmental condition, a direction of the power being a direction away from the load part; and

a connecting part, respectively connected with the load part and the power part, so that the power part seals the load part, wherein, the connecting part is configured to be disconnected when the power is greater than a preset value.

Patenting Nanorobots

– Process claim



[Claim 7]

A method of operating a microrobot for medical inspection and treatment, comprising: propelling the microrobot (400) toward a lesion by using bacteria (200) having motility and cognition (S10) ; taking a blood sample through a sampling port (310) when the microrobot (400) is positioned at the lesion by the bacteria (200) (S20) ; effusing a reagent for reacting with the lesion from a reagent unit (320) when the blood sample is introduced through the sampling port (310) into the microrobot (400) (S30) ; sucking and mixing the blood sample from the sampling port (310) and the reagent from the reagent unit (320) into a mixing unit (330) to form a mixture (S40) ; transferring the mixture of the blood and the reagent from the mixing unit (330) to a diagnostic unit (340) in which the mixture is analyzed (S50) ; determining a treatment manner in a control unit (350) in response to an analysis result of the diagnostic unit (340) and sending a control signal (S60) ; discharging a drug (362) from a drug unit (360) in accordance with the control signal of the control unit (350) (S70); and spraying the drug (362) over the external lesion through a discharging unit (380) by using a pump 370 (S80) .

■ Exceptions and exclusions from patentability

United States Patent [19]

Harvey

[11] **3,994,227**

[45] **Nov. 30, 1976**

[54] **BOUNDING ANTI-PERSONNEL MINE**

[75] Inventor: **Wallace J. Harvey, Succasunna, N.J.**

[73] Assignee: **The United States of America as represented by the Secretary of the Army, Washington, D.C.**

[22] Filed: **Oct. 6, 1971**

[21] Appl. No.: **187,134**

[52] U.S. Cl. **102/8; 102/76 R**

[51] Int. Cl.² **F42B 23/16; F42B 23/26**

[58] Field of Search **102/8, 7.2, 2, 76**

[56] **References Cited**

UNITED STATES PATENTS

2,440,702	5/1948	Short	102/8
3,175,489	3/1965	Reed, Jr.	102/8
3,344,742	10/1967	Schneider, Jr.	102/8 X
3,434,418	3/1969	Madlener et al.	102/8
3,575,110	3/1971	Conroy et al.	102/8

Primary Examiner—David H. Brown

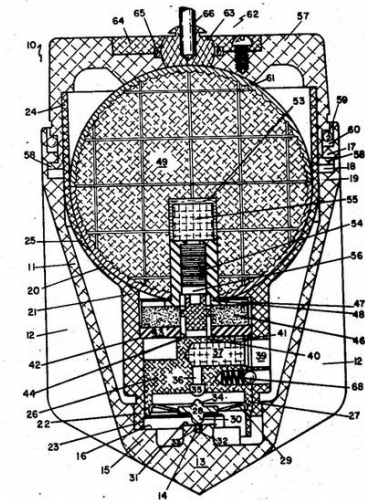
Attorney, Agent, or Firm—Nathan Edelberg; A. Victor Erkkila

[57] **ABSTRACT**

A mine casing containing an ejection barrel is closed by a shear releasable, slidable and rotatable cover for

providing an armed and a safe position. The barrel is rotatably coupled to the cover and carries a slidable belleville spring assembly including a belleville spring containing a firing pin which rests on the base of the casing and is aligned with a primer communicating with a delay column. An apertured safety plate rotatably coupled to the barrel is positioned between the delay column and ejection propellant communicating with a recess in a fragmentation sphere containing a high explosive nesting in the upper contoured portion of the barrel. The recess contains an ignition delay and a booster charge for detonating the high explosive. In the safe position the barrel cannot move downwardly and the safety plate prevents communication between the delay and propellant. When the mine cover is rotated into the armed position, the safety plate is turned to a position permitting communication between the delay column and propellant, and the barrel can be moved downward by pressure on the cover or by rotation of a ball cam in the cover in contact with the sphere. The downward movement of the barrel snaps the spring and drives the firing pins into the primer, igniting the delay and propellant, which generates gas pressure to launch the sphere, remove the cover and activate the ignition delay and booster so that the sphere is detonated sometime after launching.

10 Claims, 2 Drawing Figures



- Exceptions and exclusions from patentability

Article 53 European Patent Convention (EPC)

European patents shall not be granted in respect of:

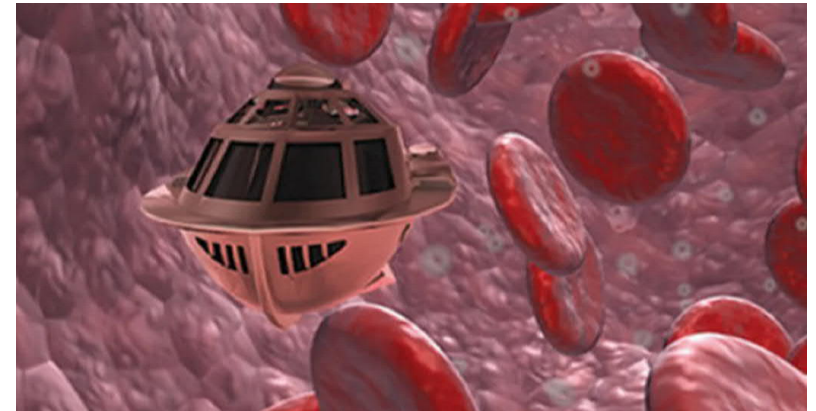
- (a) inventions the commercial exploitation of which would be contrary to “ordre public” or morality; such exploitation shall not be deemed to be so contrary merely because it is prohibited by law or regulation in some or all of the Contracting States;
- (b) plant or animal varieties or essentially biological processes for the production of plants or animals; this provision shall not apply to microbiological processes or the products thereof;
- (c) methods for treatment of the human or animal body by surgery or therapy and diagnostic methods practised on the human or animal body; this provision shall not apply to products, in particular substances or compositions, for use in any of these methods.

- Exceptions and exclusions from patentability
 - Fundamental principles
 - “Ordre public”
 - Morality
 - Refusal of patent protection does not mean that the exploitation of the invention is forbidden → question of public law
 - Example “ordre public”: field trials with transgenic plants if sufficient evidence of a serious threat to the environment is found (EPO, OJ 1995, 545 no. 18-19 – PGS)
 - Example “morality”: patent on human cloning
 - (Art. 53 (a) EPC)

- Exceptions and exclusions from patentability
 - Plant or animal varieties
 - New species of plants and animals
 - Can be protected through specific IP rights for plant varieties
 - Also: biological processes for the production of plants or animals
 - The human body and non-separated parts
 - Methods for treatment of the human or animal body by surgery or therapy and diagnostic methods practiced on the human or animal body
 - Example: No patent for a method for treating the human eye with a laser even if it involves an artificial lens being mounted on the cornea (EPO,T 24/91, OJ 1995, 512)
 - (Article 53(c) and Article 54(4)-(5) EPC)

■ Nanorobots and medical methods

- (1) Injecting a nanorobot into the bloodstream,
- (2) Driving the nanorobot toward a lesion,
- (3) Collection of a blood sample,
- (4) Mixing the blood sample with a reagent,
- (5) Transferring the mixture at a diagnostic unit,
- (6) Determining a treatment method in a control unit,
- (7) Discharging a drug from a drug unit, and
- (8) Spraying the drug over the external lesion.



Diagnostic methods: (3), (4), (6)

Therapeutical methods: (7), (8)

Avoid by patenting methods for propulsion and controlling the nanorobot (2)

Avoid by patenting nanorobot itself (composition of matter or device)

- Exceptions and exclusions from patentability

Article 52(2) European Patent Convention

The following in particular shall not be regarded as inventions within the meaning of paragraph 1:

- (a) discoveries, scientific theories and mathematical methods;
- (b) aesthetic creations;
- (c) schemes, rules and methods for performing mental acts, playing games or doing business, and programs for computers;
- (d) presentations of information.

- Exceptions and exclusions from patentability
 - A patent claim directed solely to an item listed in Article 52(2) EPC will not be considered an invention and therefore will not be patentable, but ...
 - This applies only if the patent claim relates to that subject-matter or activities “as such” (Article 52(3) EPC)
 - A patent claim that includes a mix of both patentable, technical, and excluded, non-technical, subject-matter can be regarded as an invention and may be patentable after all

■ Exceptions and exclusions from patentability

— Biotechnological inventions

- in the U.S.

- Diamond v. Chakrabarty

- 1972: A. Chakrabarty (General Electric) files an application for “Microorganisms Having Multiple, Compatible Degradative Energy-Generating Plasmids and Preparation Thereof”, including the claim: “A bacterium from the genus *Pseudomonas* containing therein at least two stable energy-generating plasmids, each of said plasmids providing a separate hydrocarbon degradative pathway”
 - 1974: patent examiner: Micro-organisms are “products of nature”; living things are not patentable subject matter under 35 U.S.C. § 101
 - 1976: Board of Appeals: affirms the patent examiner’s decision

■ Exceptions and exclusions from patentability

– Biotechnological inventions

- in the U.S.

- Diamond v. Chakrabarty

- 1980: U.S. Supreme Court

- 5-to-4 decision
- The organism is a “manufacture or composition of matter” within the meaning of 35 U.S.C. § 101.
- Chief Justice Burger, writing for the majority: “Patentable subject matter includes anything under the sun that ... is made by man.”
- Underlying doctrinal problem: originalism versus living constitution

- Aftermath of Chakrabarty

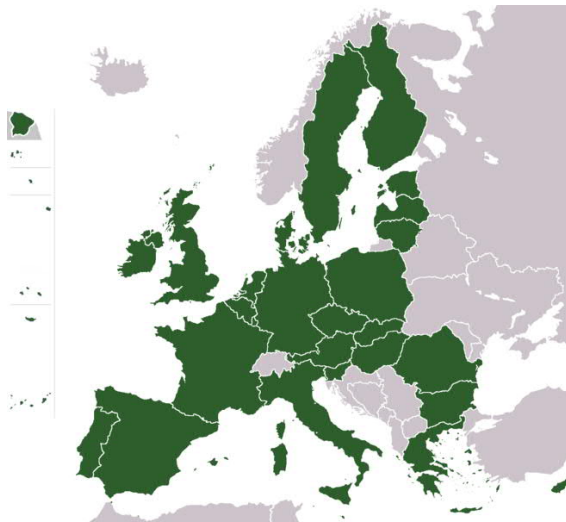
- Various patents for genetically engineered microbes
- U.S. patent 1988 / European patent 1992: Harvard OncoMouse, genetically altered to carry cancer genes for breast cancer research
- Myriad: Human genes cannot be patented because DNA is a product of nature
(vs. DNA sequences different from naturally occurring sequences are eligible)



■ Exceptions and exclusions from patentability

— Biotechnological inventions

- in Europe: European Biotechnology Directive 98/44/EC, OJ L 213, 30.7.1998, pp. 13-21
- Harmonization of patent law relating to biotech inventions



Member states of the EU



Member states of the EPC
(red: states recognizing European Patents)

■ Exceptions and exclusions from patentability

– European Biotechnology Directive

Art. 5:

1. The human body, at the various stages of its formation and development, and the simple discovery of one of its elements, including the sequence or partial sequence of a gene, cannot constitute patentable inventions.
2. An element isolated from the human body or otherwise produced by means of a technical process, including the sequence or partial sequence of a gene, may constitute a patentable invention, even if the structure of that element is identical to that of a natural element.

⇒ Naturally occurring sequence patentable if **industrial application** disclosed

- Board of Appeals T 123/05 : Useful for diagnostic purposes and could be used commercially to detect the presence of BRCA1 alleles predisposing individuals to breast cancer
- BoA T 0870/04: Structure of the claimed nucleic acid sequence was given, but function was undetermined, obscure or only vaguely indicated (“no immediate benefit”).

- Exceptions and exclusions from patentability
 - Software patents under the European Patent Convention
 - Program for a computer “as such” is excluded from patentability, but...
 - Not excluded from patentability if when running on a computer, it causes a further “technical effect” going beyond the “normal” physical interaction between the program (software) and the computer (hardware)
 - Programs for computers are therefore not automatically excluded from patentability

- Exceptions and exclusions from patentability
 - Business method patents
 - Definition
 - Systematic procedure
 - Achieving theoretical and practical objectives
 - Patent over “method” or way of doing business
 - Relevance
 - Increased relevance due to introduction of e-commerce and e-finance
 - E.g. “one-click” patent application of Amazon
 - Range: from complicated algorithms involving different software implementation, to very simple business methods
 - Differences in patentability depending on countries
 - EPC: exceptions for methods for doing business (Art. 52 (2) EPC)
 - USA: considerable case law

- Exceptions and exclusions from patentability
 - Business method patents
 - in the U.S.

Section 101 U.S. Patent Act (35 U.S.C. § 101)

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

- Practice of the U.S. Patent & Trademark Office (USPTO)
 - Business methods excluded from patentability until the 1980's
 - Emergence of the Internet and e-commerce
 - Changes of the principle for evaluation: Patentability of business methods determined according to statutory requirements
 - Rush to USPTO for software and business methods patents
 - Criticism: standards for granting patents are too loose and wide

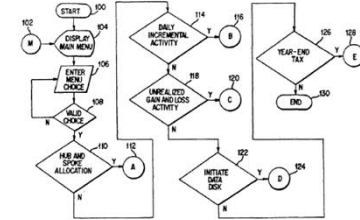
■ Exceptions and exclusions from patentability

— Business method patents

- in the U.S.

- Important court decisions

- Diamond v. Chakrabarty (Supreme Court 1980): A patent can be granted to “anything under the sun that is made by man”
 - Diamond v. Diehr (Supreme Court 1981): While patents are not granted to laws of nature, natural phenomena and abstract ideas, the mere presence of a software element which controls the execution of a physical process does not preclude patentability of the invention as a whole
 - State Street Bank v. Signature Financial Group (Court of Appeals for the Federal Circuit 1998): tax-reducing method can be patentable (U.S. patent law does not include a general business-method exception, goal of Congress was to promote progress)
 - Bilski v. Kappos (Supreme Court 2010): rejecting the test by the CAFC in State Street Bank, thereby de facto reducing the possibility for business method patents in the U.S.
 - America Invents Act of 2011 prevents the U.S. Patent & Trademark Office from issuing patents for tax strategy methods
 - Alice Corp. v. CLS Bank International (Supreme Court 2014): computer-implemented, electronic escrow service for facilitating financial transactions concerned abstract ideas outside of patent protection
- patenting computer software has become considerably harder in the U.S.



- Exceptions and exclusions from patentability

Alice Test

1) Establish whether claims are directed to a patent-ineligible concept such as a law of nature, a natural phenomena, or an abstract idea.

(Concept of organizing information through mathematical correlation; producing new labeled observations, evaluating an observation, comparing scores, identifying a feature and updating a model)

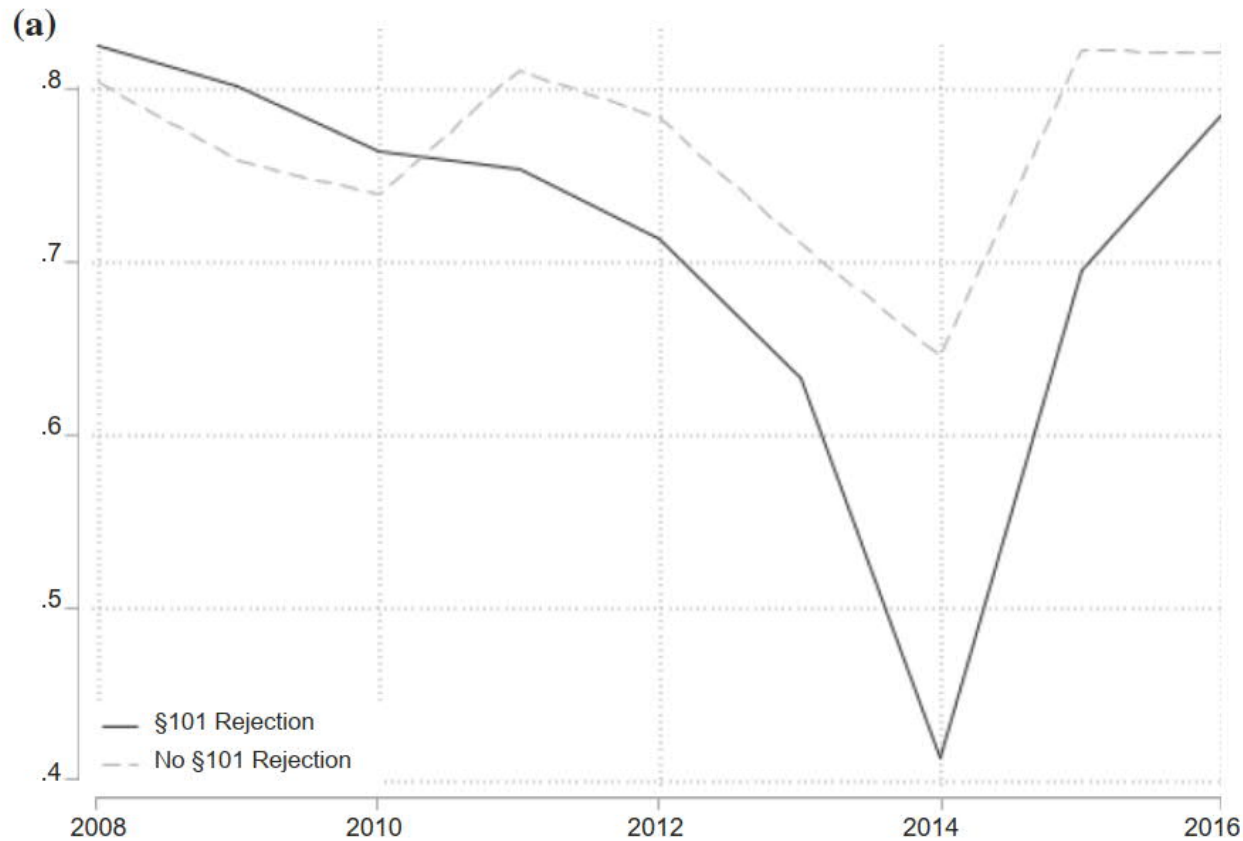
2) Examine whether elements of the claim include additional limitations amounting to “significantly more”.

(Improve the functioning of the computer itself, effect an improvement in technical field, particular technical solution to a technical problem, solve a problem necessarily rooted in computer technology)

■ Exceptions and exclusions from patentability

Alice Decision impact on AI

Grant rate over time

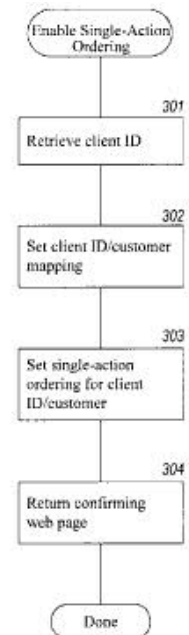


■ Exceptions and exclusions from patentability

– Business method patents

- in the U.S.

- Amazon.com's [“one click” patent](#) no. 5960411
 - Filed in September 1999: “Method and system for placing a purchase order via a communication network”
 - Registered consumer can make an online purchase with one click
 - Amazon.com v. Barnesandnoble.com
 - Amazons sues Barnes&Nobel for patent infringement in October 1999 (“one click” v. “Express Lane”)
 - Out-of-court settlement in 2002
 - Reexamination of “one click” patent by the USPTO in 2006/07
 - DigiCash electronic cash system as prior art
 - Some claims of the patent were restricted



I. Patents

2. Procedure

■ Registration

— Application

- First-to-file versus first-to-invent
 - Europe and most other countries: first-to-file system
 - U.S. until 2013: first-to-invent system
 - U.S. switched to a first-to-file system with the America Invents Act 2011, taking effect in March 2013
 - Advantage of a first-to-invent system: rewarding the actual innovator
 - Advantages of a first-to-file system
 - Simpler to administer
 - Provide more certainty
 - Additional incentive to disclose innovation early
 - International harmonization

■ Registration

— Application

- What does a European patent application consist of?
 - Request for grant
 - Description of the invention (Rule 42 EPC)

■ What does the description contain?

- Prior Art
 - Teapot with one spout
- Drawback of prior art
 - Time consuming
- Problem to be solved
 - Reduce filling time for multiple cups
- Solution
 - Provide a second spout
- Advantage of the invention
 - Filling time is reduced



Fig. 1.

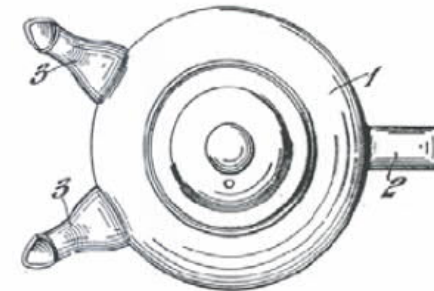




Fig. 2.

■ Registration

— Application

- What does a European patent application consist of?
 - Request for grant
 - Description of the invention (Rule 42 EPC)
 - Summary of the prior art
 - Disclosure of the invention and what problem it is supposed to solve
 - Claims (Art. 69, 84 and Rule 43 EPC)

■ Two types of claims

- Independent claims: the invention in its broadest scope
 - Example: Claim 1: A product/process/apparatus/use comprising
 - B
 - C
 - D technical features of the claimed invention
- Dependent claims: any claim which includes all the features of any other claim
 - Example: Claim 2: A product/process/apparatus/use as claimed in claim 1, comprising
 - E further particulars of claim 1

■ Registration

— Application

- What does a European patent application consist of?
 - Request for grant
 - Description of the invention (Rule 42 EPC)
 - Summary of the prior art
 - Disclosure of the invention and what problem it is supposed to solve
 - Claims (Art. 69, 84 and Rule 43 EPC)
 - Extent of protection conferred by a European patent
 - Drawings (if any) referred to in the description or the claims
 - Description and drawings are used to interpret the claims
 - Abstract (Art. 85, Rule 47 EPC)
 - Around 150 words
 - Used as a search tool for other patent applications

■ Registration

— Application

- What does the description contain?
 - Prior Art
 - Teapot with one spout
 - Drawback of prior art
 - Time consuming
 - Problem to be solved
 - Reduce filling time for multiple cups
 - Solution
 - Provide a second spout
 - Advantage of the invention
 - Filling time is reduced

■ Registration

- Formal examination
- Substantial examination concerning novelty and non-obviousness
- Outcome of examination: patent grant or denial
- Key people in the application process are
 - Applicant
 - Patent examiner
 - Representative, either
 - a professional representative who is on a list maintained by the EPO (Article 134(1) EPC), or
 - a legal practitioner entitled to act in patent matters (Article 134(8) EPC)

■ Registration

— Patent owner

- Application designates the inventor
- In general, the rights conferred by a patent belong to the inventor
- Special case: inventions by an employee
 - Invention relevant to the employee's normal field of employment will generally be owned by their employer
 - Depends on the patent and employment law of the respective country
 - Distinction: official invention, occasional invention, free invention
 - See later guest presentation
- Inventor has the right to be mentioned (also in the case he is an employee)

Article 3 Swiss Patent Act

- (1) The inventor, his successor in title, or a third party owning the invention under any other title has the right to the grant of the patent.
- (2) Where several inventors have made an invention jointly, they have this right jointly.
- (3) Where two or more inventors have made the invention independently of each other, the person who makes the earlier application or whose application has the earliest priority date has this right.

■ Who files an application where?

— Who

- Filed by natural or legal person
 - Legal person = companies, e.g. Toyota
 - Natural person = individuals, e.g. Albert Einstein
- Joint applicants possible

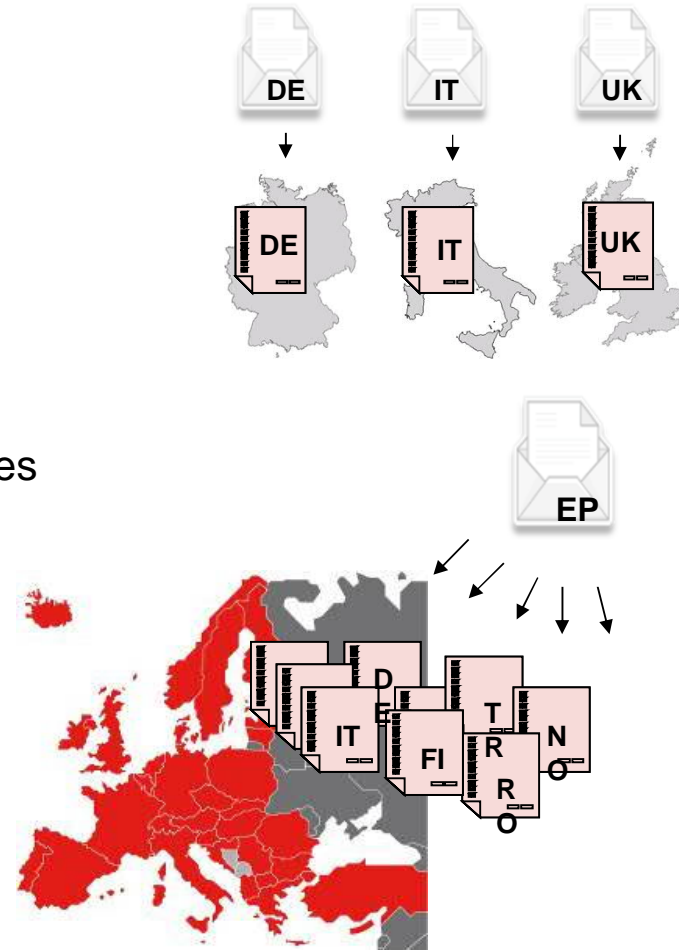
— Where

- Territoriality principle
- There is no such thing as an international patent!
- National patent offices
- European Patent Office (EPO)
- U.S. Patent Office (USPTO)
- Patent Cooperation Treaty (PCT)

■ Who files an application where?

— How to obtain patent protection in Europe

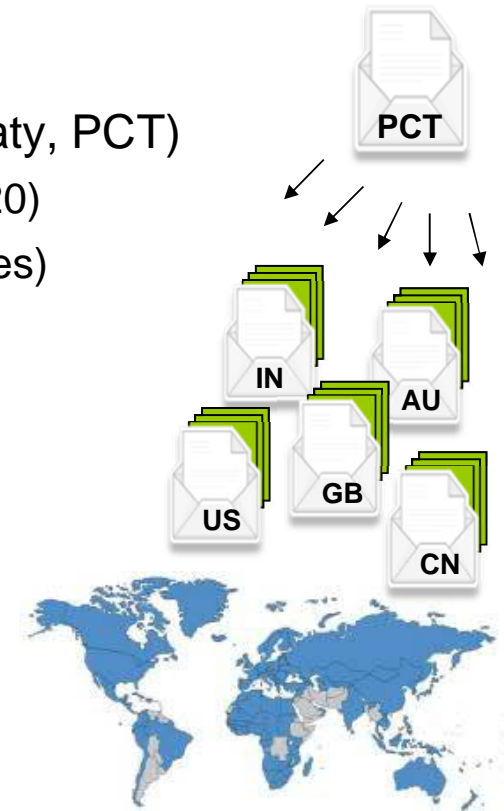
- Option 1: The national route
 - Separate procedures for each country
 - Procedures differ according to national law
- Option 2: The regional route: European Patent Convention
 - One application filed at one office for up to 40 countries
 - One procedure
 - Applicants selects the desired countries
 - Results in a bundle of national patents



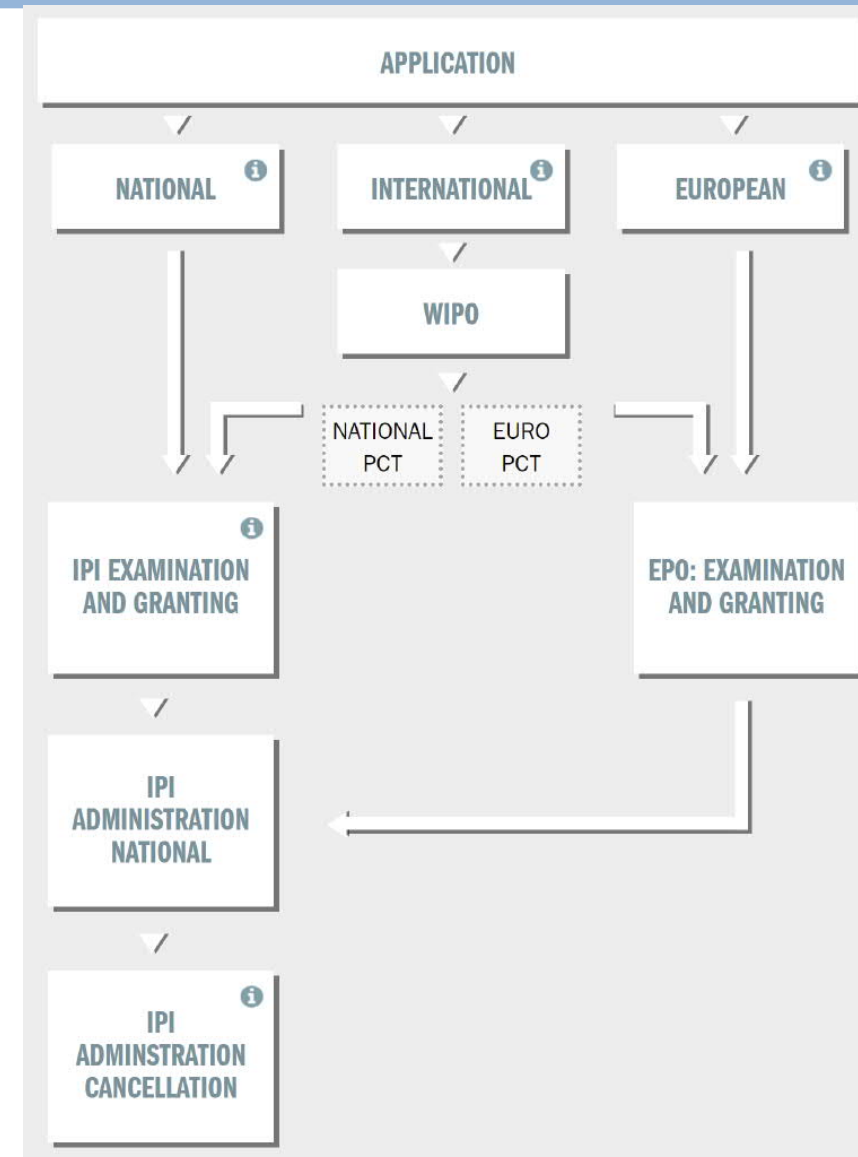
■ Who files an application where?

— How to obtain patent protection in Europe

- Option 3: The international route (Patent Cooperation Treaty, PCT)
 - One single application for up to 153 countries (as of March 2020)
 - Harmonization of formal standards (language, patent agent, fees)
 - Search report and opinion on patentability
 - After 30-31 months, decision by applicant on which countries to proceed in



- Who files an application where?
 - How to obtain patent protection in Switzerland?



- Closer look at patent offices
 - National patent offices
 - National patent valid only in the country where it is granted
 - Non-residents can also apply for a patent
 - One year of “priority” for subsequent applications

■ Closer look at patent offices

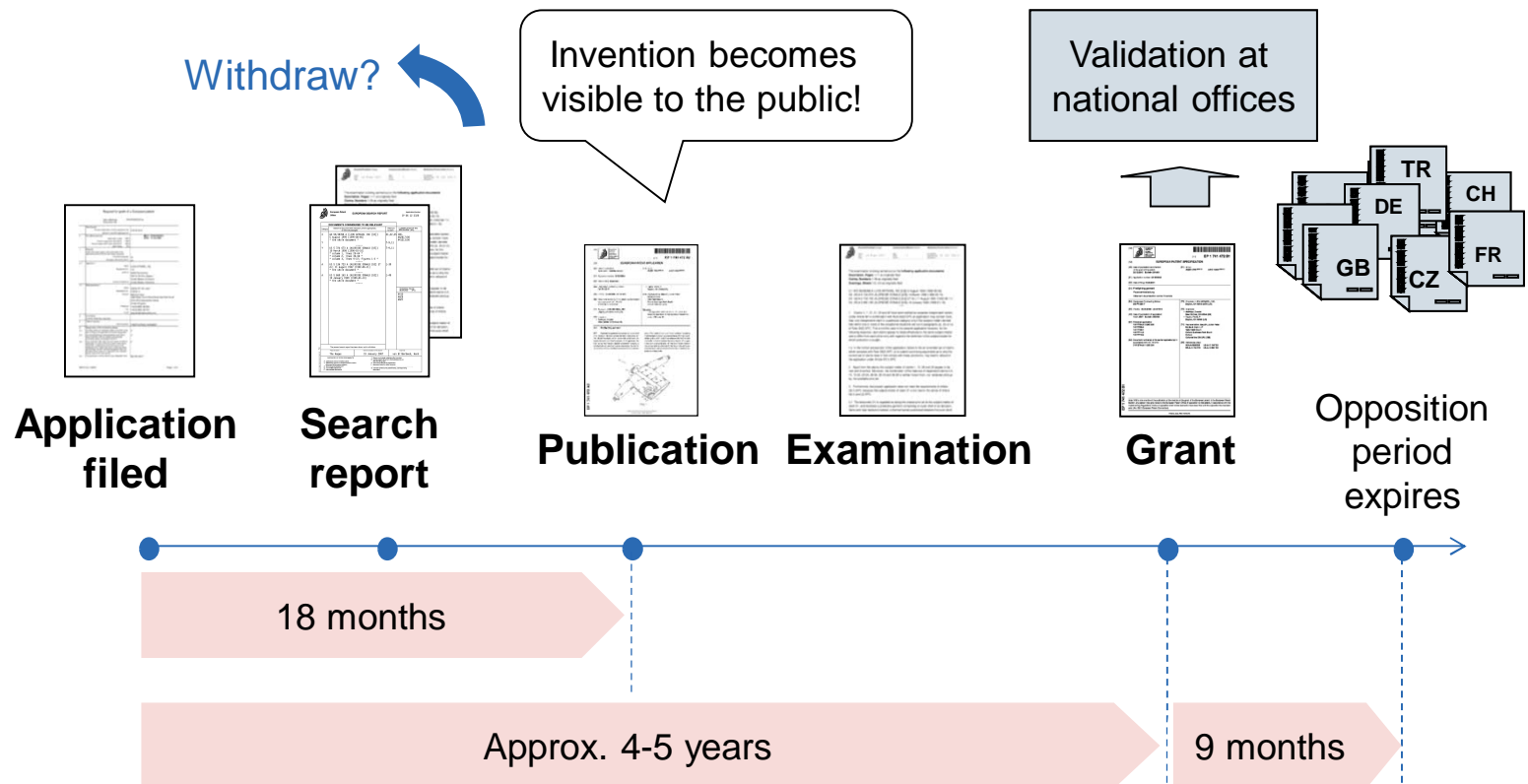
– European Patent Office (EPO)

- A European patent is equivalent to national patents in the countries where it is granted (the applicant chooses the countries)
- EPO established under the European Patent Convention (EPC)
- In force since 1977, EPC 2000 since December 2007; 36 member states, including Switzerland, plus 4 extension countries
- One central application, examined by EPO (Munich, Den Haag and Berlin)
- Publication of application 18 months after filing or priority date
- After issuance: possibility for opposition before the EPO
- Appeal: to one of the 24 independent Boards of Appeal (under special conditions: Enlarged Board of Appeal, EPC 112a)
- Revocation by Board of Appeal = final. All other cases: revocation still possible before national courts

■ Closer look at patent offices

– European Patent Office

- EPO patent application: process

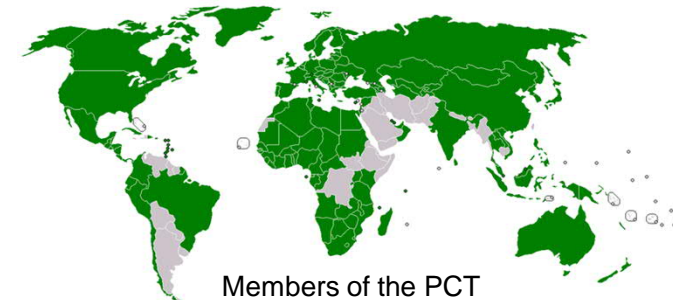


- Closer look at patent offices
 - European Patent Office
 - What can happen after a European patent has been granted?
 - Opposition
 - Limitation / revocation
 - Renewal fees
 - Invalidity proceedings (before a court)
 - Infringement proceedings (before a court)

■ Closer look at patent offices

— Via the Patent Cooperation Treaty

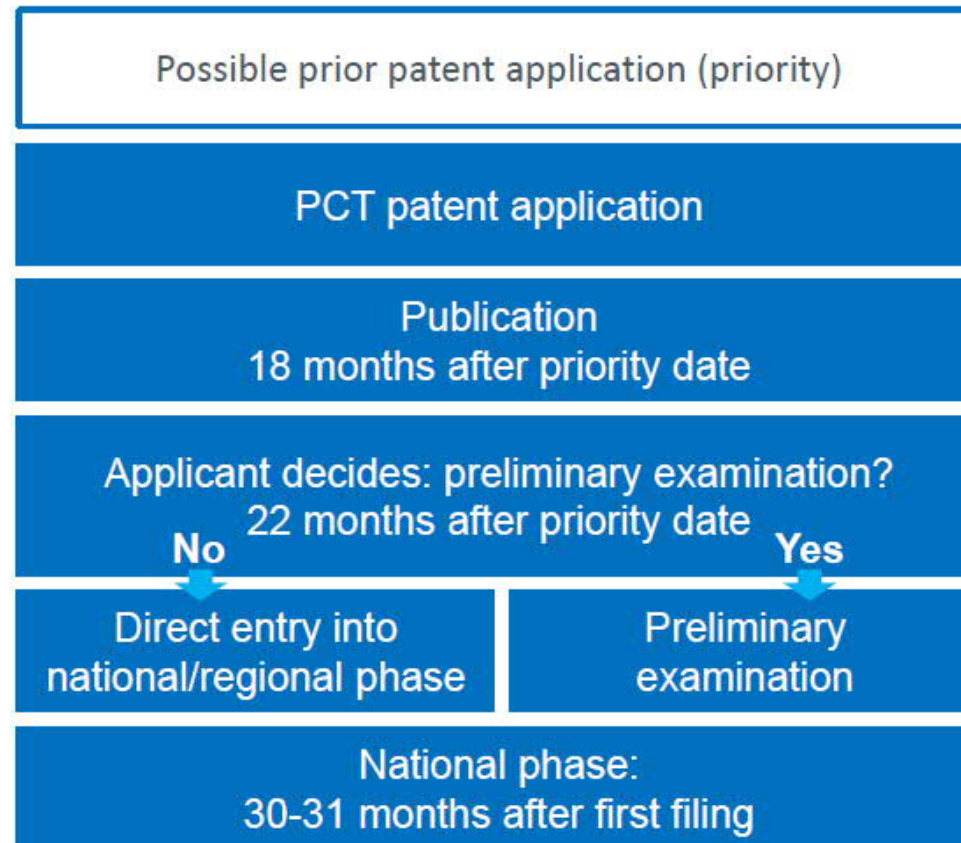
- Just one application for > 150 countries
- International search report
- After the initial application phase, the international application leads to multiple national patent examination procedures
- Decisions with cost implications can be delayed until 30-31 months after filing (e.g. choice of countries to file in)



■ About the Patent Cooperation Treaty (PCT)

- The Patent Cooperation Treaty was concluded in 1970 and has been ratified by almost all economically important countries (>150)
- The PCT gives an option to patent protection in all the member countries
- It delays as much as possible (30 months) the national/regional (namely EP) procedures („national phase“), i.e. the respective fees and translation costs
- A PCT application (or „international application“) is examined only optionally, not binding to member states
- A PCT application is published 18 months after filing or priority date
- A PCT application does not lead to the grant of a patent, not to speak of an “international patent“

- PCT patent application: process



- Cost of national patent application: Germany



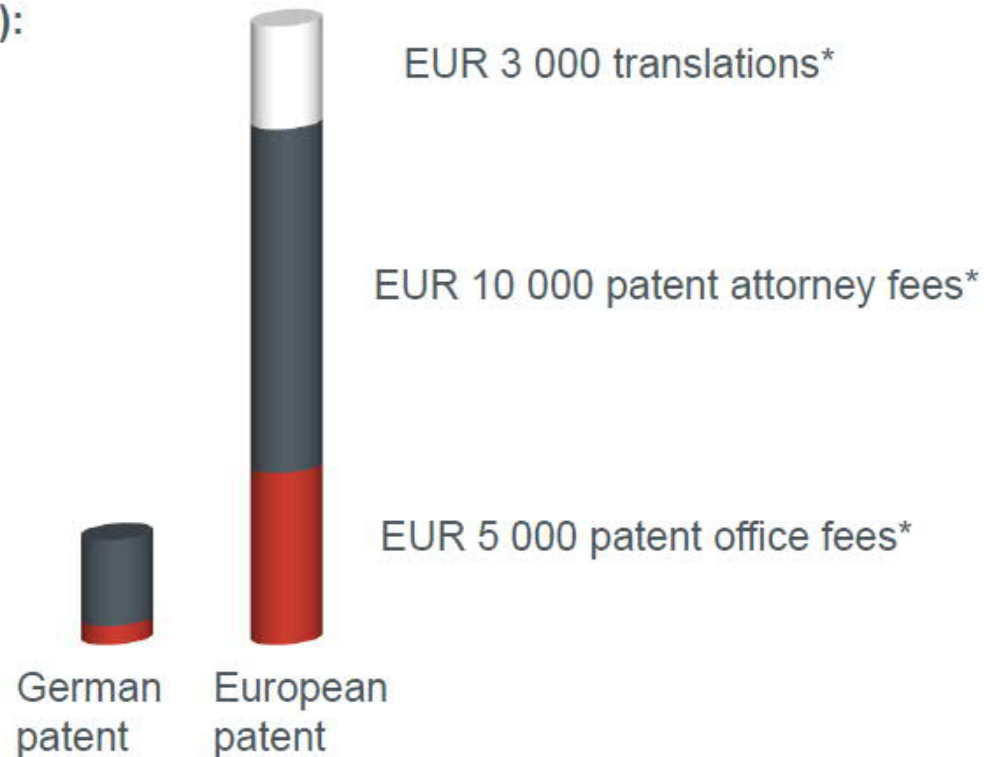
Total: EUR 1 700 - EUR 5 100

(depending on complexity of patent and extent of applicant's preparation!)

Cost of a European patent up to grant

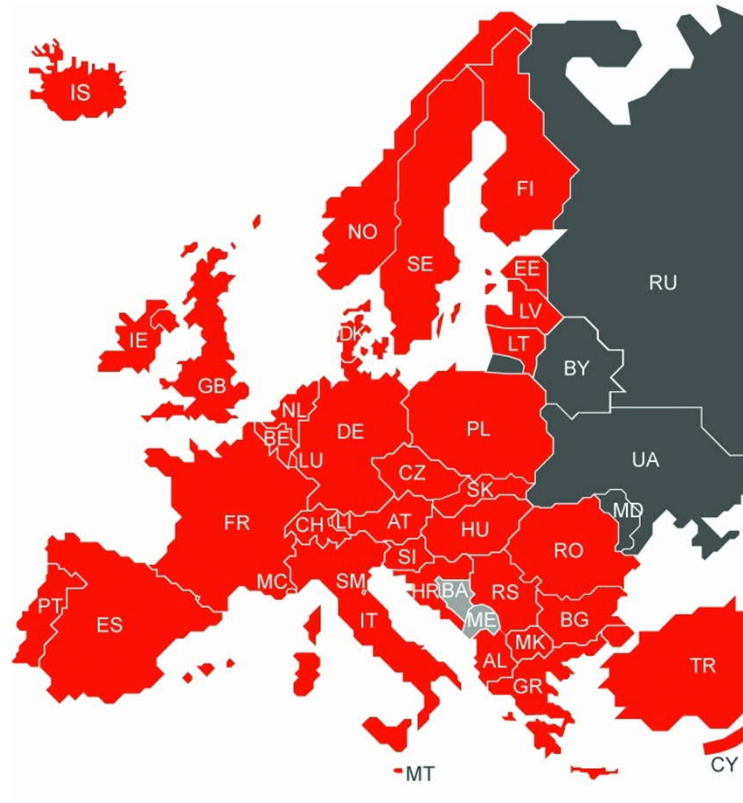
Protection in (e.g.):

Germany
United Kingdom
France
Italy
Spain
Switzerland



* Estimated cost. Actual cost depends very much on the specifics of the individual case.

- Closer look at patent offices
 - European Patent Office
 - Member states of the European Patent Convention



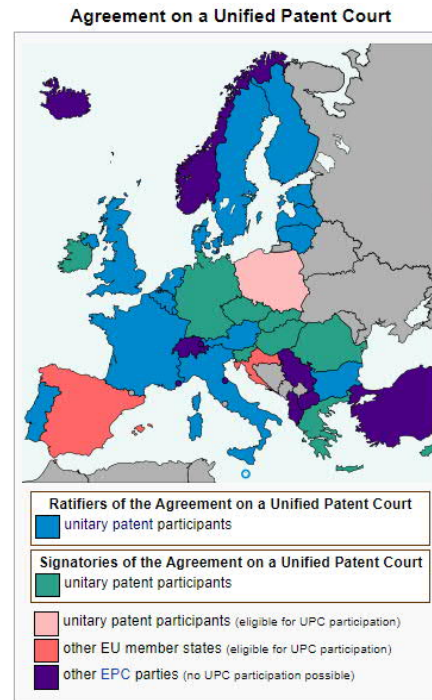
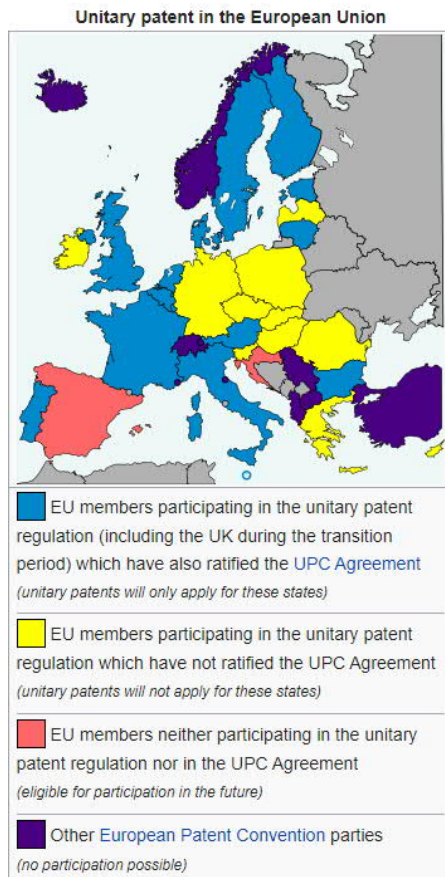
- **Developments toward a EU Unitary Patent system**
 - 1970's/1980's: Community Patent Convention & Agreement
 - Community Patent Convention: signed by 9 countries in 1975, but never entered into force (because too few countries ratified it)
 - Agreement relating to Community Patents: signed by 12 countries in 1989, but never entered into force (because too few countries ratified it)
 - 2000-2004: Community Patent Regulation
 - Goals
 - Patent granted by the European Patent Office in one of its procedural languages (English, German or French) is valid without further translation, but for a translation of the claims into the two other procedural languages → reduction in translation costs
 - Court would hold exclusive jurisdiction to invalidate patents → harmonization of patent validity across all member states
 - Project failed, one of the problems: political compromise on language issues?

- Developments toward a EU Unitary Patent system
 - 2003-2011: Proposal for a Unified Patent Litigation Agreement
 - Idea: creation of a European Patent Court system deciding patent infringement cases relating to patents of EPO member states, including a regional chambers of the court and a European Patent Court of Appeal
 - European Court of Justice (2011): incompatible with EU law

- **Developments toward a EU Unitary Patent system**
 - **2012-: Unitary Patent and Unified Patent Court**
 - **Unitary Patent**
 - A European patent with unitary effect
 - Fourth option in addition to national patents, EPO “patents”, and PCT “patents”
 - Protection in a single step for 25 participating EU member states (all EU member states but Croatia and Spain)
 - Unitary effect can be registered by the patentee after the grant of the European patent
 - Unitary character for said 25 countries: limitation, transfer, revocation, lapse (only in respect of all countries)
 - No translation after grant, machine translation sufficient, language regime applicable to the unitary patent: German, English, French
 - One-stop shop with centralised post-grant administration by the EPO (single renewal fee, register entries)

- **Developments toward a EU Unitary Patent system**
 - 2012-: Unitary Patent and Unified Patent Court
 - Unified Patent Court
 - A specialized patent court with exclusive jurisdiction for litigation relating to European patents with unitary effect (“unitary patents”) and European patents
 - Multinational panels composed of legally and technically qualified judges
 - Court of First Instance:
 - Local & regional divisions: Brussels, Den Haag, Düsseldorf, Dublin, Copenhagen, Hamburg, Helsinki, London (unrealistic after Brexit), Milan, Mannheim, Munich, Paris, Stockholm, Vienna
 - Central divisions: Paris (main branch), London (chemistry/pharma; unrealistic after Brexit), Munich (mechanical engineering)
 - Court of Appeal: Luxembourg
 - 24 participating EU member states (all except Croatia, Poland and Spain)

- Developments toward a EU Unitary Patent system
 - 2012-: Unitary Patent and Unified Patent Court
 - Unitary Patent & Unified Patent Court

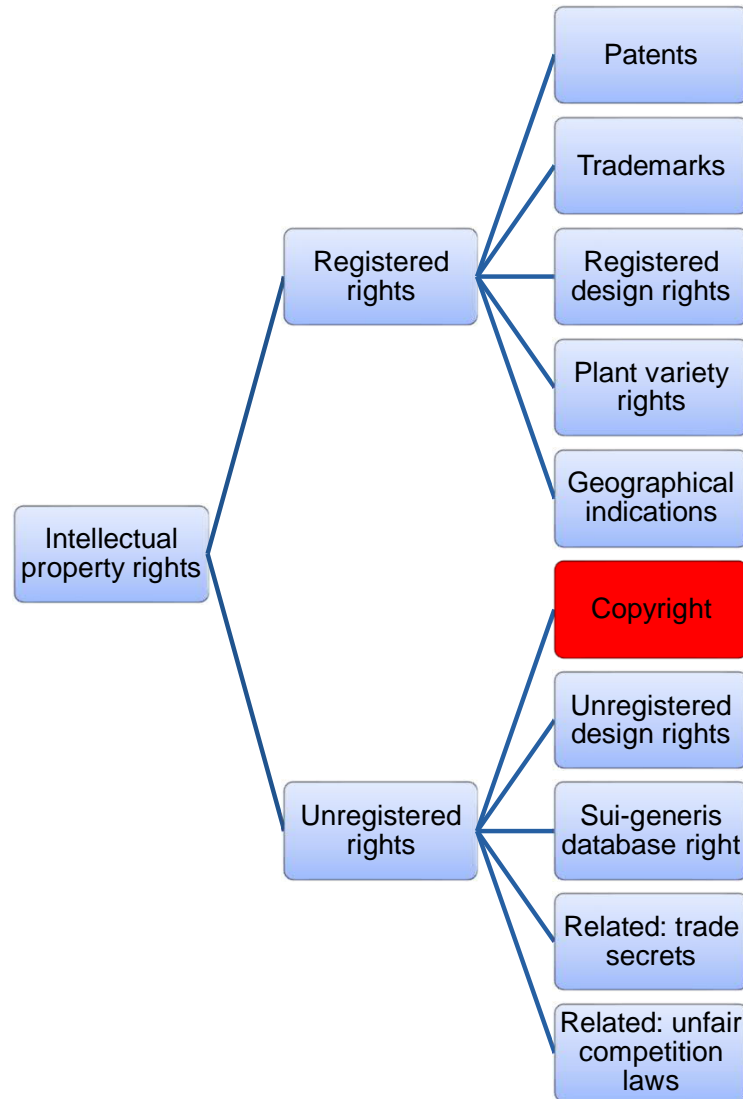


Source: Wikipedia, images partly before Brexit

- Developments toward a EU Unitary Patent system
 - 2012-: Unitary Patent and Unified Patent Court
 - January 2020: Brexit
 - After the U.K. left the EU, it can no longer participate in the systems
 - The Unified Patent Court agreement (and, indirectly, the Unitary Patent agreement) now needs the adoption by France, Germany and the Netherlands in order to become effective
 - March 2020: German Constitutional Court holds that German law ratifying the Unified Patent Court Agreement is unconstitutional
 - Art. 23(1) German Basic Law („Grundgesetz“): the establishment of the European Union, as well as changes in its treaty foundations and comparable regulations that amend or supplement the Basic Law or make such amendments or supplements possible require approval by a two-third majority in both chambers of the Parliament.
 - The Act ratifying the Unified Patent Court Agreement is equivalent to an amendment on the treaties establishing the European Union. As the German Parliament did not pass the Act with the required majority, the Act is void.
 - January 2022: Enters in force, expected to begin 2023

■ Patent system in Switzerland

- Unlike under the European or the U.S. patent system, the Swiss Patent Office (IGE/IPI) does not engage in an ex-ante substantial (i.e. novelty and non-obviousness) examination of patentability requirements
- The validity of a patent can be contested after the patent has been granted by other parties by means of a legal action in cancellation
- ex ante versus ex post examination in patent law
- Please note: Switzerland is part of the European Patent Convention, but not of the Unitary Patent and the Unified Patent Court system!



II. Copyrights

1. Legal Requirements

Article 2 Swiss Copyright Act

(1) Works are, independent of their value or purpose, intellectual creations of literature and art that have an individual character.



(2) This includes, in particular:

- (a) works based on language, be they literary, scientific or other works;
- (b) musical and other acoustic works;
- (c) works of fine art, in particular paintings, sculpture and graphic arts;
- (d) works with a scientific or technical content, such as drawings, plans, maps or three-dimensional representations;
- (e) works of architecture;
- (f) works of applied art;
- (g) photographic, cinematic, or other visual or audiovisual works;
- (h) choreographic works and pantomime.

(3) Computer programs are considered works as well.

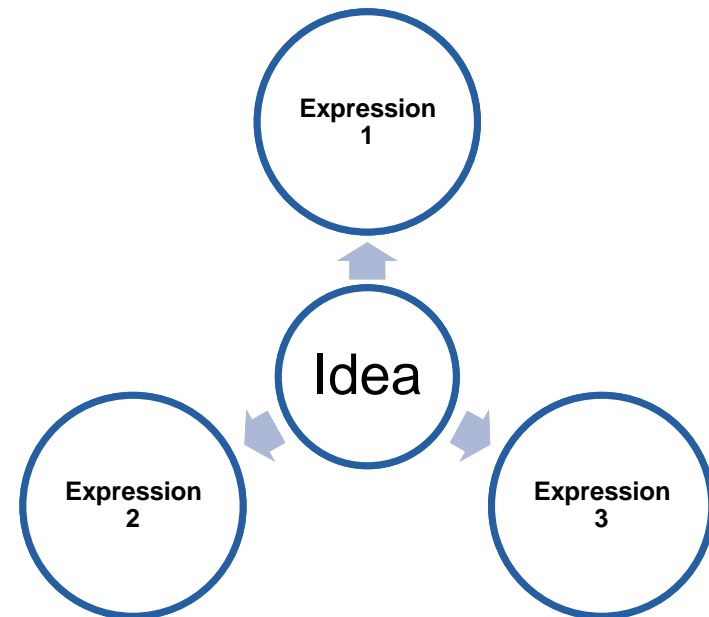
[...]

- Copyright protection covers works fulfilling the following two criteria

<p>Intellectual creation</p> 	<p>Originality</p> 
---	---

1. Intellectual creation

- Made by a human being
 - Not works created merely by machines & computers
 - Embodiment of an idea
 - Idea itself not protected
 - Only the original expression of an idea is protected
- “Idea/expression dichotomy”
- Major difference to patent law



1. Intellectual creation

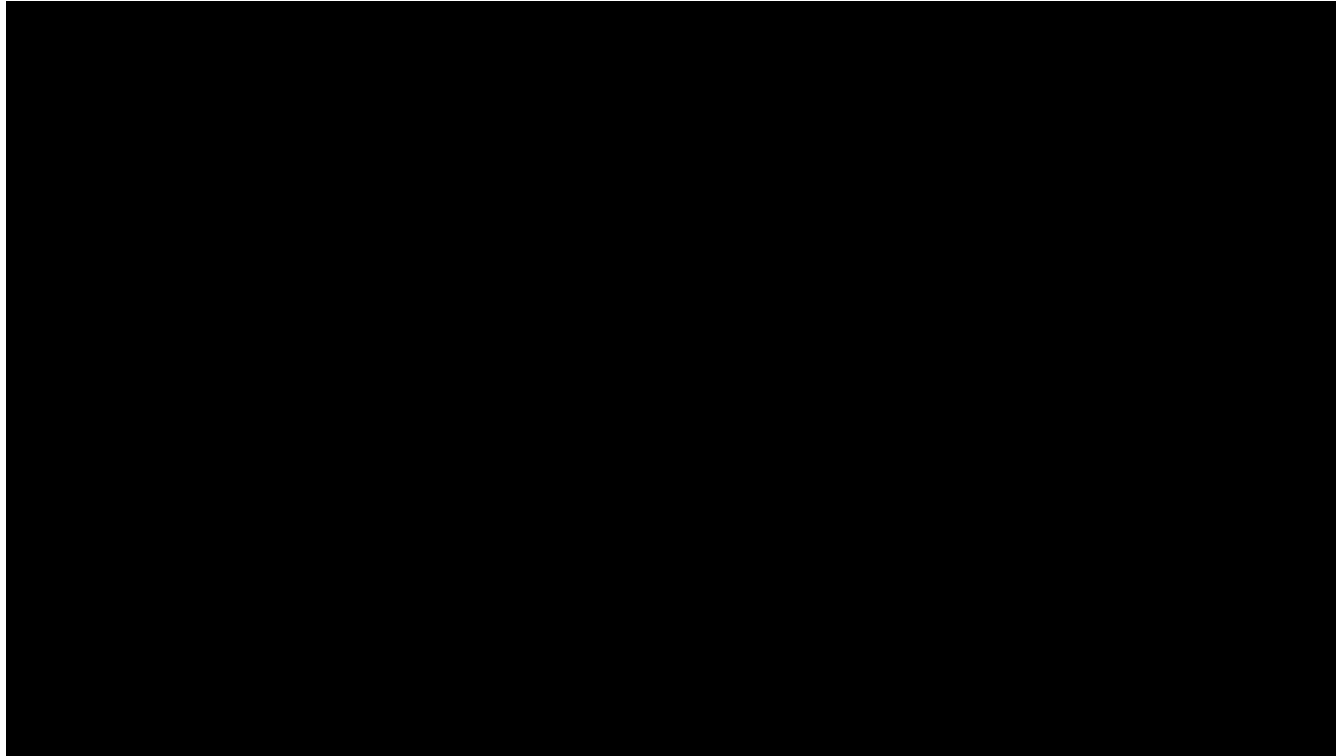
2. Originality

- Individual character making it unique
 - Intellectual creation required, but no test of the qualitative or aesthetic merits of the work
- Often low standard of originality; does not need to be considered a piece of fine art

■ Clear cases

- Literary works
- Music
- Theater, choreographic works
- Paintings, photography, sculptures
- Movies, sound recordings
- Architectural works
- Computer programs
 - In many cases, computer programs may de facto also be protected by patent law
 - Both the source code and the binary code are protected

- Less clear cases



- Databases

- No “sweat of the brow” doctrine
- Protection by the Database Directive of the European Union
- No comparable protection in Switzerland, but unfair competition laws

I. Patents II. Copyrights III. Trademarks IV. Designs V. Conclusion
 1. Legal Requirements 2. Procedure 3. Case Studies



- Neighboring rights protect the rights of
 - Performers
 - Producers of phonograms
 - Broadcasting Organizations
 - Film producers
 - Database creators
 - Photographers
- Existence and scope of neighboring rights differs across countries

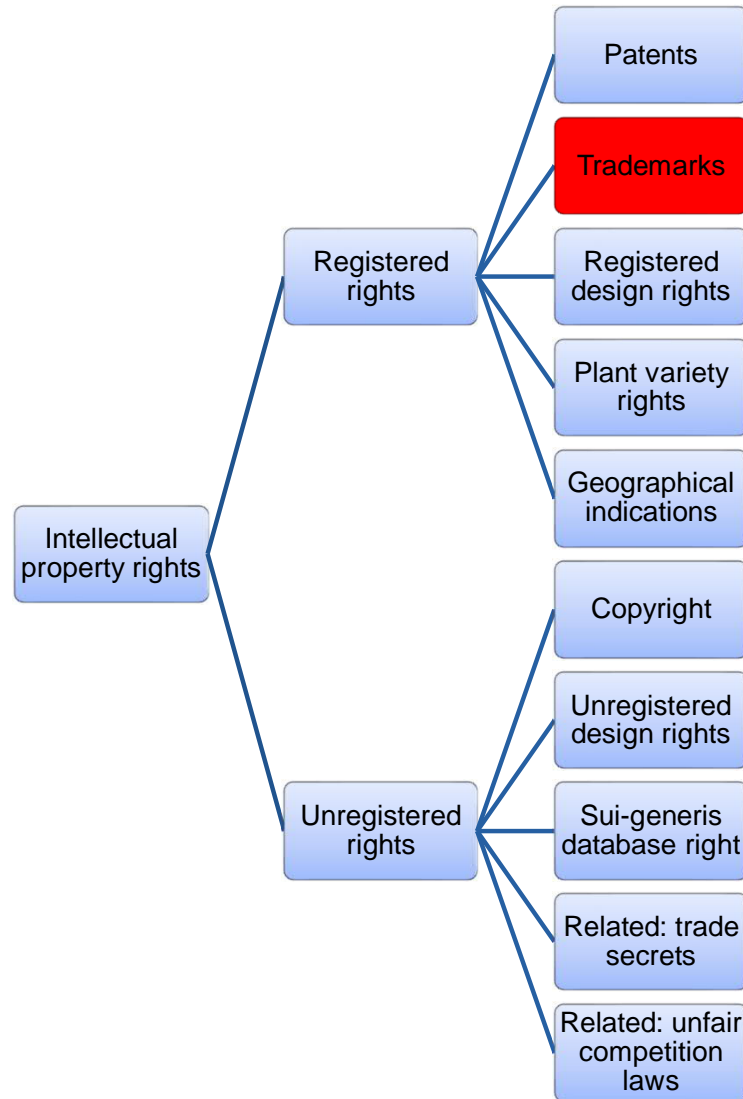
II. Copyrights

2. Procedure

- Copyright is automatically granted at the moment of creation
- Neither a
 - copyright notice © nor a
 - registrationare required → major difference to patent law
- But registration is possible (and recommendable) in the U.S.



- Is copyright protection valid worldwide?
 - Various international treaties concerning copyright law:
 - Berne Convention
 - TRIPS Agreement
 - WIPO Copyright Treaty (WCT)
 - Important principles
 - Are often directed to member states
 - National treatment
 - Minimum standards
 - But still: national protection (territoriality protection)



III. Trademarks

1. Legal Requirements

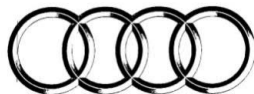
■ Conventional trademarks

- Words, letters and numerals, slogans
- Figurative elements, logos
- Three-dimensional shapes
- Colors



JUST DO IT

PHILIPS



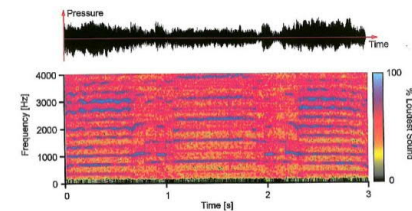
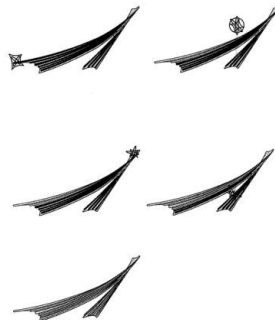
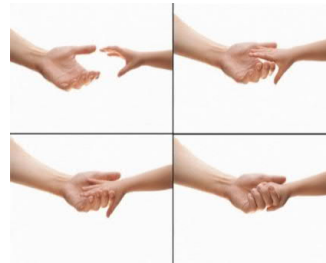
Coca-Cola



H&M

■ Unconventional trademarks

- Sounds, music, jingles
- Signs with movement
- Smells? Tastes?
- Other
 - Holograms
 - Position marks
 - Tracer marks



- Other categories of protection
 - Certification marks
 - CE mark, woolmark, TÜV
 - Collective marks
 - Protected geographical indications (PGI)
 - Turrón di Alicante, Ardennes ham
 - Protected designation of origin (PDO)
 - Parma ham, Mozzarella di Bufala Campana, feta cheese
 - Traditional specialities guaranteed (TSG)
 - Kriek beer, Mozzarella cheese, Serrano ham

Article 3 European Trademark Directive
≈ Article 4 Community Trademark Regulation

A trade mark may consist of any signs, in particular words, including personal names, or designs, letters, numerals, colours, the shape of goods or of the packaging of goods, or sounds, provided that such signs are capable of:

- (a) distinguishing the goods or services of one undertaking from those of other undertakings; and
- (b) being represented on the register in a manner which enables the competent authorities and the public to determine the clear and precise subject matter of the protection afforded to its proprietor.

■ Secondary legislation in the European Union (Art. 288 Treaty on the Functioning of the European Union, TFEU)

– Directive

- Is addressed to all member states
- Generally comparable to framework legislation
- Sets specific objectives, but leaves form and means to member states
- Member states must comply within given timeframe
- Must be implemented into national law
- If member state fails to implement, implements falsely or implements, but fails to abide in practice,
 - European Commission can initiate legal action before the Court of Justice of the European Union
 - Directive can have direct legal force in member states where unimplemented or badly implemented
 - Member states can be liable to pay damages to individuals and companies who have been adversely affected by the non-implementation of a directive

- Secondary legislation in the European Union (Art. 288 Treaty on the Functioning of the European Union, TFEU)
 - Regulation
 - Immediately enforceable as law in all member states (self-executing)
 - Overrides all national laws dealing with the same subject matter. Subsequent national legislation must be consistent with regulation

■ European Trademark Directive (1988/2015)

- Harmonization of the trademark laws of the member states
- Exhaustive harmonization of substantive trademark law
- No full harmonization of procedural trademark law
 - member states are free to
 - Protect trademarks acquired through use (unregistered trademarks)
 - Regulate administrative procedures (provisions concerning registration, revocation, invalidity, fees etc.)
 - Clarify the relationship to unfair competition, tort & consumer law

- Community Trademark Regulation (1994/2015)
 - Unitary EU-wide trademark granted by the “European Union Intellectual Property Office (EUIPO, formerly known as “Office of Harmonisation in the Internal Market” (OHIM)) in Alicante, Spain
 - EUIPO is a self-financing agency, receives approx. 45000 applications/year
 - Filing possible in all official languages, international working languages are English, French, German, Italian, Spanish

■ Community Trademark Regulation (1994/2015)

- Most substantial provisions of the Trademark Directive can also be found in the Community Trademark Regulation
 - In addition, the Community Trademark Regulation includes rules for granting, opposing, and enforcing Community trademarks
 - Trademarks are enforced in the courts of the member state, with such enforcement having pan-European effect
 - National trademarks and Community trademarks coexist and are treated equally (e.g. earlier national trademark can be cited against a subsequent application for a Community trademark, and vice versa)

■ Comparison

Issue	Trademark Directive	Community Trademark
Scope	Harmonization of national substantive trademark law	Creation of an EU-wide substantive and procedural trademark law
Granting	Trademark is granted by national trademark office	Trademark is granted by the EUIPO
Registration disputes	National courts → ECJ	EUIPO Boards of Appeal → Court → ECJ
Enforcement	National courts	National courts
Overlap	Can co-exist	Can co-exist, CTM application can be converted into bundle of national applications with same priority date
Term	No harmonization	10 years, renewable

Article 3 European Trademark Directive
≈ Article 4 Community Trademark Regulation

A trade mark may consist of any signs, in particular words, including personal names, or designs, letters, numerals, colours, the shape of goods or of the packaging of goods, or sounds, provided that such signs are capable of:

- (a) distinguishing the goods or services of one undertaking from those of other undertakings; and
- (b) being represented on the register in a manner which enables the competent authorities and the public to determine the clear and precise subject matter of the protection afforded to its proprietor.

- Requirements for trademark protection
 - Trademark (Article 3 EU Trademark Directive)
 - Sign
 - Words, letters (“ABB”), numbers (“4711”), slogans (“Red Bull verleiht Flügel”)
 - Drawings
 - Pictures
 - Shapes (Toblerone)
 - Labels, logos (SBB logo)
 - Colors, sounds, smells
 - Capable of distinguishing goods / services
 - Perspective: average buying consumer
 - Very low requirements

■ Requirements for trademark protection

– Trademark

– No absolute grounds for refusal (Article 4 EU Trademark Directive)

• Distinguish

- Absolute grounds: general requirements for a sign to be a suitable trademark
- Relative grounds: trademark registration may be denied based upon a comparison with prior rights
 - Unlike some national systems, EUIPO does not refuse applications on relative grounds
 - Third parties can raise relative grounds in opposition or cancellation proceedings

■ Requirements for trademark protection

– Trademark

– No absolute grounds for refusal (Article 4 EU Trademark Directive)

- List of grounds for refusal

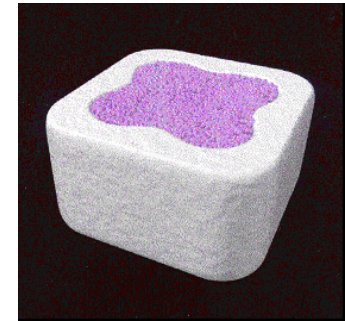
- No distinctive character

- Example: General Court Procter & Gamble v. OHIM (now EUIPO) (2007): average consumer is unable to determine the trade of origin of the detergent tablet
 - May change over time (Aspirin, Tempco, Coca Cola)

- Descriptive character

- Sign has become customary in the current language

- Sign consists of the shape of the good with no distinctive feature / shape is technically necessary
 - Examples: 3D trademarks (e.g. ECJ *Philishave* 1999, screws)



■ Requirements for trademark protection

– Trademark

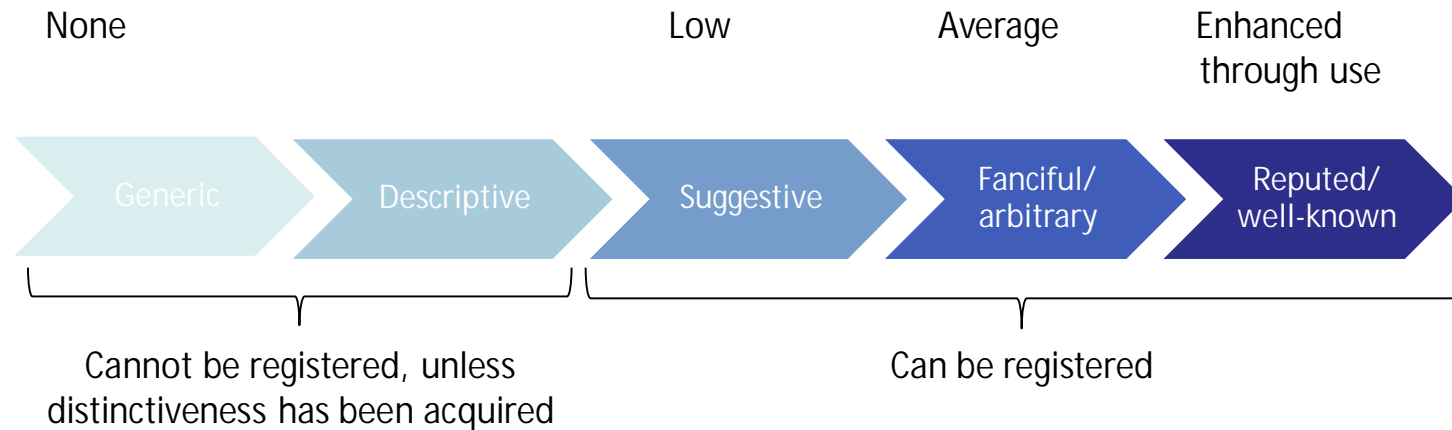
– No absolute grounds for refusal (Article 4 EU Trademark Directive)

- List of grounds for refusal
- Unless sign has acquired distinctiveness through use
 - Applicant must prove that, irrespective of how the mark was perceived in its natural state, it now operates as a trade mark → acquisition of “secondary meaning”
 - Example: Fuji (geographic location has been accepted as trademark)



■ Degree of distinctiveness

- The more distinctive the trademark, the stronger the mark
- Strong trademarks give wider protection
- Level of distinctiveness



■ Requirements for trademark protection

- Trademark
- No absolute grounds for refusal
- No relative grounds for refusal (Article 5 EU Trademark Directive)
 - Compared with an earlier trademark, sign shall not be registered if
 - Identical trademarks and identical goods
 - Identical trademarks, confusingly similar goods
 - [Likelihood of confusion](#): perspective of the average consumer (e.g. : “Canal plus/Câble plus” for video cassettes / audiovisual program)
 - Confusingly similar trademarks, identical/similar goods
 - Similar trademarks, not similar goods, well-known earlier trademark with a reputation, sign takes unfair advantage of / is detrimental to the well-known trademark
 - Detrimental to the distinctive character of the trademark: dilution/blurring
 - Detrimental to the reputation of the trademark: tarnishment

III. Trademarks

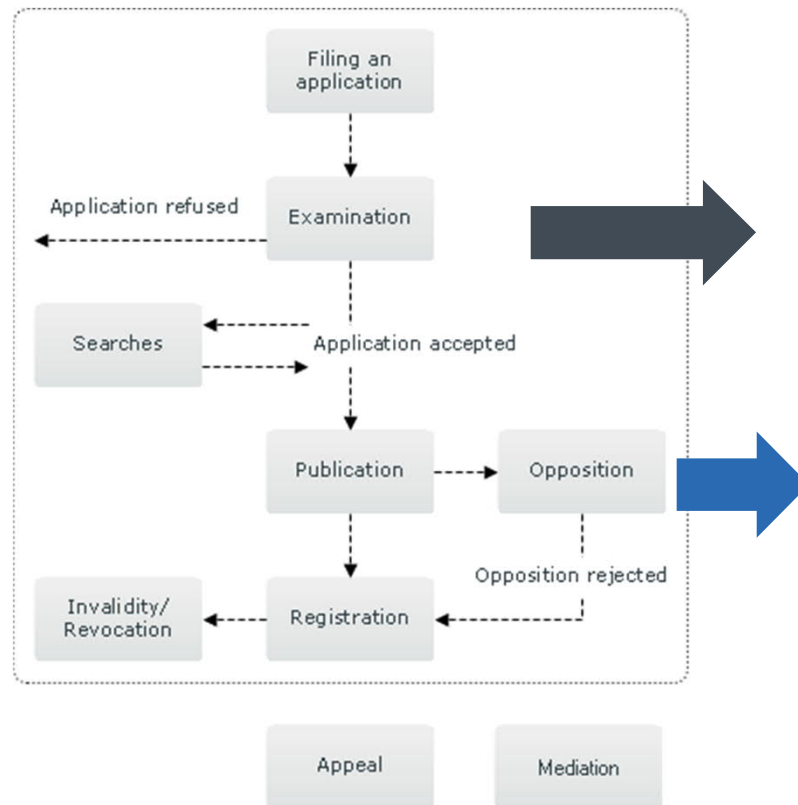
2. Procedure

- Trademarks are obtained through registration
 - The principle of priority
 - Exception for well-known trademarks
- Trademarks must be used within 5 years of trademark registration (use requirement)
 - Otherwise, trademark can be revoked
- Trademarks are registered for specific product and service classes as categorized in the [Nice classification](#)
 - no easy coverage of the entire potential value of a sign in all markets

- How to obtain registration
 - Registration is possible at three levels
 - National
 - Regional (in particular: EU)
 - International
 - Coexistence
 - Remember: be the first!

- The EU Community trademark
 - Protection at EU level
 - Two main principles
 - Unitary character
 - Coexistence with national trademarks
 - Advantage: one application procedure

- The EU Community trademark registration procedure



Absolute grounds for refusal
– what can and cannot be a
trade mark?

Relative grounds for refusal
– earlier trade marks?

■ How to apply for a EU Community trademark

- Who?
- How and where?
- Official form?
- Language?
- Filing date?
- Representative?

Application for a Community Trade Mark

[Save to PC](#) [Restore from PC](#) [Print](#) [Autohelp OFF](#) Date of Application: 11/02/2013 [Clear](#) [Continue](#)

Fields that are indicated with an asterisk (*) are mandatory.

Previous CTM Application ?

Previous CTM to import: [Import](#) [Search CTM](#)

Applicant Reference ?

Your Reference:

Languages * ?

First Language: *

Second Language: *

☐ I want to receive all correspondence in the second language

☐ I will provide translations of the Disclaimer, Description and List of Goods & Services in the 2nd language

Applicant(s) Information * ?

Existing Applicant OHIM ID: [Load](#) [Search in CTM Online](#)

Create Applicant: [Create](#)

Representative(s) Information ?

We recommend that you always use the association ID number where available.

Existing Representative OHIM ID: [Load](#) [Search in FindRep](#)

Create Representative: [Create](#)

- The Madrid system for the international registration of trademarks
 - International registration at International Bureau of WIPO
 - Basic trade mark registration with office of origin
 - Offices of designation examine application
 - Registration of national marks or EU Community trademarks
 - No supranational mark!
 - Simplification of subsequent management of trade mark

- What happens after registration?
 - Duration of protection
 - initial period of ten years
 - unlimited renewal
 - Requirement of genuine use after five years
 - Cancellation
 - invalidity
 - revocation:
 - lack of genuine use
 - acquired generic character
 - misuse

III. Trademarks

3. Case studies

■ Colors as trademarks

– Reasoning

- Visual impression of a trademark strongly influenced by colors (also shapes)
- Consumer likelihood of confusion if same color used by different owners, especially if similar/same products

→ Economic value of trademark colors

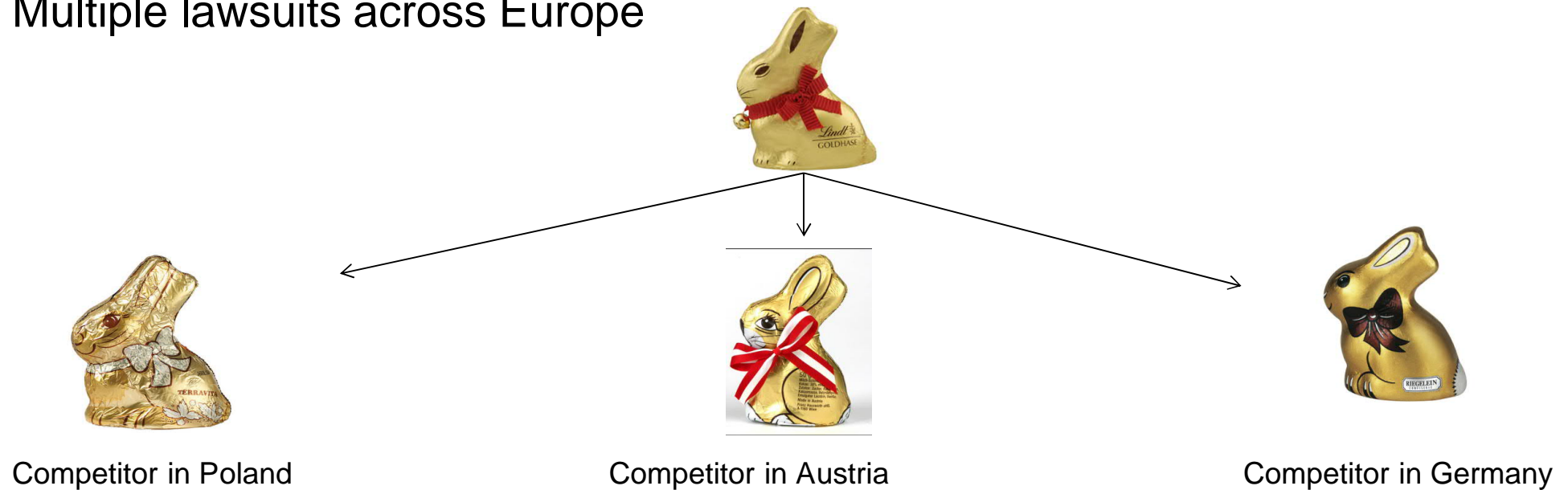


- Examples: yellow (postal services), brown (UPS), purple (Milka), magenta (Deutsche Telekom)
- Graphical representation: color codes

#FFFFFF	#CCFFFF	#99FFFF	#FF66FF	#CC66FF	#9966FF
#FFFFCC	#CCFFCC	#99FFCC	#FF66CC	#CC66CC	#9966CC
#FFFF99	#CCFF99	#99FF99	#FF6699	#CC6699	#996699
#FFFF66	#CCFF66	#99FF66	#FF6666	#CC6666	#996666
#FFFF33	#CCFF33	#99FF33	#FF6633	#CC6633	#996633
#FFFF00	#CCFF00	#99FF00	#FF6600	#CC6600	#996600
#FFCCFF	#CCCCFF	#99CCFF	#FF33FF	#CC33FF	#9933FF
#FFCCCC	#CCCCCC	#99CCCC	#FF33CC	#CC33CC	#9933CC
#FFCC99	#CCCC99	#99CC99	#FF3399	#CC3399	#993399
#FFCC66	#CCCC66	#99CC66	#FF3366	#CC3366	#993366
#FFCC33	#CCCC33	#99CC33	#FF3333	#CC3333	#993333
#FFCC00	#CCCC00	#99CC00	#FF3300	#CC3300	#993300
#FF99FF	#CC99FF	#9999FF	#FF00FF	#CC00FF	#9900FF
#FF99CC	#CC99CC	#9999CC	#FF00CC	#CC00CC	#9900CC
#FF9999	#CC9999	#999999	#FF0099	#CC0099	#990099
#FF9966	#CC9966	#999966	#FF0066	#CC0066	#990066
#FF9933	#CC9933	#999933	#FF0033	#CC0033	#990033
#FF9900	#CC9900	#999900	#FF0000	#CC0000	#990000
#66FFFF	#33FFFF	#00FFFF	#6666CC	#3366CC	#0066CC
#66FFCC	#33FFCC	#00FFCC	#666699	#336699	#006699
#66FF99	#33FF99	#00FF99	#666666	#336666	#006666
#66FF66	#33FF66	#00FF66	#666633	#336633	#006633
#66FF33	#33FF33	#00FF33	#666600	#336600	#006600
#66FF00	#33FF00	#00FF00	#6633FF	#3333FF	#0033FF
#66CCFF	#33CCFF	#00CCFF	#6633CC	#3333CC	#0033CC

■ Lindt “Goldhase”

- Three-dimensional sign consisting of the shape of a chocolate rabbit with a red ribbon which is red, gold and brown
- Registration as community trademark denied by the European Court of Justice (ECJ) (May 2012)
 - Not distinctive; did not acquire distinctive power through use in all European countries
- Multiple lawsuits across Europe



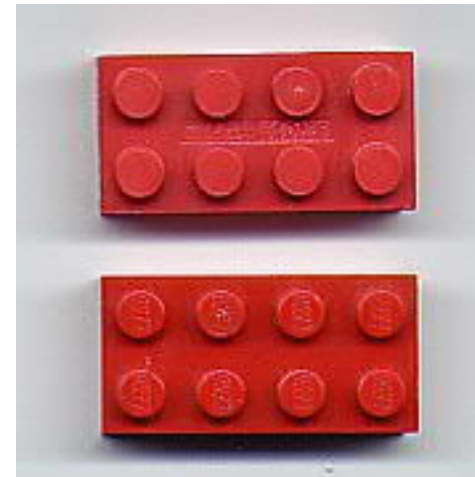
■ Lego

– European Court of Justice (2010):

- While product shapes can be registered as three-dimensional trademarks, this is not possible if the shape is necessary to obtain a technical result → Lego brick cannot be registered as 3D trademark

– Overlapping IP rights

- Patents on lego bricks have expired
- Lego has used sued competitors not only on trademark, but also unfair competition law grounds



Mega
Brands brick

Lego brick



PATENT SPECIFICATION

587,206

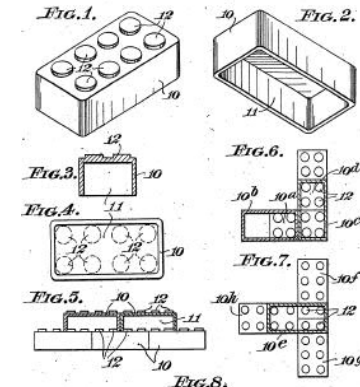
Application Date: Dec. 7, 1944.

No. 24492/44.

(Patent of addition to No. 529,580 dated April 17, 1939.)

Complete Specification Accepted: April 17, 1947.

COMPLETE SPECIFICATION Improvements in Toy Building Blocks



■ Louboutin (BGer 4A_363/2016)

— Facts

- International trademark registration (IR 1031242)
- Registration sought for goods from:
 - Class 25, footwear “chaussures pour dames à talons hauts”
- Produced by Christian Louboutin
- Protected as a design in several countries such as:
 - UK, China, Australia, Russia etc



■ Louboutin (BGer 4A_363/2016)

— Decisions relating to the case

- September 1, 2013: Refusal of the trademark protection by the Swiss Federal Institute of Intellectual Property (IGE)
 - No distinctive character: red shoe sole as a purely decorative element
- November 1, 2013: appeal against the decision to the Swiss Federal Administrative Court
 - Dismissed the appeal
- Louboutin the filed an appeal to the Swiss Federal Court
 - Swiss Federal Court dismisses appeal by Christian Louboutin

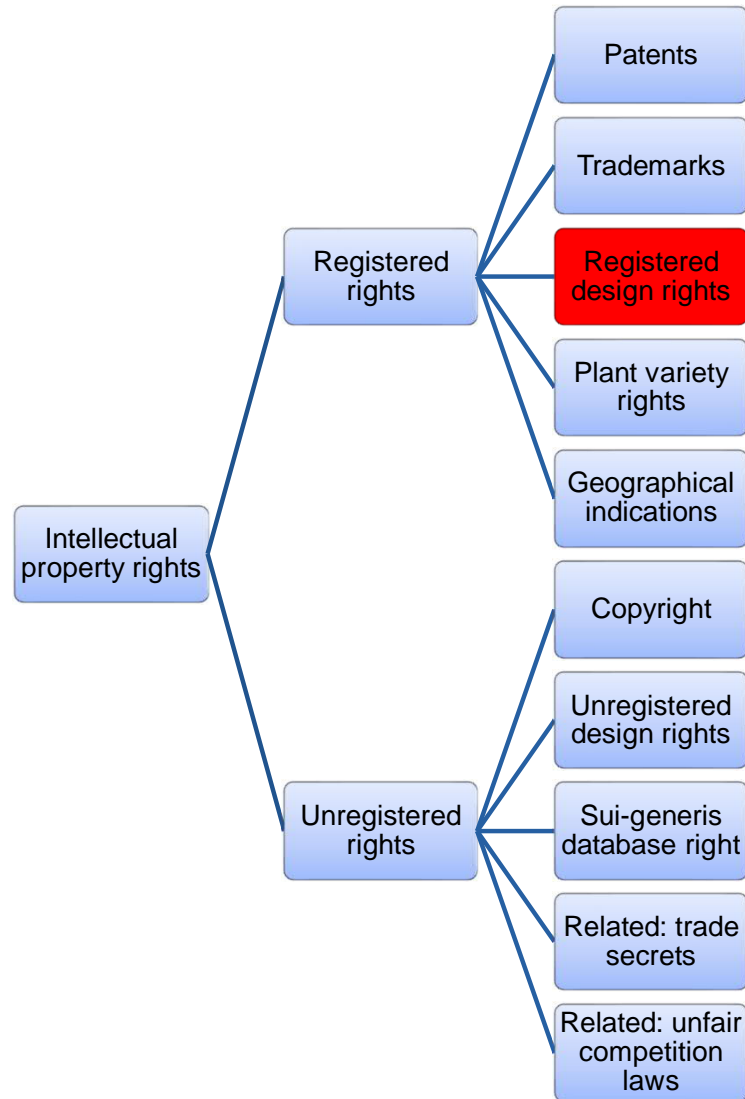


■ Louboutin (BGer 4A_363/2016)

- Louboutin asked for trademark registration based on inherent distinctiveness of the red sole
- Distinctive enough?
 - Swiss Federal Court:
 - The distinctiveness of a positional trademark is assessed by position of the trademark and other trademark elements. The position in which the trademark is located must be so different from the common position that it is understood by the relevant public solely as a distinctive sign referring to the origin of the product.

■ Louboutin (BGer 4A_363/2016)

- relevant public: mainly female purchasers with slightly elevated fashion sense
- position of the trademark and other elements:
 - the sole on high heels for women is usually the only place where a trademark can be placed
 - shapes or contours that constitute the nature of the goods themselves are generally descriptive (see Art. 2 lit. b MschG (Swiss Trademark Act))
 - the color and the contour of a women's shoe are often used in the fashion industry as a decorative element
- Therefore: no sufficient distinctiveness can be awarded to these trademark elements which are rather understood by the relevant public as aesthetic elements of the shoe and not as a trademark
- Final decision: no inherent distinctiveness of the red high heel sole: trademark protection denied
 - The court however did not assess on whether the sign acquired distinctiveness by use





IV. Designs

1. Legal Requirements



EU Community Design Regulation (2002)

- Art. 3 (a) “design” means the appearance of the whole or a part of a product resulting from the features of, in particular, the lines, contours, colours, shape, texture and/or materials of the product itself and/or its ornamentation;
- Art. 4(1) A design shall be protected by a Community design to the extent that it is new and has individual character.
- Art. 4(2) A design applied to or incorporated in a product which constitutes a component part of a complex product shall only be considered to be new and to have individual character:
- (a) if the component part, once it has been incorporated into the complex product, remains visible during normal use of the latter; and
 - (b) to the extent that those visible features of the component part fulfil in themselves the requirements as to novelty and individual character.

- Distinction between the EU Design Directive (1998) and the EU Community Design Regulation (2002) similar as in trademark law

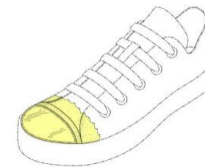
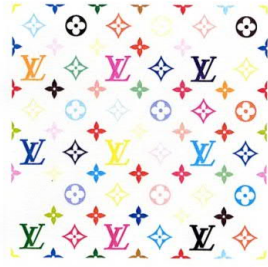
■ Requirements for a registered EU Community design

— Design

- Appearance of the whole or a part of a product
- Lines, contours, shape, texture, material, ornamentation, combination of material or colors
- Examples: lamps, furniture, kitchen objects, jewelry etc.



- More examples of designs



■ Requirements for a registered EU Community design

– Design

– Novelty

- Design is novel if no identical design has been made available to the public before the date of filing → comparison to “prior art” (“vorbekannter Formbestand”)
- Designs are identical if their features differ only in immaterial details
- Unlike patent law, novelty is not considered worldwide, but considered for the territory of the EU
- No disclosure of own design (however: 12-month grace period)
- Not novel anymore if design has been made available to the public in
 - Exhibition
 - Use in trade
 - Publication
- Still novel if design has been disclosed under condition of confidentiality

■ Requirements for a registered EU Community design

— Design

— Novelty

• Problems

- “Public”: circles specialized in the sector concerned (Article 7 Community Design Regulation, Article 6 Design Directive)
- Novel as of the date of filing: What about designs that are forgotten (retro design problem)?
- Prior art: In general, any disclosure of prior art destroys novelty; exceptions: disclosure could not reasonably have become known, breach of confidence, 12-month grace period for testing design

■ Requirements for a registered EU Community design

– Design

– Novelty

– Individual character

- The overall impression on the informed user must differ from that made by any other design made available to the public earlier
 - Informed user: intermediate character
 - Between the average user and the expert; not a designer or technical expert, but also not an average consumer, some awareness of prior existing designs
 - Assessment through expert witnesses, market surveys
- In assessing the individual character, the degree of freedom of the designer in developing the design must be taken into account
- Design does not have to distinguish products (other than trademark)
- The aim of a design is its aesthetic appearance and not merely the fulfilling of a technical function; the lack of esthetic appearance can be a hint for the mere fulfillment of a technical function
- There is no requirement that a design must be “pretty” or “attractive”

■ Requirements for a registered EU Community design

- Design
- Novelty
- Individual character
- No absolute grounds for refusal
 - If design is solely dictated by the technical function of the product
 - Interface exception: Design must fit with other products

Art. 8 EU Community Design Regulation

- (1) A Community design shall not subsist in features of appearance of a product which are solely dictated by its technical function.
- (2) A Community design shall not subsist in features of appearance of a product which must necessarily be reproduced in their exact form and dimensions in order to permit the product in which the design is incorporated or to which it is applied to be mechanically connected to or placed in, around or against another product so that either product may perform its function.
- (3) Notwithstanding paragraph 2, a Community design shall under the conditions set out in Articles 5 and 6 subsist in a design serving the purpose of allowing the multiple assembly or connection of mutually interchangeable products within a modular system.

- Requirements for a registered EU Community design
 - Design
 - Novelty
 - Individual character
 - No absolute grounds for refusal
 - No relative grounds for refusal
 - Conflict with prior design
 - Conflict with a prior trademark, geographical indication, or copyrighted work

IV. Designs

2. Procedure

■ Distinguish

— Registered designs

- National design registration systems
- Registered Community design

— Unregistered design

- National unregistered designs
 - Covered by national laws concerning design, copyright, trademark, utility model, tort, unfair competition etc.
- Unregistered Community design (additional to the national unregistered designs)

■ EU Community design system

Unregistered Community designs Registered Community designs

- | | |
|--|--|
| <ul style="list-style-type: none">• No application procedure• No cost• Protection against copying• Protection for 3 years• No grace period• No priority | <ul style="list-style-type: none">• Application with EUIPO• Fees payable to EUIPO• Full protection• Min. 5 years, max. 25 years• 12-month grace period• 6-month priority period |
|--|--|

■ Registration

– Designs under the EU Design Directive

- Registration by national IP offices, question of national IP law
- Directive does not impose any procedural provisions concerning registration, renewal or invalidity → national IP offices are not required examine the filing before granting design protection

– Registered EU Community designs

- Registration by EUIPO
- If formal requirements are met, the design is registered and published
- Substantial examination only ex post in proceedings for invalidity (before EUIPO) or infringement (before national courts)

– Unregistered EU Community designs

- No registration

■ Registration

— Switzerland

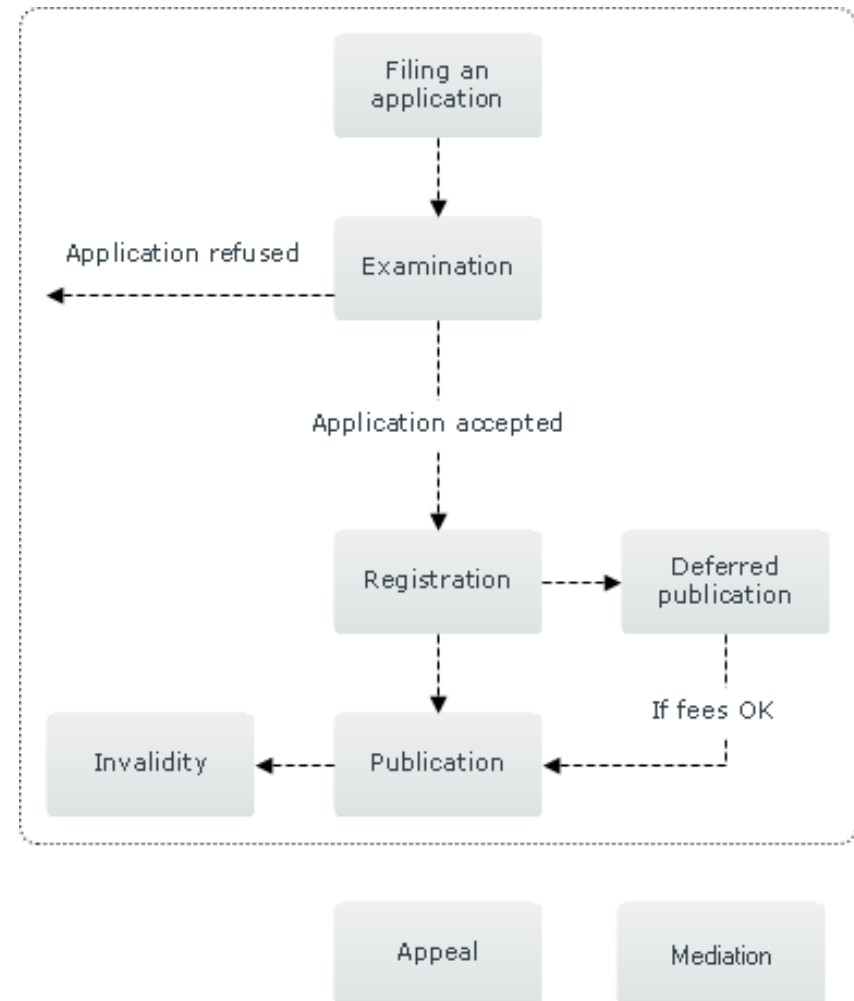
- Registration by IGE/IPI
- No examination of novelty & individual character

— International level

- Direct application through WIPO, for countries designated at the time of filing

■ Registration procedure for EU registered community designs

- Fast procedure
- Examination of
 - Formalities
 - Grounds for refusal: EUIPO only checks
 - Not a design?
 - Against public policy or morality?
- No opposition: only invalidity procedure



- Invalidity claims after registration
 - Design fails to meet the definition of a design
 - Requirements for protection are not fulfilled
 - Design is excluded from protection
 - Holder is not entitled to the design
 - Design is in conflict with a prior right
 - Design uses certain emblems

	Patents	Copyrights	Trademarks	Designs	Trade secret
Subject matter	Inventions	Works	Signs	Designs	Information
Formal requirements	Registration & examination	None	Registration & examination	Registration, no examination	None
Substantial requirements	1. Novelty 2. Non-obviousness 3. Industrial application 4. Disclosure	1. Intellectual creation 2. Originality	1. Sign 2. Distinctiveness 3. No grounds for refusal	1. Design 2. Novelty 3. Individual character 4. No grounds for refusal	Efforts to keep information secret
Duration of protection	up to 20 years	70 years after death of the author	10 years, but can be renewed without limits	up to 25 years	No limit



Raphael Zingg
rzingg@ethz.ch
www.ip.ethz.ch

The slides incorporate material from the European Patent Office's IP teaching kit,
which has been modified for this course.