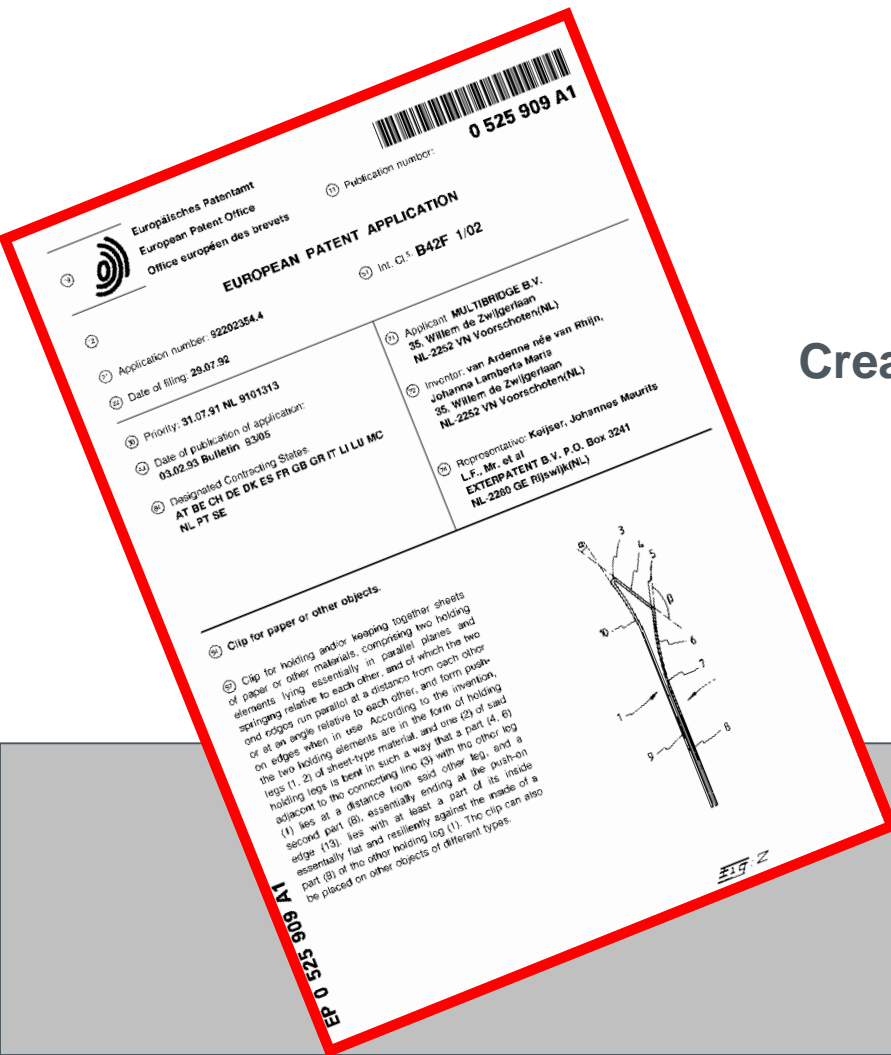


Intellectual Property Right (IPR's)



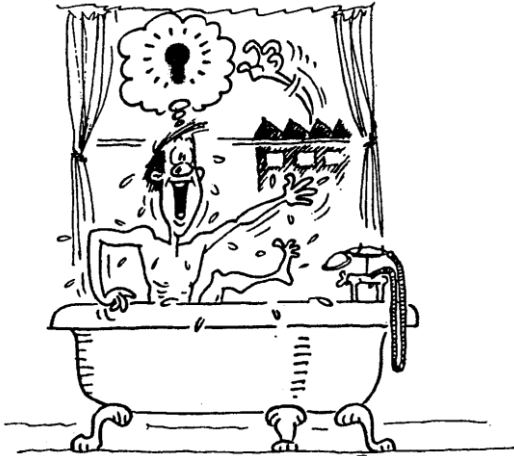
PhD *plus* 2014
 Creatività, innovazione, spirito imprenditoriale

PISA, 01.04.2014

Domenico Golzio
 European Patent Office
dgolzio@epo.org

- The Inventing Process
- Overview of Intellectual Property Rights
- What is a Patent
 - Rights conferred
- Why File a Patent?
- 5 roles of a Patent
- When to File a Patent
- Who should File a Patent
- Where to File a Patent
- Infringement, Patentability and Freedom to Operate

The Inventing Process

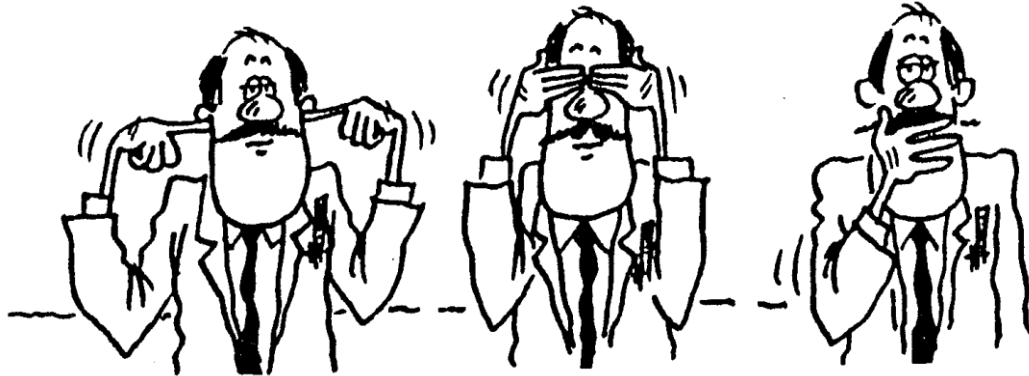


I have an idea !!!

It's my idea !!!

How can I protect it ?

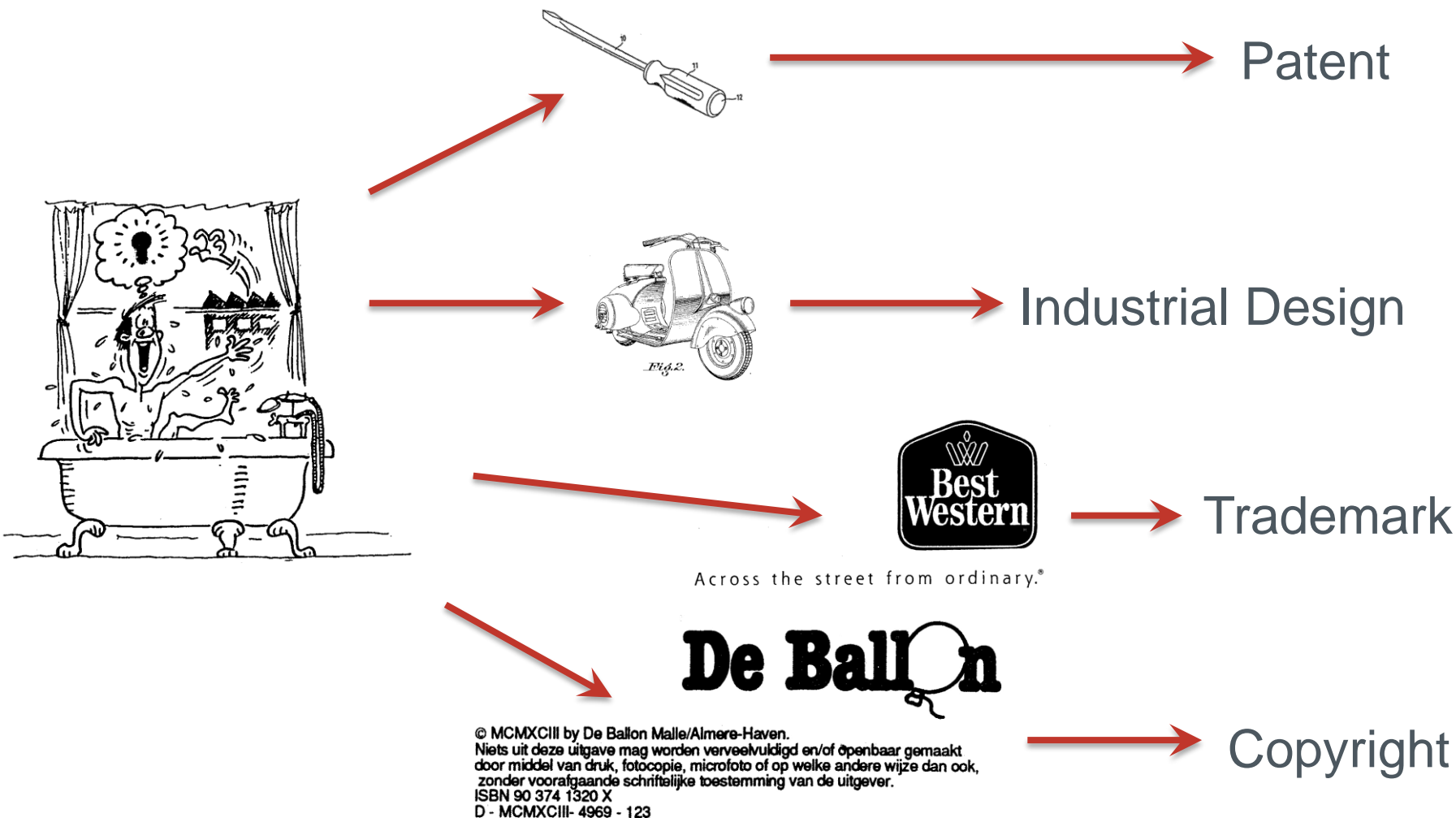


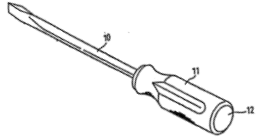


- Products and services need to be known and advertised
- Difficult to enforce
- Intellectual Property Rights come to help you



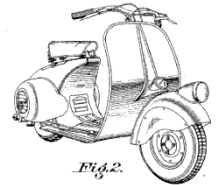
Intellectual Property Rights (IPR's)





"Technical" Idea: Patent, Petty Patent, Utility Model

"Appearance" of a Product: Industrial Design, Registered Design



Name or other sign of a product/enterprise:
Trademark, Trade Name

Across the street from ordinary.®

Literary, Musical, Artistic works: Copyright



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Niets uit deze uitgave mag worden veeveelvuldigd en/of openbaar gemaakt
door middel van druk, fotocopie, microfoto of op welke andere wijze dan ook,
zonder voorafgaande schriftelijke toestemming van de uitgever.
ISBN 90 374 1320 X
D - MCMXCIII- 4969 - 123

IPRs are regulated by different national or international laws and treaties, they have different terms of protection, are acquired and maintained through different procedures:

they should be used in combination

- Industrial design refers to the creative activity of achieving a formal or ornamental appearance for mass-produced items that, within the available cost constraints, satisfies both the need for the item to appeal visually to potential consumers, and the need for the item to perform its intended function efficiently.
- Industrial design refers to the right granted in many countries, pursuant to a registration system, to protect the original ornamental and non-functional features of an industrial article or product that result from design activity.



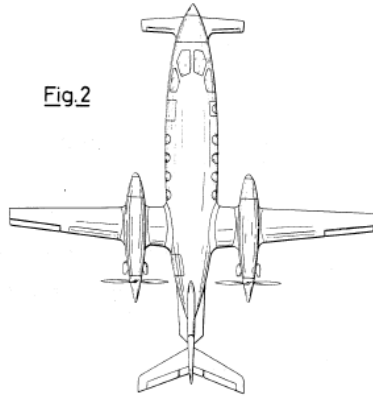
- Monopoly right for the appearance of (part of) a product, the aesthetic value
 - e.g. Textile patterns, car design,...
- About the ornamental, aesthetic aspect of a product
 - 3D: shape, surface,...
 - 2D: pattern, lines, color,...
- About the appeal to the eye, not technical function.
 - exception: Lego, Mecano,...

FIG.2



USD246817

Fig.2



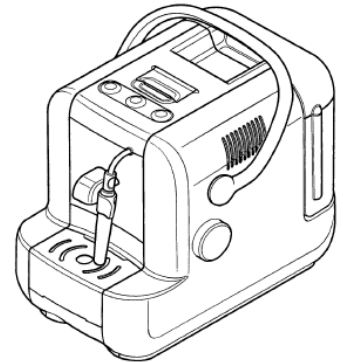
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FIG. 1



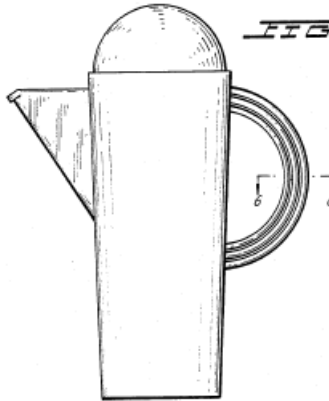
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FIG. 7



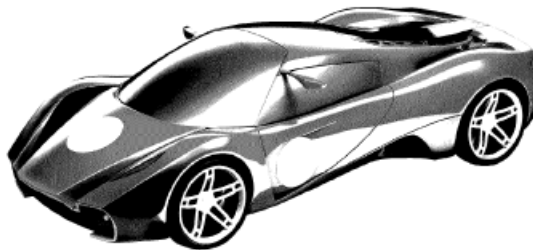
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FIG. 1.



USD295940

FIG. 6



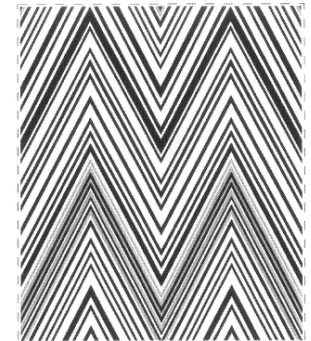
USD550124

Fig.1



USD289940

Fig. 1



USD647705

- Registered / unregistered Design
 - unregistered 3 years from disclosure
 - registered up to 25 years
- Application at OHIM or national office
- Criteria for registration
 - new (or original)
 - individual character
- Computer generated design accepted as computer is considered as a tool

Infringement of industrial design

- Proceedings for infringement can only be commenced after the design has been examined and a certificate of examination granted.
- A person will infringe a registered design if, without consent of the owner they:

- make
- import
- sell, hire or offer for sale or hire

a product that embodies a design that is identical to, or substantially similar in overall impression, to the registered design.

- A distinctive sign used by a business or organisation to exclusively identify the **origin** or **products** or **services**.
- A trademark is any sign that **individualizes** the goods of a given enterprise and **distinguishes** them from the goods of its competitors
- Service, Certification and Collective trade marks
- **Why register a trade mark?**
 - Protect goodwill associated with trade mark
 - Exclusive rights to use trade mark
 - Asset included in business valuation
 - May assist with franchising and licensing

- **Words:** This category includes company names, surnames, forenames, geographical names and any other words or sets of words, whether invented or not, and slogans.
- **Letters and Numerals:** Examples are one or more letters, one or more numerals or any combination thereof.
- **Devices:** This category includes fancy devices, drawings and symbols and also twodimensional representations of goods or containers.
- **Combinations of any of those listed above,** including logotypes and labels.
- **Coloured Marks:** This category includes words, devices and any combinations thereof in colour, as well as colour combinations and colour as such.
- **Three-Dimensional Signs:** A typical category of three-dimensional signs is the shape of the goods or their packaging. However, other three-dimensional signs such as the three-pointed Mercedes star can serve as a trademark.
- **Audible Signs** (Sound Marks): Two typical categories of sound marks can be distinguished, namely those that can be transcribed in musical notes or other symbols and others (e.g. the cry of an animal).
- **Olfactory Marks** (Smell Marks): Imagine that a company sells its goods (e.g. writing paper) with a certain fragrance and the consumer becomes accustomed to recognizing the goods by their smell.
- **Other (Invisible) Signs:** Examples of these are signs recognized by touch.

Trademark





- Reach out and touch someone (AT&T)
- Be wise - Alkalize (Alka Seltzer)
- Where's the beef? (Wendy's)
- Connecting people (Nokia)
- Let's Make Things Better (Philips)
- Live unböring (Ikea)
- Easy as Dell (Dell Computer)
- Go further with Shell (Shell Oil)
- Intel Inside (Intel)
- Where do you want to go today? (Microsoft)
- Sharp Minds, Sharp Products (Sharp)
- High Performance, Delivered (Accenture)
- Everything is easier on a Mac (Apple Computer)
- Wikipedia, the Free Encyclopaedia (Wikipedia)
- Let your fingers do the walking (Yellow Pages)
- Once you pop, you can't stop (Pringles)



™ Means the trademark is not registered but rights are claimed

® Registered trademark

The sign to be registered:

- should have a distinctive character
- can be represented graphically
- does distinguish the applicant's goods or services

The sign cannot be registered if:

- if it is generic "Apple" for apple, "Furniture" for furniture, etc.
- consists of matter the use of which would be likely to deceive or cause confusion
- is substantially identical with, or deceptively similar to, a trade mark registered by another person.
- consists of scandalous matter or matter the use of which would be contrary to law; contains or consists of a sign prohibited by regulation

Registration initially for 10 years, then renewed indefinitely for successive periods of 10 years.

Territorial right

Genericization

- Brand name becoming generic term, may lead to loss of trademark rights
- Examples: aspirin, zipper, kleenex, pampers, thermos, velux, luxaflex, vaseline, frisbee, band-aid, velcro, xerox, google, escalator, cellophane, linoleum
- The trademark should not be used as, or instead of, the product designation.
- Trademarks should always be used as true adjectives and never as nouns, the trademark should not be used with an article, and the possessive “s” and the plural form should be avoided
- Prevention:
 - Market with 'generic descriptor'
 - e.g. Kleenex tissues
 - Campaign for alternative term
 - e.g. 'photocopy' for 'xerox'
 - References in manuals
 - e.g. 'Lego blocks' for 'Lego's'

- **Infringement of trade marks**
 - Using mark similar to registered trade mark, in order to deceive
- **Remedies for infringement of trade marks**
 - Injunction
 - Damages:
 - Loss sustained
 - Account for profits
- **Counterfeiting**



Copyright

- Copyright law deals with the rights of intellectual creators.
- It is concerned with virtually all forms and methods of public communication
- Copyright deals with the rights of intellectual creators in their creation. Most works, for, example books, paintings or drawings, exist only once they are embodied in a physical object. But some of them exist without embodiment in a physical object. For example music or poems are works even if they are not, or even before they are, written down by a musical notation or words.
- Copyright law protects only the form of expression of ideas, not the ideas themselves.
- Copyright law protects the owner of rights in artistic works against those who “copy”, that is to say those who take and use the form in which the original work was expressed by the author.

- Automatic when the work is 'fixed' (written, recorded,...) registration is optional
- ©, "all rights reserved" or "copyright by ..." are not needed in order to establish copyright. They are only used because they could improve the position of the owner of the right in an infringement lawsuit in the USA (the infringer cannot claim innocent infringement)
- Copyright comprises:
 - Right of reproduction
 - Right to performance
 - Right to record
 - Motion picture right
 - Broadcasting rights
 - Translation and adaptation rights
 - Moral right



Applies to:

- **literary works:** novels, short stories, poems, dramatic works and any other writings, irrespective of their content (fiction or non-fiction), length, purpose (amusement, education, information, advertisement, propaganda, etc.), form (handwritten, typed, printed; book, pamphlet, single sheet, newspaper, magazine); whether published or unpublished; in most countries “oral works,” that is, works not reduced to writing, are also protected by the copyright law;
- **musical works:** whether serious or light; songs, choruses, operas, musicals, operettas; if for instructions, whether for one instrument (solos), a few instruments (sonatas, chamber music, etc.), or many (bands, orchestras);
- **artistic works:** whether two-dimensional (drawings, paintings, etchings, lithographs, etc.) or three-dimensional (sculptures, architectural works), irrespective of content (representational or abstract) and destination (“pure” art, for advertisement, etc.);
- **maps and technical drawings;**



Applies to:

- **photographic works:** irrespective of the subject matter (portraits, landscapes, current events, etc.) and the purpose for which they are made;
- **motion pictures (“cinematographic works”):** whether silent or with a soundtrack, and irrespective of their purpose (theatrical exhibition, television broadcasting, etc.), their genre (film dramas, documentaries, newsreels, etc.), length, method employed (filming “live,” cartoons, etc.), or technical process used (pictures on transparent film, videotapes, DVDs, etc.).
- **“works of applied art”** (artistic jewelry, lamps, wallpaper, furniture, etc.) and choreographic works.
- **computer programs** (either as a literary work or independently).



Copyright subsists in 'original' works.

- To be original:
 - it is not necessary for the work to be first of its kind
 - the work must originate with the author
 - the work must be more than a copy of some other material
 - author must have used some skill or experience in making the work/product original

Ownership of Copyrights

- Author generally owns copyright (author is person responsible for compiling the work).
- Employer owns copyright where author is under contract of service or apprenticeship. However "Moral Rights" always belong to the author whoever is the owner of the copyright.
- Person who commissions and pays for work
- Maker of sound recording or film
- **Copyrights can be transferred**

Duration of Copyrights

- Published work (i.e. supplied to public):
 - 70 years after death of copyright owner
- Unpublished work:
 - 70 years after publication for the first time



Infringement of Copyrights

- **Original works** —by person performing any of the various acts in respect of the work without authorisation or consent of owner of copyright.
- **Examples:**
 - Reproduction (i.e. copying) in a material form the whole or a substantial part of a literary, dramatic, musical or artistic work.
 - Importing copies of an original work for sale, hire, exhibition or distribution.
 - Performance of a work in public or broadcasting of a work without consent of the owner.

Actions not amounting to infringement of copyright

- **Use of insubstantial parts**
- **Fair dealing:**
 - Research or study
 - Criticism or review
 - Reporting of news
 - Giving of professional advice by a legal practitioner or a patent attorney
- **Educational copying**
 - If adequate records maintained to enable compensation to owner of copyright
- **Public readings**
- **Performances at home**
- **Copyright work available in libraries**
- **Incidental appearances of artistic work in films or television broadcasts**



Remedy to Infringement:

- **Remedies:**
 - **Damages**
 - **Injunction**
 - **Public apology order**
 - **Remove infringement**
 - **Reverse the infringement**

Some IP found in a mobile phone

Trade marks:

- Made by "Nokia"
- Product "N95"
- Software "Symbian", "Java"

Patents:

- Data-processing methods
- Semiconductor circuits
- Chemical compounds
- ...

Copyrights:

- Software code
- Instruction manual
- Ringtone
- ...



© Nokia

Trade secrets:

?

Designs (some of them registered):

- Form of overall phone
- Arrangement of buttons in oval shape
- Three-dimensional wave form of buttons
- ...

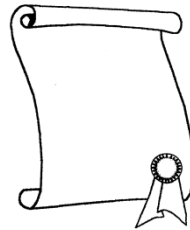


What is a Patent?



- A contract between an inventor and a state

Inventor



State

Protection for about 20 years;
Right to exclude others from
making, using, selling and
importing the invention

- *to recoup investment in R&D*
- *to strengthen market position and competitiveness*

Publication of the invention

- *to spread new technical knowledge*
- *to avoid R&D duplication*
- *to foster innovation*

Patents are granted to inventions which are **Novel**, **Inventive** (non obvious),
suitable for **Industrial Application** when considered against the **Prior Art**

Rights Conferred by a Patent

- **Exclusive Right**
Nobody can produce, use, sell, or import your invention
- **Territorial Right**
Patent rights apply only in the countries where they are granted
- **Timed Right**
Protection from a certain date to another date
- **One-Time Right**
When a patented product is put on the market the patent right is exhausted
- **Transferable Right**
You can assign or sell (licence) your patent to others
- **Passive or Relative Right**
A granted patent does not necessarily gives the right to exploit the invention (depends on the rights of others and on general law)

Why File a Patent

Patents define **Innovation Strategy** and **Market Strategy** and help you:

... to recover your R & D investments and to safeguard the results

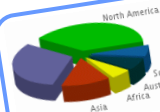
... to introduce new products and processes

... to provide recognition and motivation for employees



... to bring together inventors and investors

... to increase your market share



... to retain your market position



Roles played by Patents

Informative Role



Defensive Role



Co-operation Role



Aggressive Role



Financial Role



Five Roles played by Patents



Informative Role



- Every patent is published in exchange to the rights conferred
- Every patent is abstracted and indexed in several databases
- Patents used to gain a reputation and promote themselves
- Patents used as proof of technical ability to encourage potential partners to form joint ventures
- Patents used to mislead competitors (disinformative role)

Five Roles played by Patents



Defensive Role



- Defensive publication: the invention of a published patent (application) **cannot be patented again**
- Publishing a patent application is easier and cheaper than publishing in a technical journal (no peer/editorial review) and its publication date is certain
- Owning many patents in many technology areas to be used against future competitors
- A large patent portfolio discourages and disorients competitors
- Patents protect a market at its outset („pioneer“ patents)
- Patents build a protective wall around a „pioneer“ patent („fence“ patents)

Five Roles played by Patents



Co-operation Role



- Patents are traded to acquire an advantage (licence) of another patent owned by competitor (cross-license) or know-how
- To create mutual respect between competitors and promote co-operation or joint-ventures

Five Roles played by Patents



Aggressive Role



(INVADERS)

- Patent used directly or indirectly to exclude others from use, produce or sell the same product
- Patent used for threatening competitors
- Patent used to prolong the domination on the market: patents for improvements
- Patent used to scare off competitors not familiar with patent system

(DEFENDERS)

- Patents used for improving a position before negotiations with owner of a master patent: dependent patents may block a master patent

Five Roles played by Patents



Financial Role



- Patents used in order to earn money through licensing
- Patents used as a guarantee for a loan (security)
- Patents used as an asset when founding a company
- Creation of business units using internal licensing fees
- Global tax optimisation through transfer of patent rights

Roles played by Patents

Informative Role



Defensive Role



Co-operation Role



Aggressive Role



Financial Role

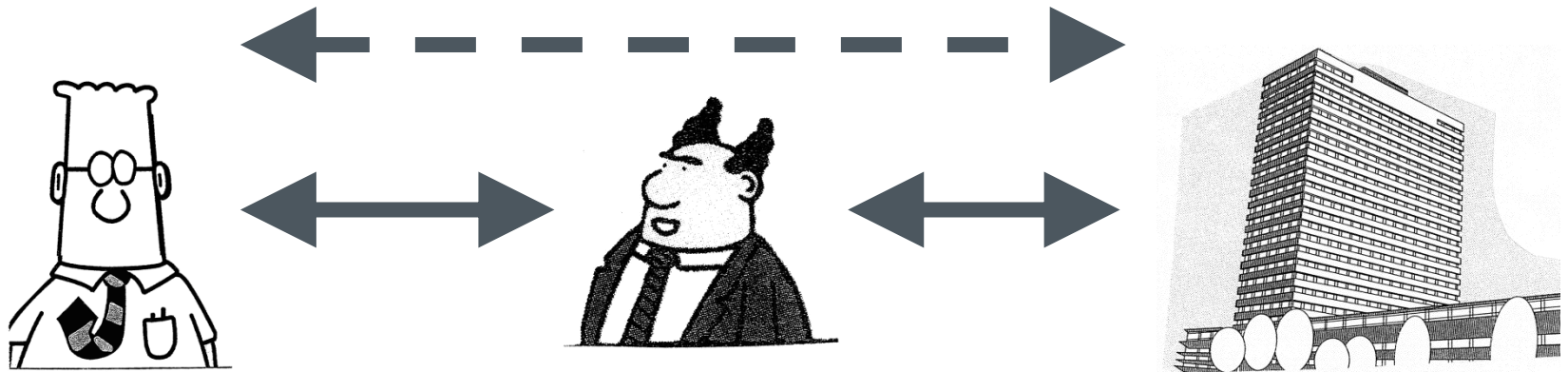


***An Example
of Patent Portfolio***

Maybe the questions to ask yourself are:

- 1)** You may have a really great invention, but is it relevant to your business objectives?
- 2)** Would a patent give you any practical leverage over a competitor?
- 3)** Do you already have an appropriate patent portfolio?

The Actors of the Patent Procedure



Inventor/Applicant

Representative

Patent Office

Unexamined Patent Applications (A)
Contract Proposal

Granted Patents (B)
Final Contract

publishes

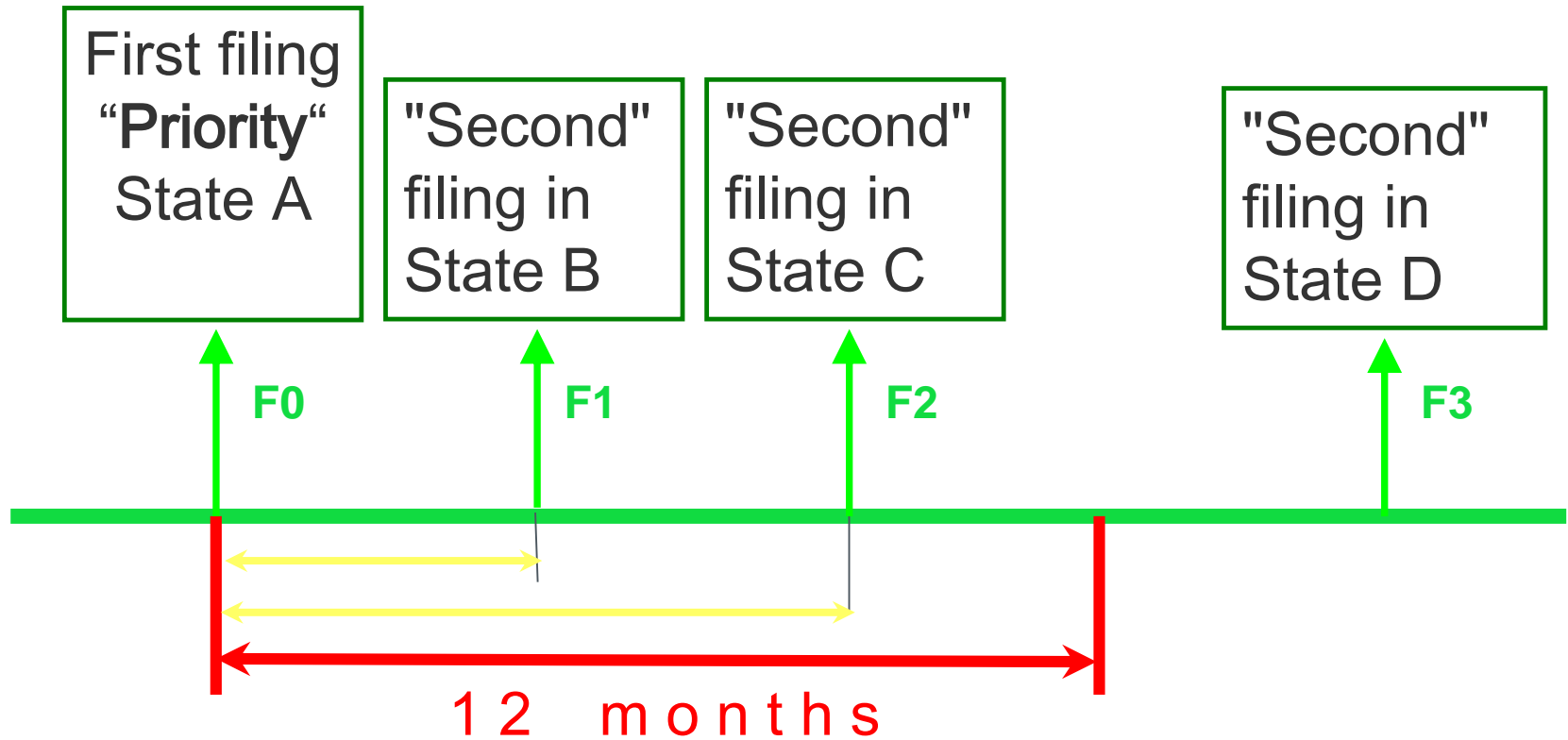
Paris Convention for the Protection of Industrial Property

After filing a patent application (**priority document**) in a state at a certain date (**priority date**) the applicant can file:

- other patent applications (**family member**) based on the same subject-matter of the priority document
- at any time (**filing date**) in the next 12 months
- in any state member of the Paris Convention
- while maintaining the same priority date (**priority rights**)

When to File a patent

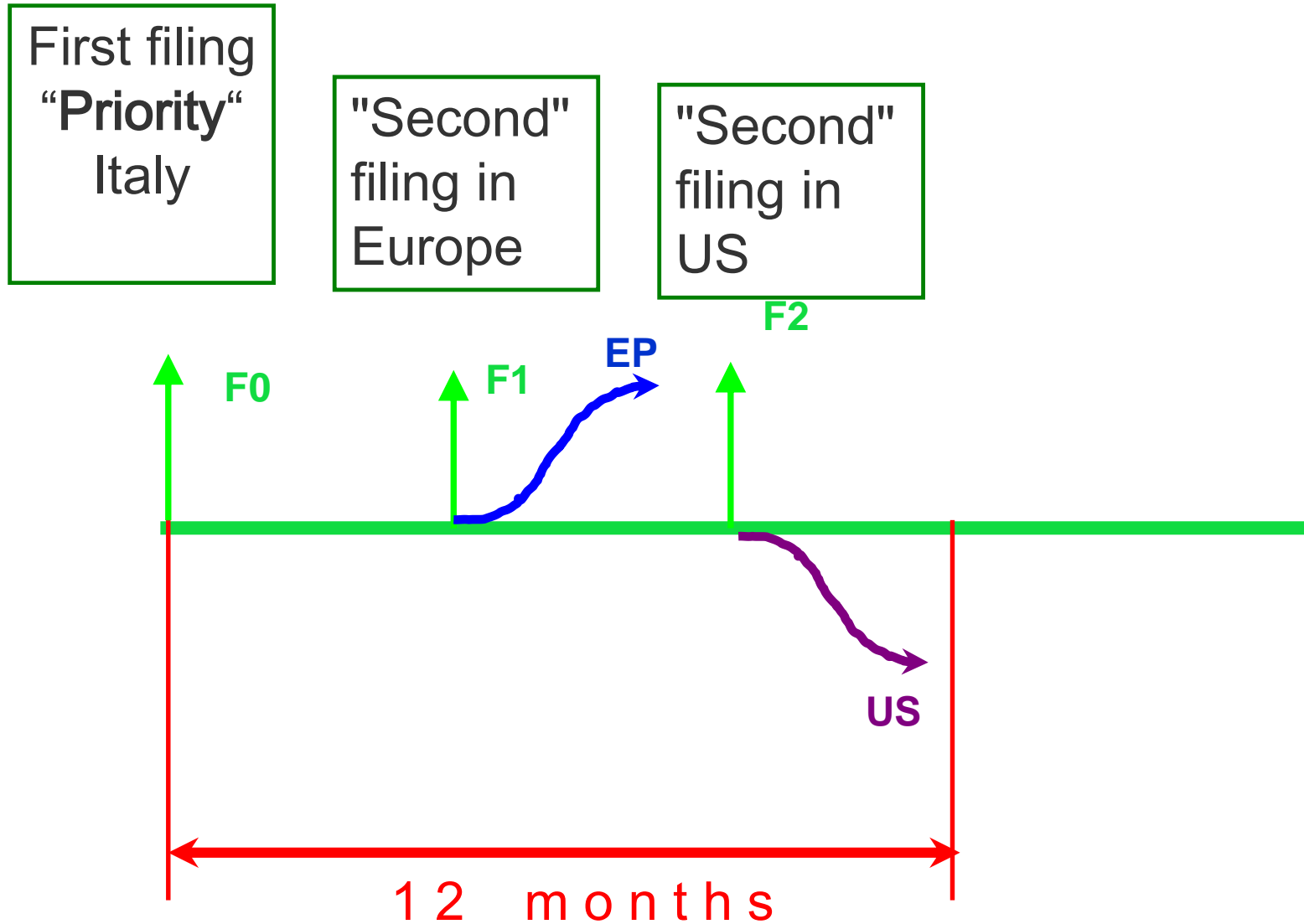
Paris Convention



Second filings of an application based on the first filing **F0**
F1 and **F2** entitled to use the "priority date" as the first filing date
F3 **NOT** entitled to use the "priority date" as the first filing date

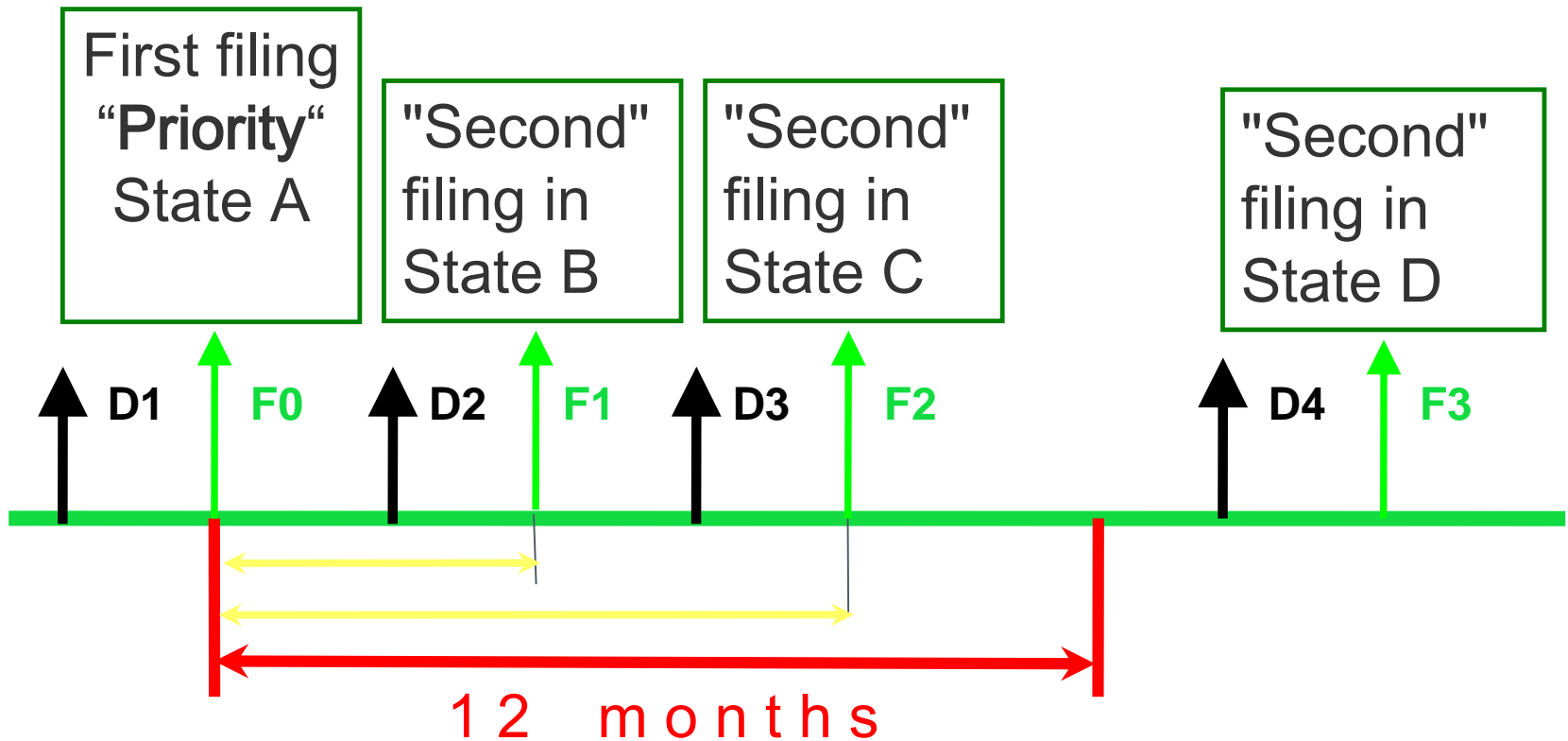
When to File a patent

Paris Convention



When to File a patent

Paris Convention



D1 prior art for all filings

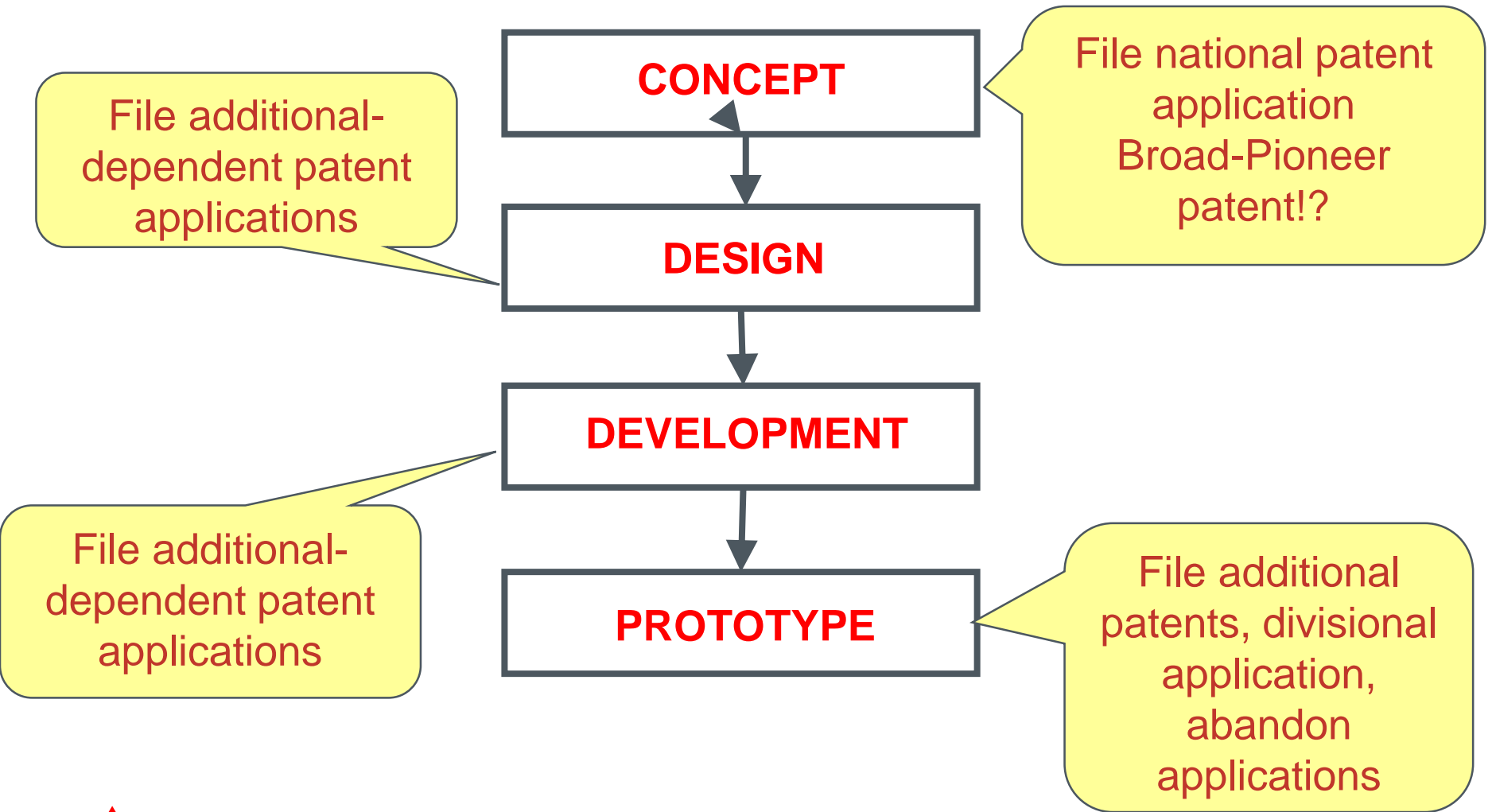
D2, **D3** and **D4** **NOT** prior art for **F0-F2**

D2, **D3** and **D4** prior art for **F3**



If **F0**, or **F1** or **F2**, is published before the filing of **F3**, it will anticipate the application **F3**.

When to File a patent



File a patent before you disclose your invention !!!

Who should File a patent

PATENT ATTORNEYS

- They know the formal requirements and the procedure
- They know the language of patents
- They can advise on the appropriate patent strategy and on the general Intellectual Property Rights (IPRs)



Where to File a patent

Patent Offices in those **Countries**:

- **where** the invention can be **produced**

and/or

- **where** the invention can be **used**

and/or

- **where** the invention can be **sold**

*by the **inventor** (patentee) or by **others** (infringers)*

*Check the compatibility of your invention with the
Technical Standards in use in a specific country:
your invention may be of no interest there!*



A) **National** Patent Application

B) **International** Patent Application **PCT**

C) **European** Patent Application (**EPO**)

National Patent Application

- ➔ *one application for each state*
- ➔ *one procedure for each state*
- ➔ *one patent for each state*

International Patent Application PCT

- ➔ ***one application for all the (132) PCT member States***
(beside the ***IB of WIPO*** and the ***National Offices*** also the ***EPO*** can act as a ***Receiving Office*** for applicants who are nationals or residents of an ***EPC*** contracting state)
- ➔ ***International Search Report and International Preliminary Examination Report***
(the ***EPO*** act as ***International Search Authority*** and / or as ***International Preliminary Examining Authority*** for ***any*** application on condition that the relevant receiving office has specified the ***EPO*** as ***ISA*** and / or ***IPEA***. As from 01.01.2004 together with the search report the applicant receives a written opinion on patentability, the WO-ISA)
- ➔ ***EPC states can be collectively designated as a region***

European Patent Application (EPO)

- ➔ *one application filed at one Office for “n” contracting states*
- ➔ *one procedure (in one language) for all “n” states*
- ➔ *one EP patent for all “n” states*
- ➔ *Cost – Effective (costs less than 3 national patents)*

Up today n= 38 states

Where to File a patent (4)

European Patent with unitary effect at the EPO (probably as of 2014)

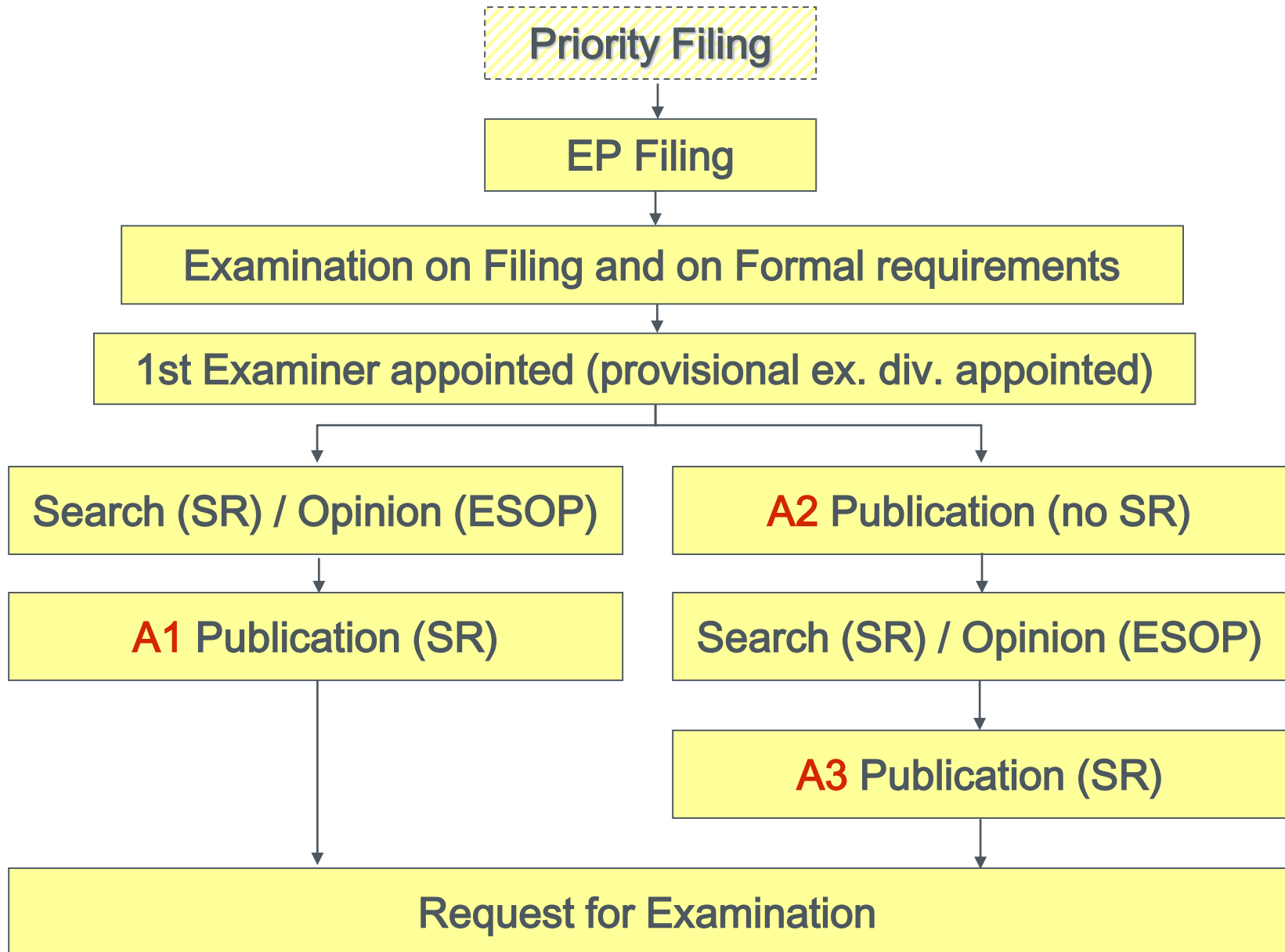
- one application filed at one Office for 38 contracting states
- one procedure (in one language) for all 38 states
- one EP patent for all 38 states
- Cost –Effective (costs less than 3 national patents)

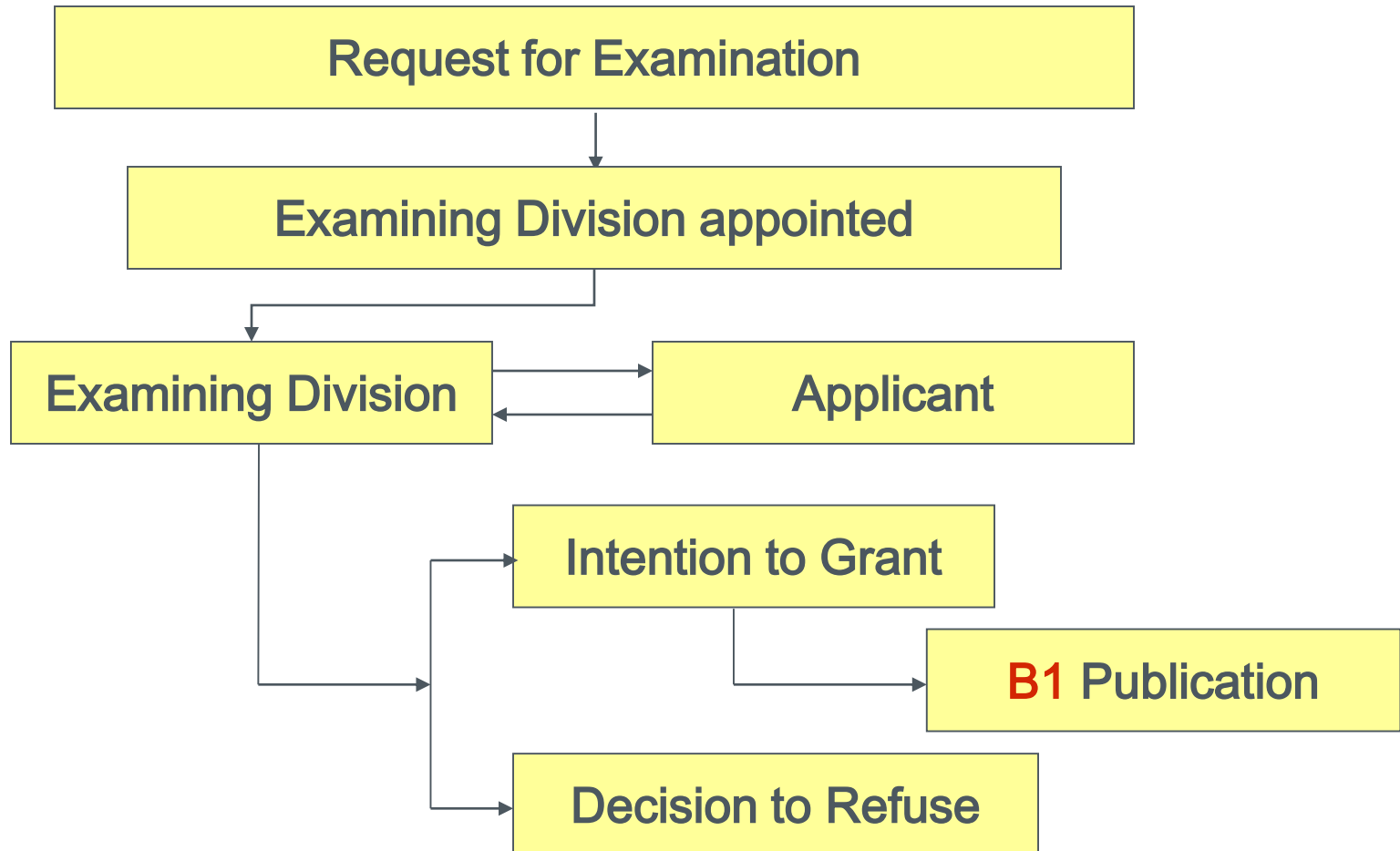
but also:

one litigation procedure (Unified Patent Court)
simplified linguistic regime after grant

will be administered by the European Patent Office

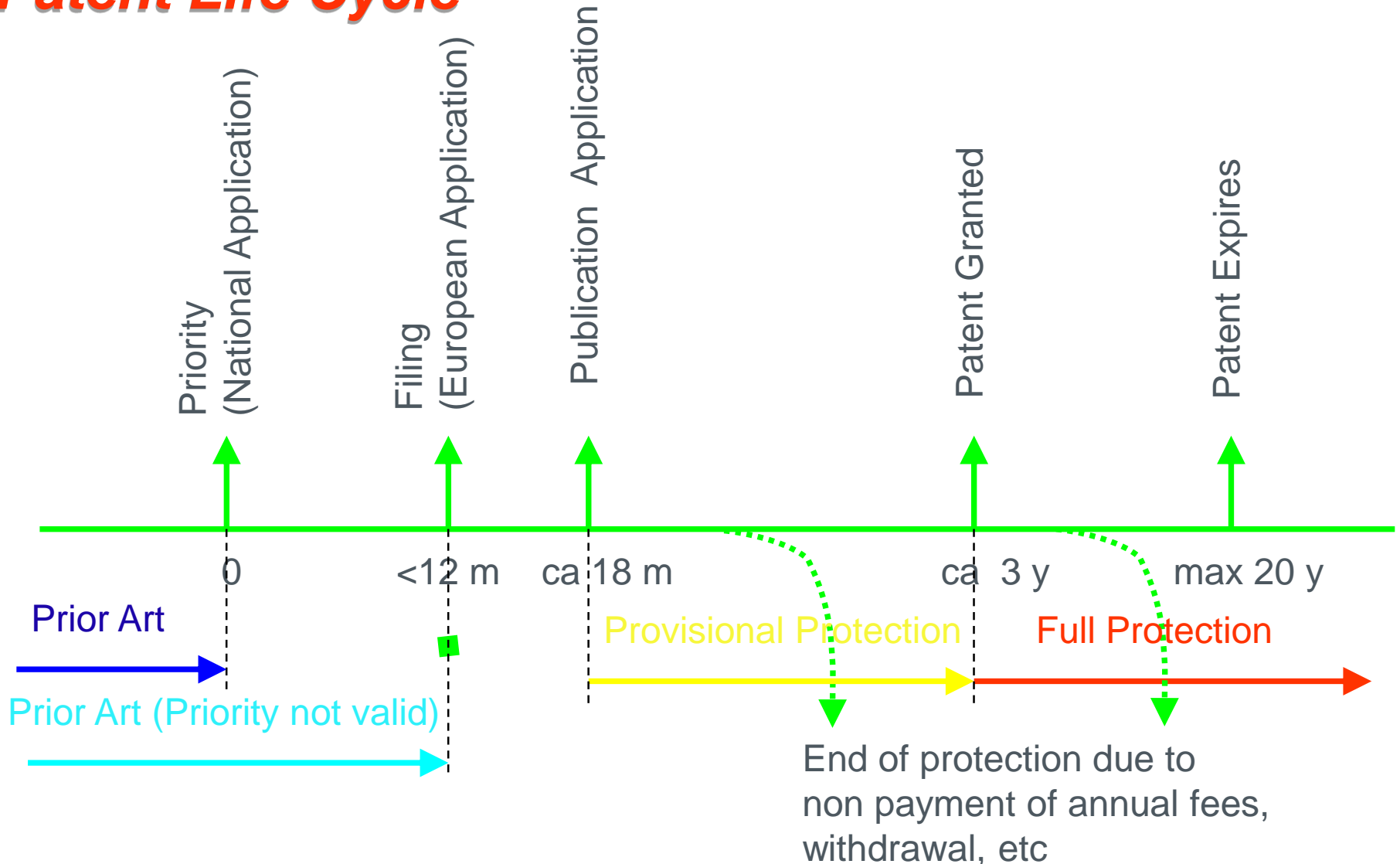
Overview of the EP Search and Examination Procedure





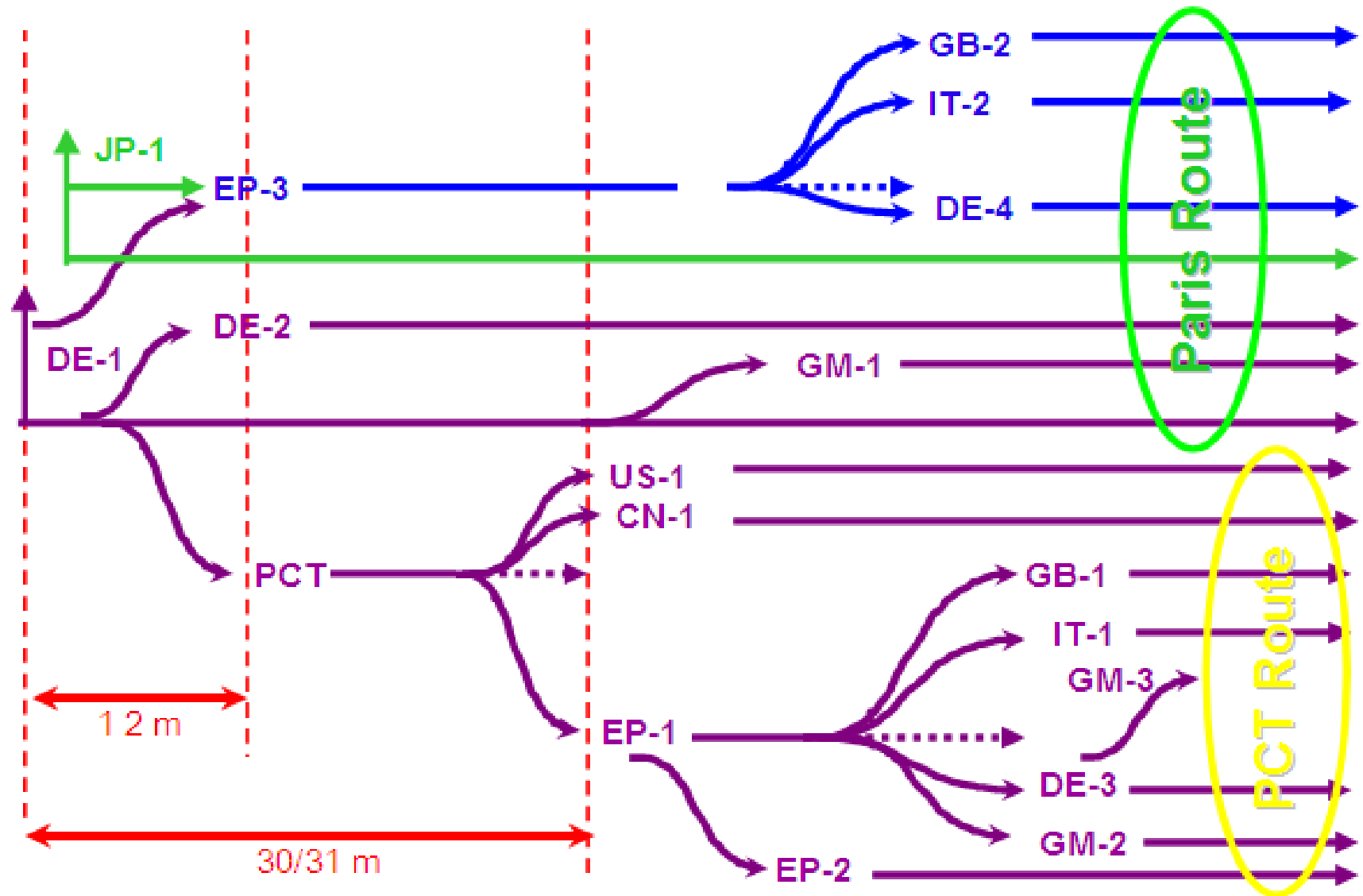
Where to File a Patent

Patent Life Cycle



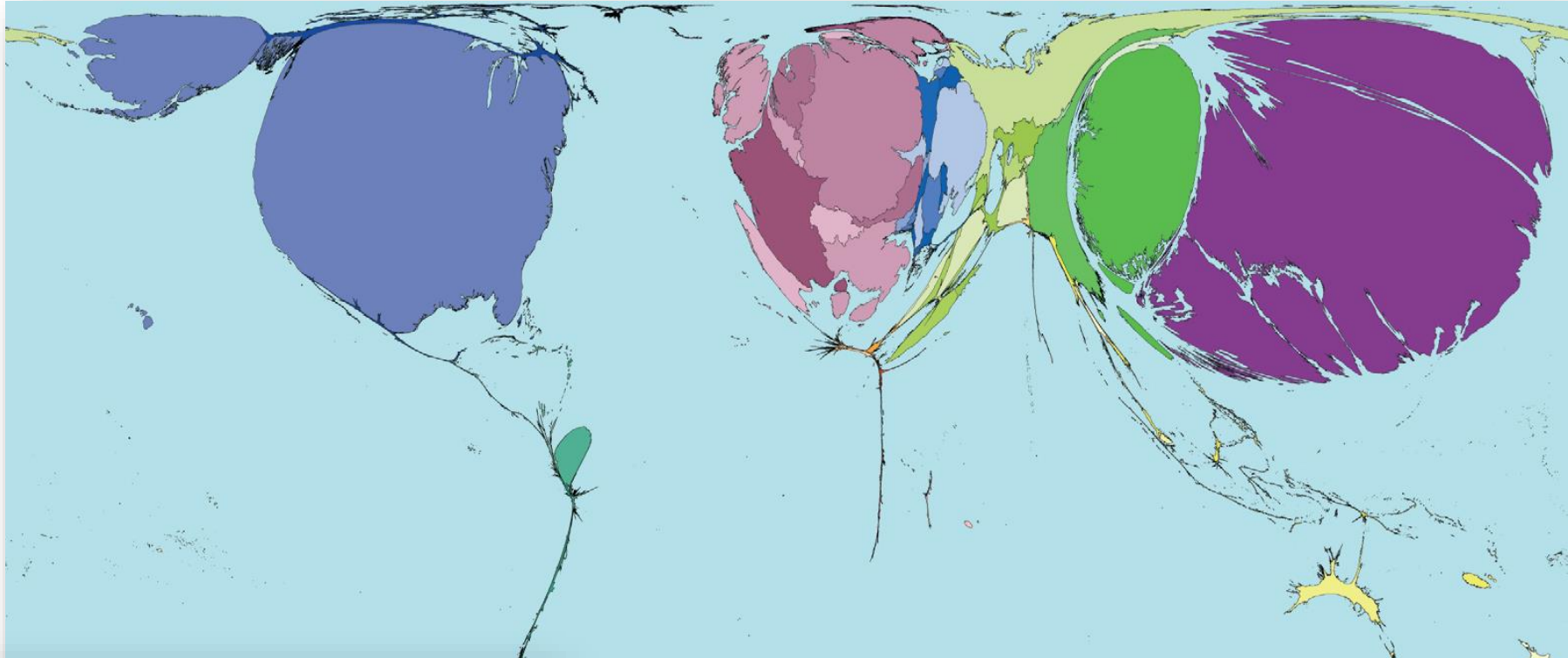
Where to File a patent

Paris Convention: Multiple Priorities - A non improbable example



Where to File a patent

Territory size shows the proportion of all patents worldwide that were granted there according to the United Nations Development Programme's 2004 Human Development Report.



HIGH AND LOW RATES OF PATENTS GRANTED

Rank	Territory	Value	Rank	Territory	Value
1	Japan	884	55	Dem P Republic Korea	22
2	Republic of Korea	490	57	Bulgaria	18
3	United States	298	57	Hungary	18
4	Sweden	235	59	TFYR Macedonia	17
5	Bahamas	208	60	Uzbekistan	16
6	Greenland	207	61	Slovakia	15
7	Germany	205	62	Kyrgyzstan	13
8	Switzerland	188	63	Ireland	9
9	Netherlands	177	64	Iceland	7
10	France	174	65	Hong Kong (China)	6

patents granted per million people in 2002*

Patents granted per millions of people (2002)

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What does a patent/application look like ? (1)


 Europäisches Patentamt
 European Patent Office
 Office européen des brevets

Publication number: **0 525 909 A1**

EUROPEAN PATENT APPLICATION

Int. Cl.⁸ B42F 1/02

(1) Application number: 92202354.4
 (2) Date of filing: 29.07.92
 (3) Priority: 31.07.91 NL 9101313
 (4) Date of publication of application: 03.02.93 Bulletin 93/05
 (5) Designated Contracting States: AT BE CH DE DK ES FR GB GR IT LI LU MC NL PT SE

(6) Applicant: MULTIBRIDGE B.V.
 35, Willem de Zwijgerlaan
 NL-2252 VN Voorschoten(NL)
 (7) Inventor: van Ardenne née van Rhijn,
 Johanna Lambertia Maria
 35, Willem de Zwijgerlaan
 NL-2252 VN Voorschoten(NL)
 (8) Representative: Keijser, Johannes Maurits
 L.F., Mr. et al
 EXPATENT B.V. P.O. Box 3241
 NL-2280 GE Rijswijk(NL)

(9) **Clip for paper or other objects.**
 (10) Clip for holding and/or keeping together sheets of paper or other materials, comprising two holding elements lying essentially in parallel planes and springing relative to each other, and of which the two end edges run parallel to each other, and one (2) of said on edges when in use. According to the invention, the two holding elements are in the form of holding legs (1, 2) of sheet-type material, and one (4, 6) of said holding legs is bent in such a way that a part (4, 6) adjacent to the connecting line (3) with the other leg (1) lies at a distance from said other leg, and a second part (6), essentially ending at the push-on edge (13), lies with at least a part of its inside essentially flat and resiliently against the inside of a part (9) of the other holding leg (1). The clip can also be placed on other objects of different types.



Fig. 2

0 525 909 A1

Function of a Patent Application

1. Proposal for the “contract”

2. Disclosure of the invention

in a manner sufficiently clear and complete in order to allow a person knowing everything publicly disclosed at the time of the invention to reproduce or carry out the invention without any additional creative activity. (enabling disclosure)

- **Description**
- **Claim(s)**
- **Drawing(s)**
- **Abstract**

What does a patent/application look like ? (3)

- **Bibliographic information**
 - Inventor, proprietor, date of filing, technology class, etc.
- Abstract (not part of the application)
 - Around 150 words as a search aid for other patent applications
- **Description**
 - Explains how the invention works ([technical specification](#))
 - Summary of prior art (i.e. the technology known to exist)
 - The problem that the invention is supposed to solve
 - An explanation and at least one way of carrying out the invention
- **Claims**
 - Define the extent of patent protection ([legal statements](#))
- **Drawings**
 - Illustrate the invention



How much is this patent worth ?

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5.000	€ 825,00	€ 660,00	€ 165,00
10.000	€ 1.399,00	€ 1.119,20	€ 279,80

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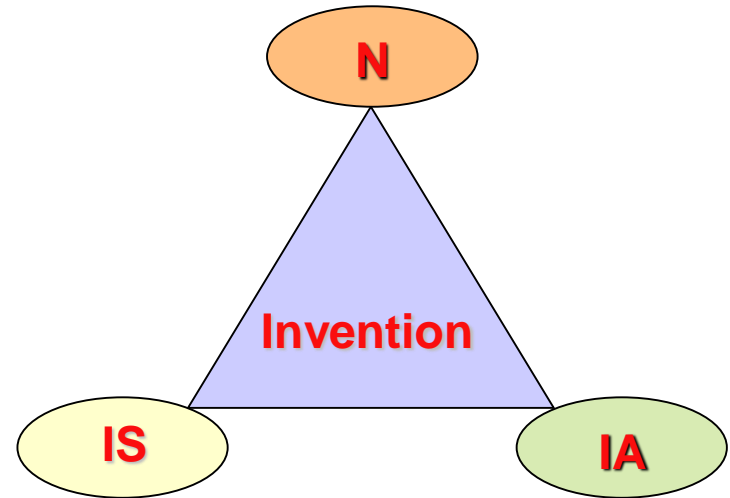
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bestelformulier op
de achterzijde.

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Points of Examination

- **Invention**
- **Novelty**
- **Inventive Step**
 - Problem Solution Approach
- **Industrial Application**
 - It should have the **possibility** of industrial application, not necessarily the **probability**,...



Whether the invention is actually produced/used is up to the market not to the patent office!

- **Prior art:** EVERYTHING made available to the public, by any means, e.g. oral or written description, use etc **before the filing date** of the application.



What is a "new" invention?

- New **at the date of filing** the patent application
- New if it does not form part of the "state of the art"
(Article 54(1) EPC)
- "State of the art" means **everything made available to the public
before the filing date of the European patent application**
(Article 54(2) EPC)
- There must have been no public disclosure of an invention
before the filing date of the patent application

The following are **not** considered to be inventions for the purposes of granting European patents:

- Discoveries, scientific theories and mathematical methods (Article 52(2)(a) EPC)
- Aesthetic creations (Article 52(2)(b) EPC)
- Schemes, rules and methods for performing mental acts, playing games or doing business, and programs for computers (Article 52(2)(c) EPC)
- Presentations of information (Article 52(2)(d) EPC)



Programs for computers (1)

- Program for a computer "as such" is excluded from patentability
(Article 52(2)(c) EPC), 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

Programs for computers (2)

- **Example 1:** A program for controlling an x-ray apparatus having instructions adapted to carry out the following steps:
Step 1, Step 2, ..., Step n

Allowable

Further effect generated by the program running on a computer: Control of the x-ray apparatus
This further effect is **technical**.

- **Example 2:** A program for checking the spelling of a word having the following instructions:
Instruction 1, Instruction 2, ..., Instruction n

Not Allowable

Further effect generated by the program running on a computer: Decision of orthographic correctness
This further effect is **not technical**.



What cannot be patented? (2)

- Inventions whose commercial exploitation would be contrary to **"ordre public"** or **morality** (Article 53(a) EPC)
- **Plant or animal varieties** or essentially biological processes for the production of plants or animals (Article 53(b) EPC)
- **Methods for treatment** of the human or animal body **by surgery or therapy** and **diagnostic methods** practised on the human or animal body (Article 53(c) and Article 54(4)-(5) EPC)

Infringement

- An infringement occurs when the patented invention is used, produced, imported without the authorization of the patent owner
- The scope of the invention is solely defined by the claims.
Other aspects of the invention which are not covered by the claims are not considered to be patented.
However the interpretation of the claims and the information contained in the description and in the figures of the patent may lead to a different appreciation of the infringement.
- The patent must be in **force at the time of infringement**. It should not have expired because the maximum life span (20 years) has lapsed or it should not have been abandoned failing to pay maintenance or renewal fees.
- The patent must be in **force in the country** where the infringement allegedly occurs



Novelty

A Claim is novel if its features are not disclosed together in a single prior art document, object, activity, etc

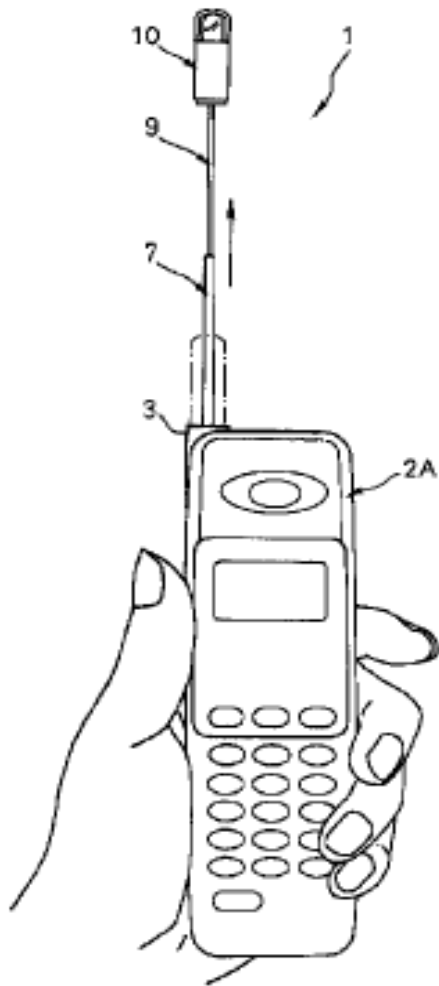
Infringement

An entity infringes on a valid patented claim if the entity shows all the features defined in that claim

An activity infringes on a valid patented claim if the activity shows all the features defined in that claim

If your entity or activity does not infringe on a existing valid patent you have **freedom to operate**. If that entity/activity is also novel you may **seek for patent protection**, if you can prove is not obvious.

Your Invention



A possible Claim formulation:

Claim: A **mobile telephone handset** comprising a **casing** and an **extensible antenna** characterised in that the extensible antenna is **telescopic**.

Features in the Claim:

A: *mobile telephone handset*

B: *casing*

C: *extensible antenna*

D: *telescopic*

Symbolized Claim:

Claim: A B C D

Novelty (Are Claim 1 to 5 Novel?)

Prior art (object, disclosure, use, etc.)	Claim 1	Claim 2	Claim 3	Claim 4	Claim 5
A	A	A	A	A	A
B	B	B	B	B	B
C	C		C	C'	
			D		D
	<i>Not Novel</i>	<i>Not Novel</i>	<i>Novel</i>	<i>Novel</i>	<i>Novel</i>

Remember: A Claim is novel if all its features are not disclosed together in a single prior art document or object

Infringement (Are Products 1 to 5 Infringers?)

Valid Patent Claim	Product 1	Product 2	Product 3	Product 4	Product 5
A	A	A	A	A	A
B	B	B	B	B	B
C	C		C	C'	
			D		D
	<i>Infringes</i>	<i>Does Not Infringe</i>	<i>Infringes</i>	<i>Does Not Infringe ?</i>	<i>Does Not Infringe</i>

Remember: A product infringes on a patented claim if it shows all the features defined in that claim

A patented invention featuring A,B,C exists and is in force in a certain country

You want to enter that market with a similar product and, possibly, you would like to patent it:

Is your product Infringing on the valid patent, i.e. on Claim ABC? If not you have Freedom to Operate

Is the claim defining your product Novel and Patentable in view of the prior art defined by the existing patent?

Can you patent your product and at the same time having Freedom to Operate?

Patentability and Freedom to Operate

Valid Patent Claim	Product I	Claim Product I	Product II	Claim Product II	Product III	Claim Product III	Product IV	Claim Product IV	Product V	Claim Product V
A	A	A	A	A	A	A	A	A	A	A
B	B	B	B	B	B	B	B	B	B	B
C	C	C			C	C	C'	C'		
					D	D			D	D
	I	NN	NI	NN	I	N	NI	N	NI	N
	NF	NP	FO	NP	NF	P	FO	P	FO	P

I = Infringing ; **NI** = Not Infringing; **N** = Novel ; **NN** = Not Novel;
P = Patentable ; **NP** = Not Patentable ; **FO** = Freedom to Operate;
NF = No Freedom to Operate

A patented invention featuring an Hamburger exists and is in force in a certain country

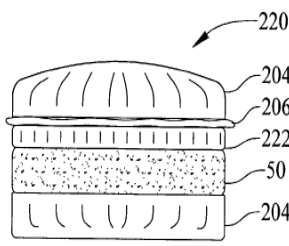
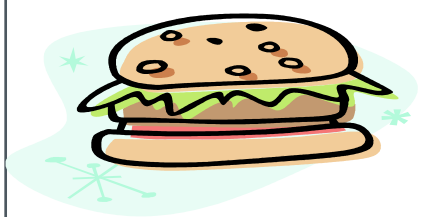
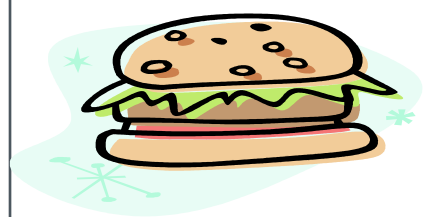
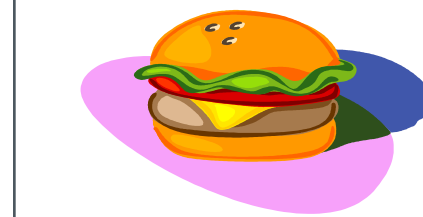
You want to enter that market with a similar Hamburger and, if possible, you would like to patent it:

Is your Hamburger Infringing on the valid patent? If not you have Freedom to Operate

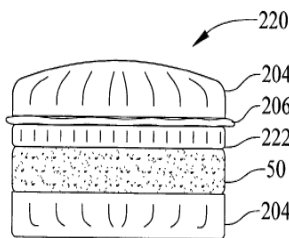
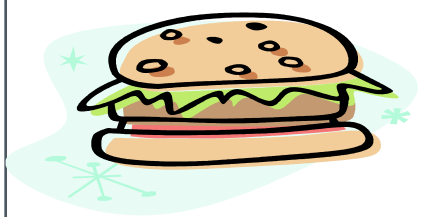
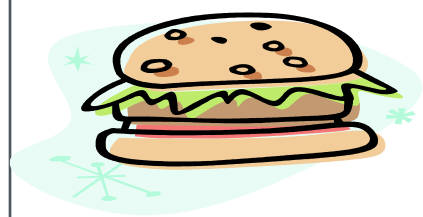
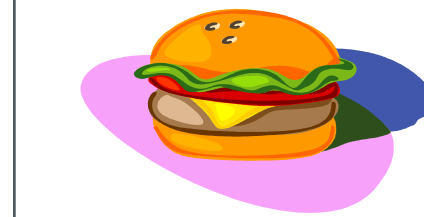
Is the claim defining your Hamburger Novel and Patentable in view of the prior art defined by the existing patent?

Can you patent your Hamburger and at the same time having Freedom to Operate?

Infringement (The Hamburger case)

Valid Patent Claim	Hamburger 1	Hamburger 1'	Hamburger 2
			
Two Slices of Bread (204)	Two Slices of Bread	Two Slices of Bread	Two Slices of Bread
Cheese (206)		Cheese Flavoured Dressing	Cheese
Meat product (50)	Meat product	Meat product	Meat product
Lettuce (222)	Lettuce	Lettuce	Lettuce
	Tomato slice	Tomato slice	Tomato slice
	Does Not Infringe	EQUIVALENT??	Infringes

Novelty (The Hamburger case)

Valid Patent Claim	Claim for Hamburger 1	Claim for Hamburger 1'	Claim for Hamburger 2
			
Two Slices of Bread (204)	Two Slices of Bread	Two Slices of Bread	Two Slices of Bread
Cheese (206)		Cheese Flavoured Dressing	Cheese
Meat product (50)	Meat product	Meat product	Meat product
Lettuce (222)	Lettuce	Lettuce	Lettuce
	Tomato slice	Tomato slice	Tomato slice
	Novel	Novel	Novel



Patentability and Freedom to Operate (The Hamburger Case)

- **Hamburger 1:** Novel, if the new characteristics, i.e. absence of cheese and addition of tomato not obvious, is also inventive and therefore **Patentable**; **No infringement** on existing patent, **Freedom to Operate**
- **Hamburger 1':** Novel, i.e. absence of cheese and addition of tomato not obvious, is also inventive and therefore **Patentable**; **Infringement/No infringement** on existing patent depending on the degree of "equivalence" attributable to the cheese flavoured dressing
- **Hamburger 2:** Novel, if the new characteristics, i.e. addition of tomato not obvious, is also inventive and therefore **patentable**; **Infringement** on previous patent, **No Freedom to Operate**

An existing Patent

1. A mobile telephone handset comprising a casing **characterised in that** it comprises an extensible antenna.
2. A mobile telephone handset according to claim 1 wherein the antenna is made of a single element.
3. A mobile telephone handset according to claim 2 wherein the antenna is mounted on the right side of the casing.
4. A mobile telephone handset according to claim 2 wherein the antenna is mounted on the left side of the casing.
5. A mobile telephone handset according to claim 1 wherein the antenna has a circular cross section.

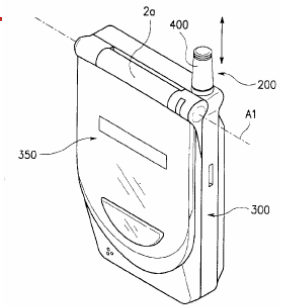


FIG. 1

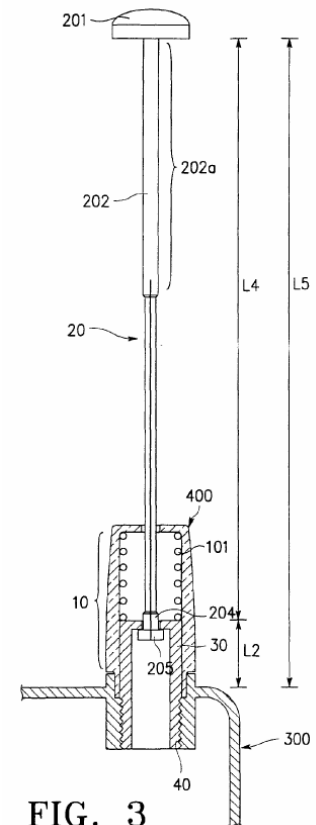


FIG. 3

Infringement, Novelty and Patentability

Your invention: telephone with a telescopic antenna

Does it infringe on the patent in the previous slide?

Can you patent your invention?

Your invention is for mobile telephone handset, with a casing and a telescopic antenna.

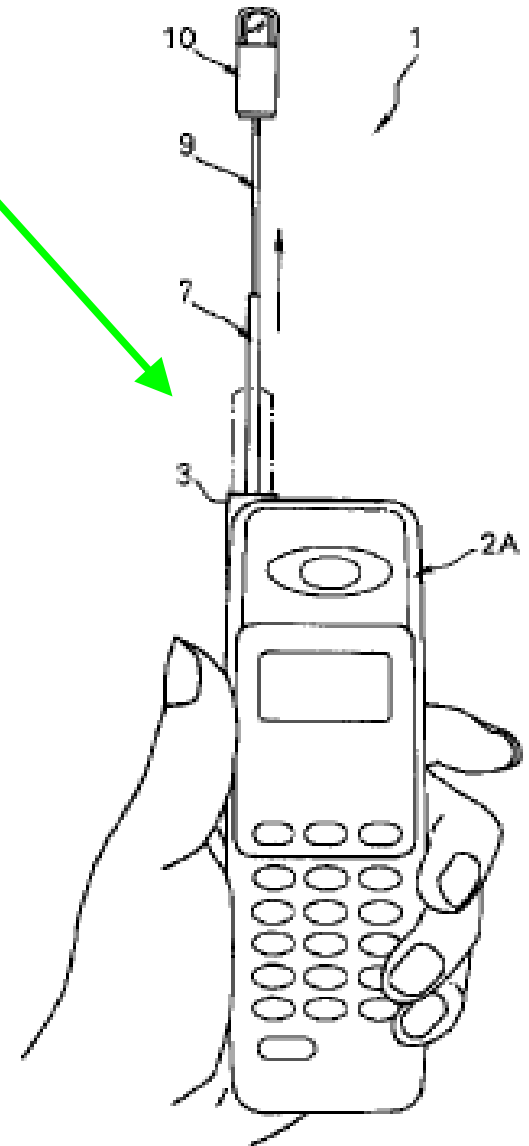
A **prior patent** defines in the claim: A **mobile telephone handset** comprising a **casing** characterised in that it comprises an **extensible antenna**.

The description, the drawings and the dependent claim in this patent indicates that the extensible antenna is a one-piece rod.

Is your invention infringing on the patent?

You have filed a patent application where the independent claim defines: A mobile telephone handset comprising a casing and an extensible antenna characterised in that the extensible antenna is **telescopic**.

Is this claim patentable?



Infringement, Novelty and Patentability

Does your invention infringe on the previous patent?

Read the prior patent claim into your invention:

A **mobile telephone handset** comprising a **casing** characterised in that it comprises an **extensible antenna**.

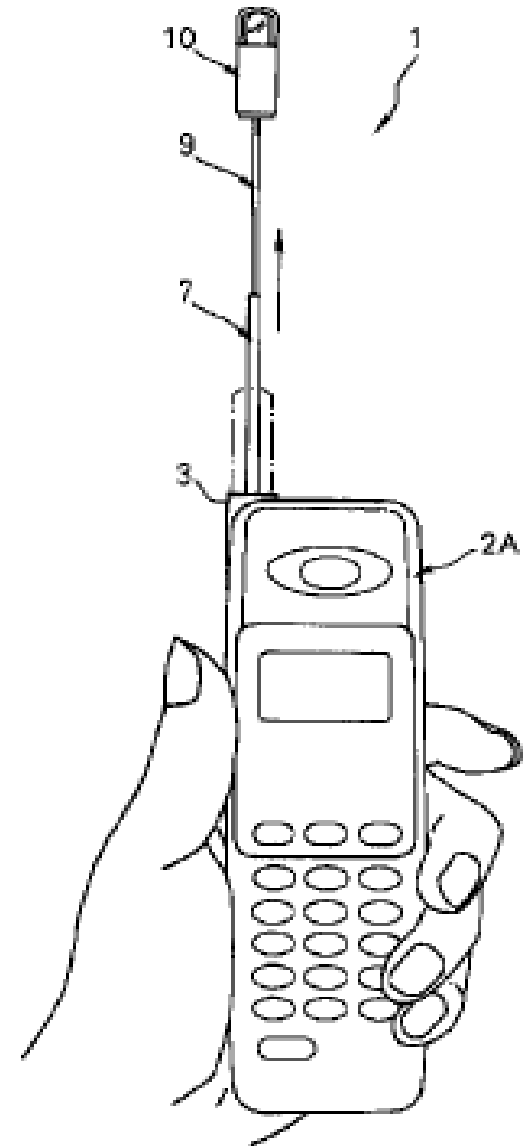
Your invention has all the features of the patent and falls in the scope of the patent: **it is infringing!**

Can you patent your claim assuming the previous patent as only prior-art?

Claim: A mobile telephone handset comprising a casing and an extensible antenna characterised in that the extensible antenna is **telescopic**.

Telescopic is a feature not disclosed in the previous patent: the claim is novel and if you identify a problem and a solution, for instance a telescopic antenna allows for more extensibility, the claim is patentable, i.e. novel and inventive.

But your patent "depends" on the previous one!



Infringement, Novelty and Patentability

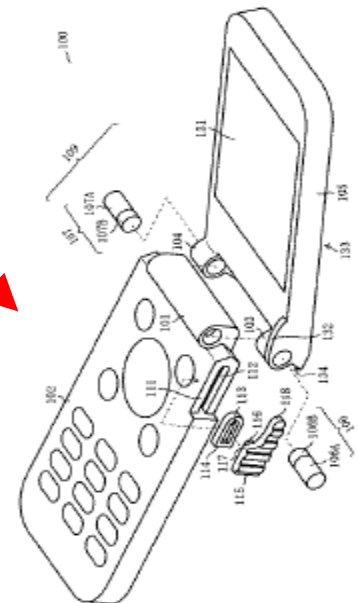
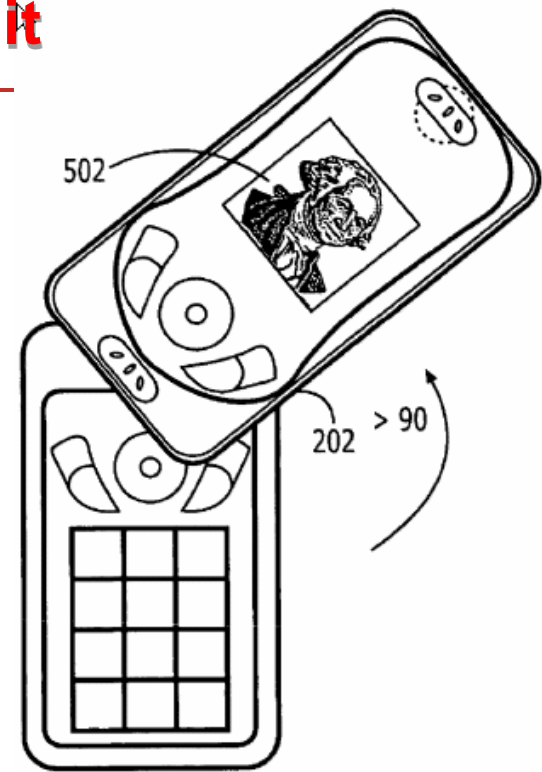
Your **invention**: a mobile telephone where the two parts of the body are joined by one hinge.

A **previous patent** claims "A mobile telephone where the two parts of the casing are joined by two hinges"

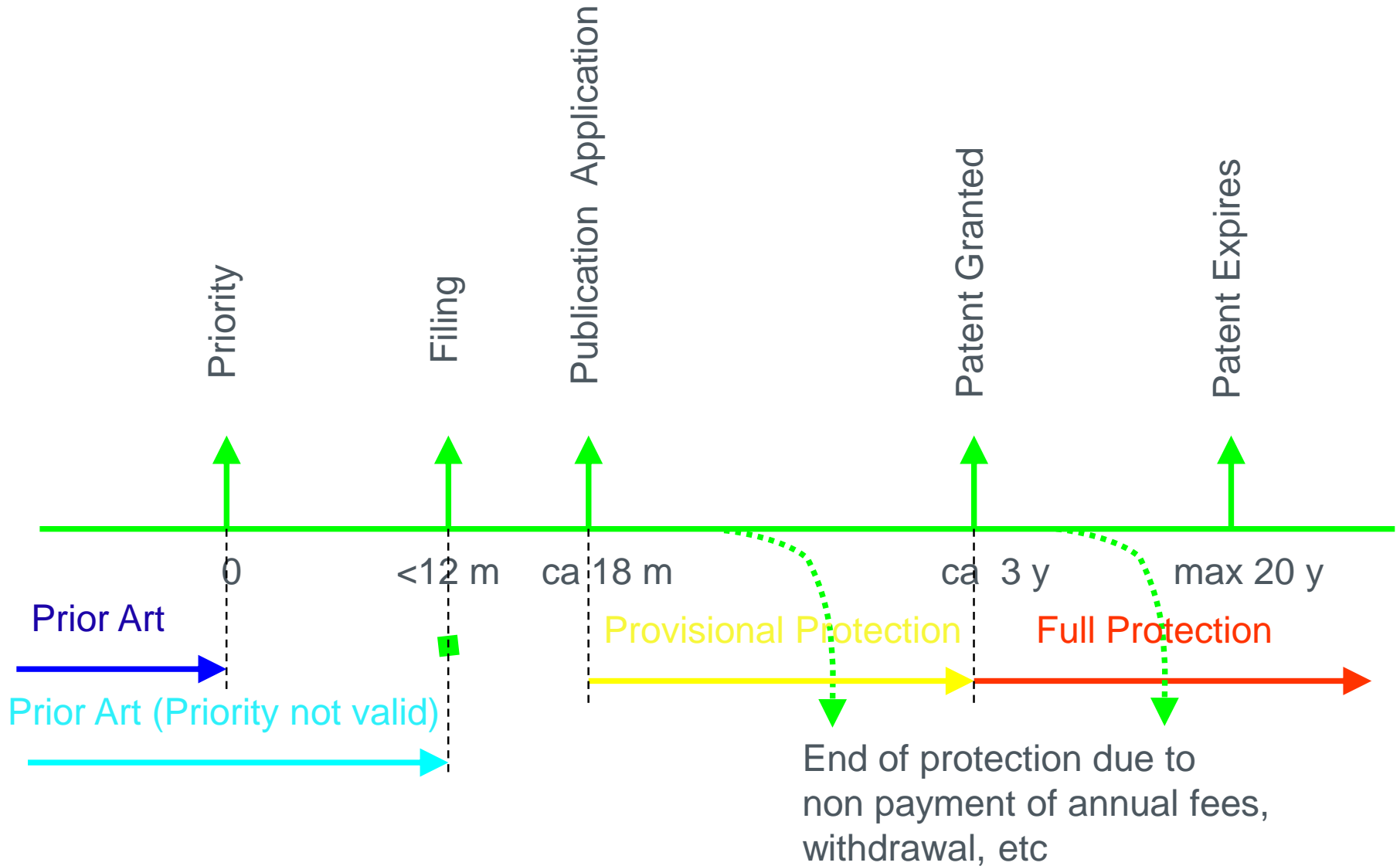
Does your invention infringe on the patent?

You claim "A mobile telephone comprising a casing with two parts and one hinge"

Is your claim novel?



Patent Cycle



Patent Cycle: Prior art

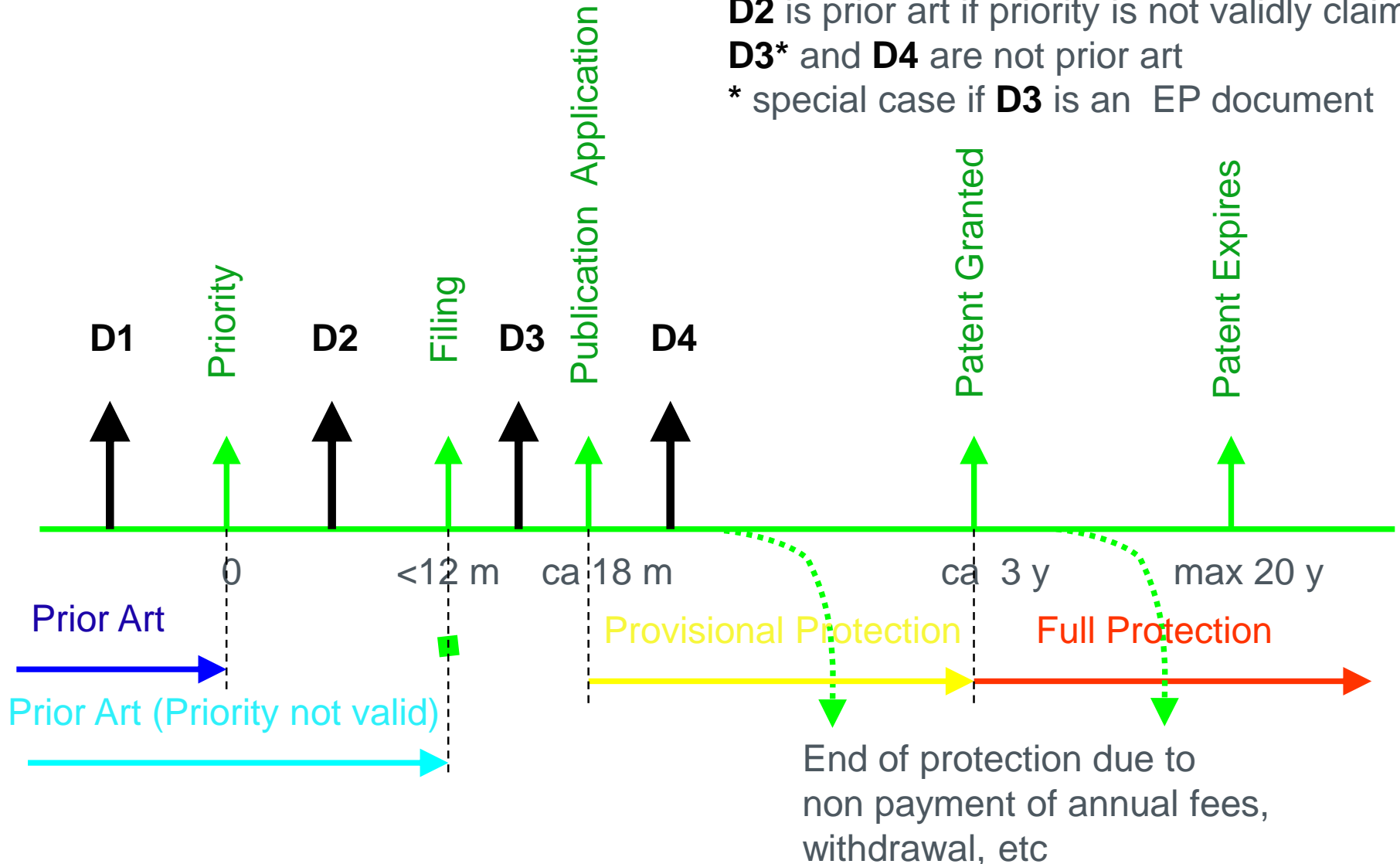
D1 a (patent) document, a prior use is prior art

D2 is not prior art if priority is validly claimed

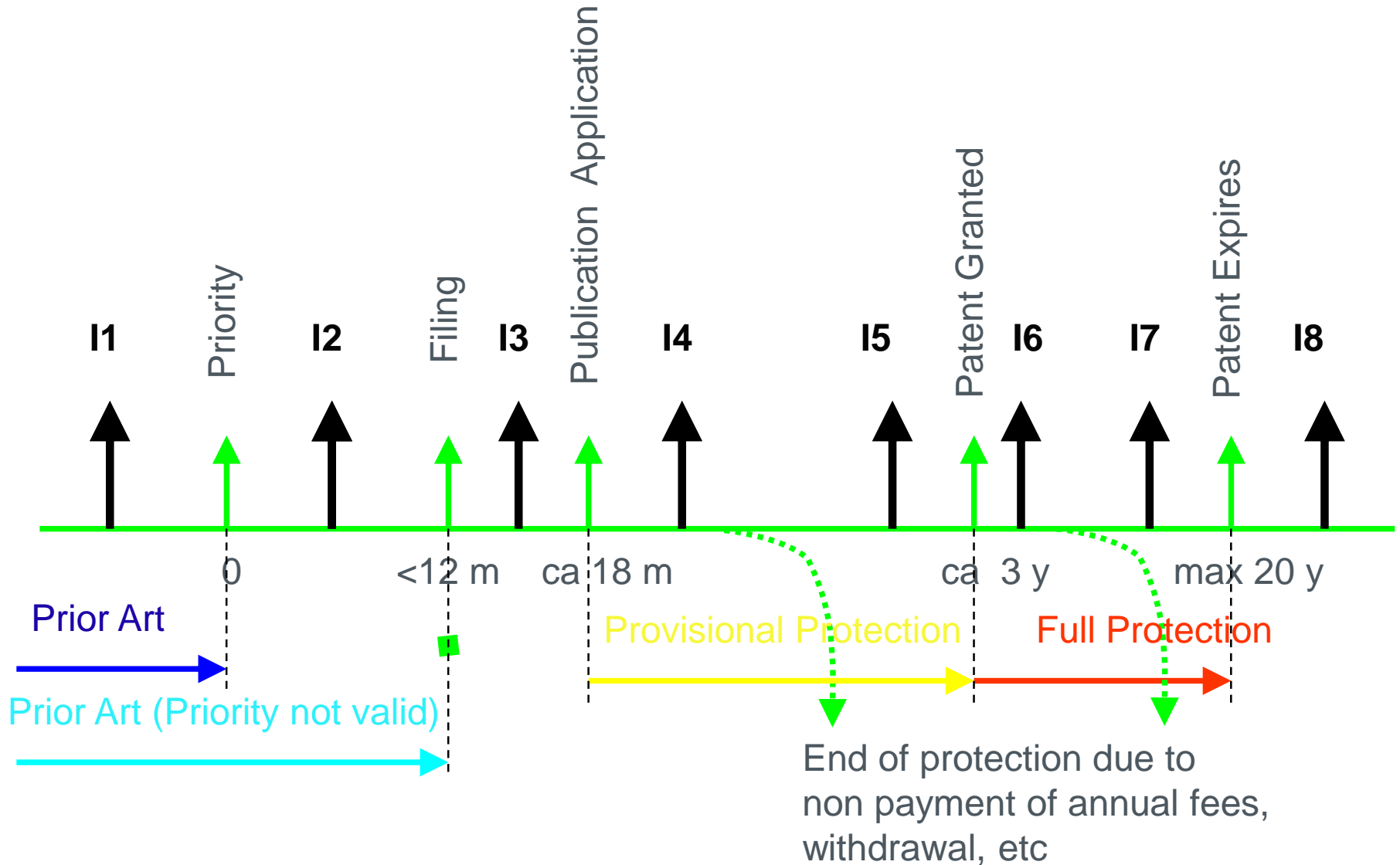
D2 is prior art if priority is not validly claimed

D3* and **D4** are not prior art

* special case if **D3** is an EP document



Patent Cycle: Infringement



Patent Cycle: Infringement

I1 a prior use of the invention is not infringing and can be used to invalidate the patent (if it has been granted)

I2 if the priority is valid it cannot be used as prior art to invalidate the patent once granted. It does not constitute an infringement because the patent application has not been published yet. Once the patent application is published or the patent is granted provisional and full protection can be exercised against **I2**

I2 if the priority is **not** valid same as for **I1**

I3 same as **I2** with valid priority

In the case **I2-I3**, because the patent application was not public, compensation may be limited.

I4 the patent application is now public and provisional protection may be exercised. However the patent has not been granted yet so the right does not exist and the infringement is provisional

I5 patent application has been abandoned no rights in place

I6 patent is now granted: the infringement now is full

I7 granted patent has been abandoned and is public domain: rights do not exist anymore, **I7** is not an infringer.

I8 granted patent expired after 20 years from the priority date and is public domain: rights do not exist anymore **I8** is not an infringer.



**More questions?
Please consult
www.epo.org
or
write to
dgolzio@epo.org**

Thank you!!

