# **Creativity, Ethics of IP, & Moral Right**

A free stroll among human creations : IP rights



session in applied Ethics of Creations

II- A brief overview of the International Intellectual Property System Erasmus Mundus Monabiphot, Frejus, 26 June-02 July 2011

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## A free stroll among human creations: IP rights

Pecuniary rights & terminology... The state of the art A person skilled in the art Who is Who on the stage ? What is behind Innovation ?

IPs among the assets of a firm Main IPs -About Copyright law -About Registered designs -A brief view on trademarks -What about patent law ? Patents Birth & death of the patent Criteria for granting a patent -About novelty -About the inventive step -The susceptibility of industrial application -About the patentable subject matter A classification of patentable inventions

**Specificities** The publish/patent dilemma for scientists Required skills in Universities

A conclusion about Creations and IPRs Annexes



# Here is what is told in the french national agency



## The state of the art

## Could there be anything created sui generis ?

We always start with something...

Although... as regards collective unconscious, assume a given quantity of something like entropy always increased, as is said with thermodynamics...

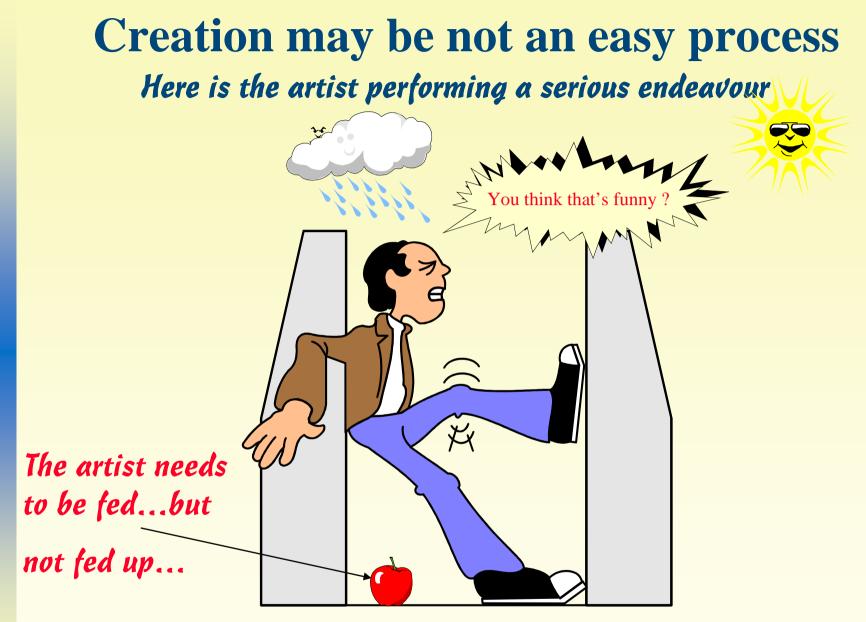
We could describe global knowledge evolving as:

[the state of the art + the artist's creativity] All what already exists

Then the man as an artist is called on the stage so as to improvise, and not to repeat.

Creation is an impromptu piece of art...





The artist is trying to enlarge the state of the art...



#### **Commissioned creations**

## **Creation as an added value**

A question arises now about being aware of the difference between what is already known and what is new ;

However, to proceed further, the creator has to get knowledge of the state of the art, take advantage of its known elements, prior to create whatever he wants...

...Most often creation may be part of our job...

That regards the so-called issue of Employee author creation... whatever the field.



## Is there a profit from creation ?

## Being aware of the whole lot of pre-existing items...

There appears **the person skilled in the art**, as **a notional person** able to distinguish what's really new under the sun.

To this end, many fields (available matters) have to be considered...

## Pecuniary rights on a global scale

The Intellectual Property System (IPS) seeks to protect and reward any innovative and creative activity, while affording specific rights that confer temporary monopoly rights over the relevant work.

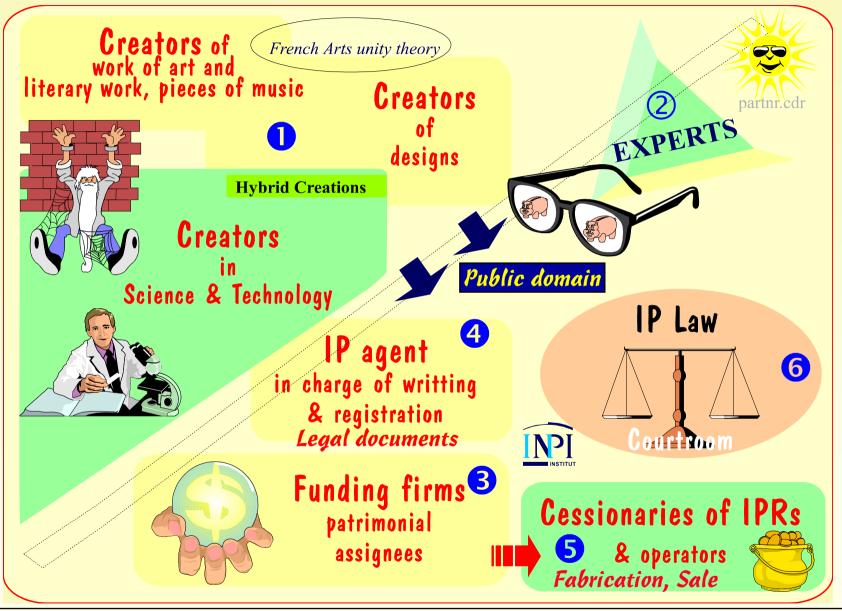
Then owners can choose to sell or licence such **patrimonial rights** to third parties.

Intellectual Property Rights (IPRs) are considered as a most widely accepted mechanism for encouraging innovation and economic growth.

However... Who is really on the stage ?



# Patrimonial rights: Who is who with who ?





# Whatever the object of creativity... Here you are... But for how many time ? Not a useful question; forget-it now... At a due place, At a due time... a creation appears...

But how far is it in time and space from a so-called innovation?



## **Innovation : is that much a famous concept ?**

An innovation is defined as an effective technological creation made available to the public domain.

If a flowing spring could be seen as the creator, then the general public would be near to the sea... Sometimes, Innovation lays a far cry from the creator...







The ones speaking the more of it, are most often those making the less of it...



## A wide variety of creations

A general policy is defined with the **intellectual property rights** (IPRs). The IP system has been subject to a **globalisation process** through the settlement terms of the General Agreement on Tariffs and Trade (GATT) and its Trade-**R**elated to Intellectual Property Standards (TRIPS : dec. 1993) provisions.

Nowadays it can be difficult to identify the tangible boundaries of any property rights or to file the **most appropriate form** for a given creation:

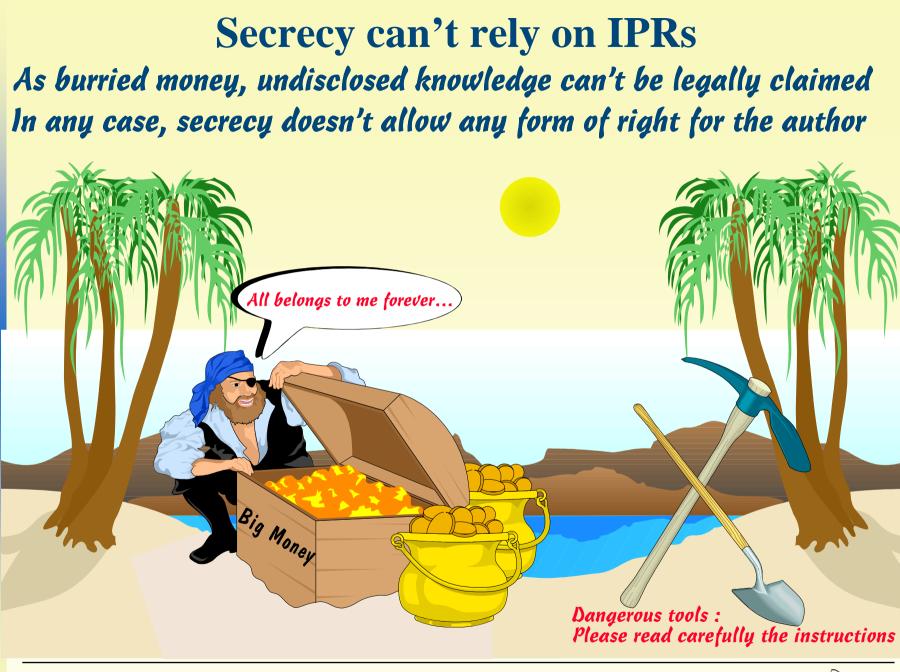
### IP right and protection involve Copyright, Patents, Registered Designs, and Trademarks.

## We have defined here a definite set of immaterial properties

Attempts to harmonise **patent law**, yet to be achieved, confirm the demand from industrial sectors for a **greater uniformity across national regimes**.

## What about a strategy built on secrecy more than law ?





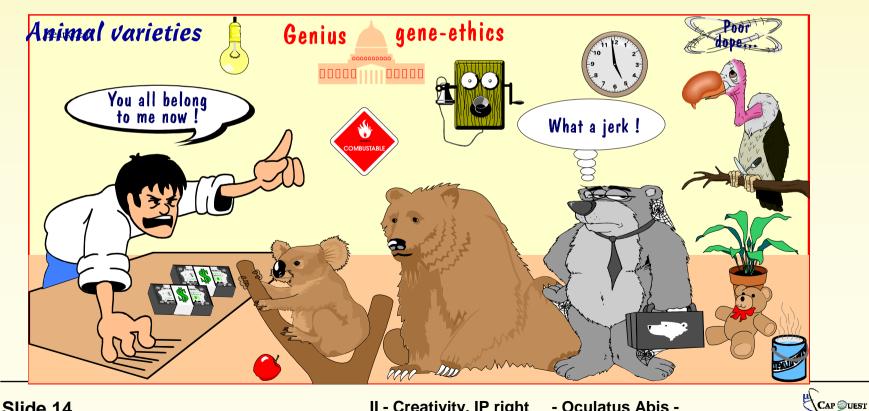


# **Diversity of Intellectual Property Rights IPRs**

The complexity for achieving a **global policy** can be analysed in a threefold way, with parameters: Geospatial, Technical, and Ethical.

**Geospatial**  $\lambda$  as countries must meet the TRIPS provisions,

**Technical**  $\lambda$  due to the variety and complexity of patentable inventions nowadays. Law tends to extend IPRs to an ever larger range of life forms and kinds of invention. **Ethical questions** about the monopoly rights that should legitimately be claimed.



# **Diversity of Intellectual Property Rights IPRs**

Among national and international agencies, over 30 years many turmoil and debate are observed in the IP system. Such a tension confirms a quite different economic and political interests of the participants.

The tripartite interaction between firms, universities, and national patent offices takes on an additional complexity.

Then such problems may deter scientists to patent their findings...

Creation gone with the wind?

However, how can interact IPRs with material assets ?

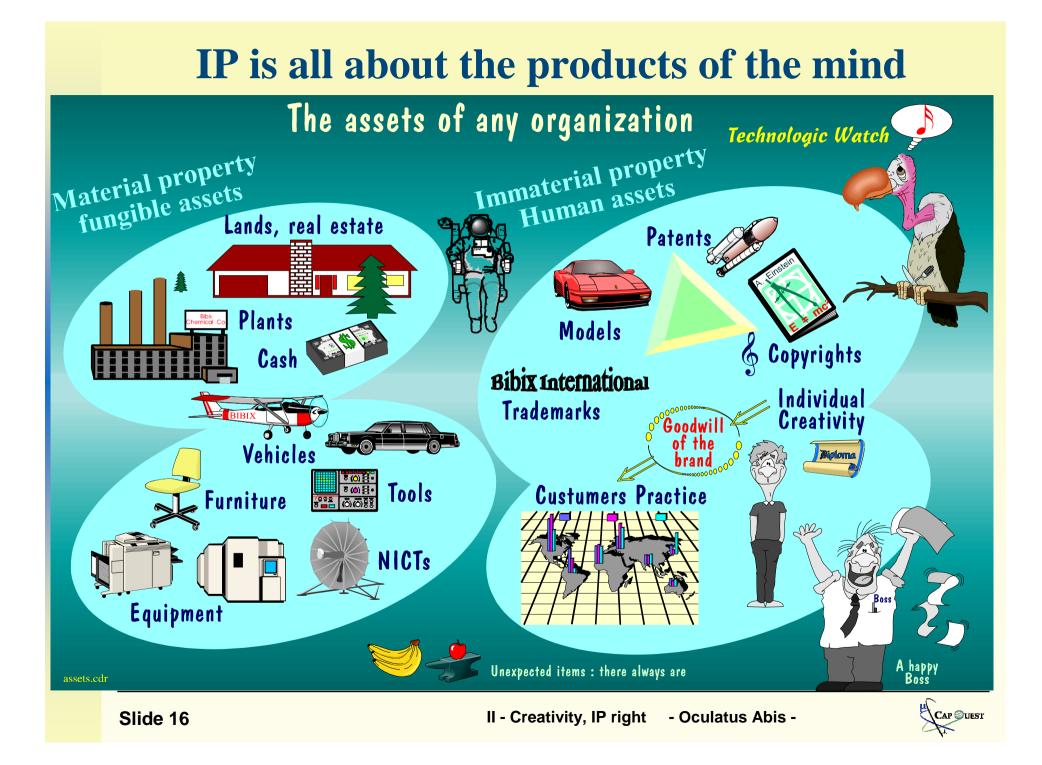
II - Creativity, IP right - Oculatus Abis -

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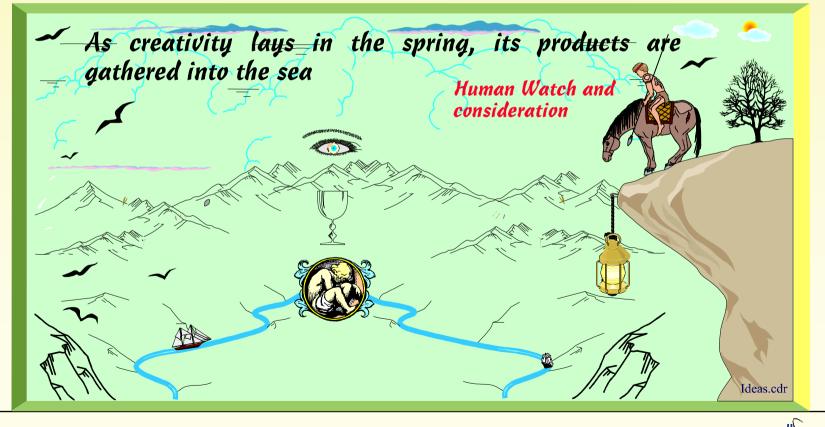
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## IP is all about the products of the mind, but creativity cannot be included among IPs

Lawmakers leave out creativity, as an unaccountable asset since his expected products are not already available. Creation must be matrialized...

It is a paramount advantage over the pundits to be able to see that: Creativity is the strongest human immaterial property <sup>x2</sup>

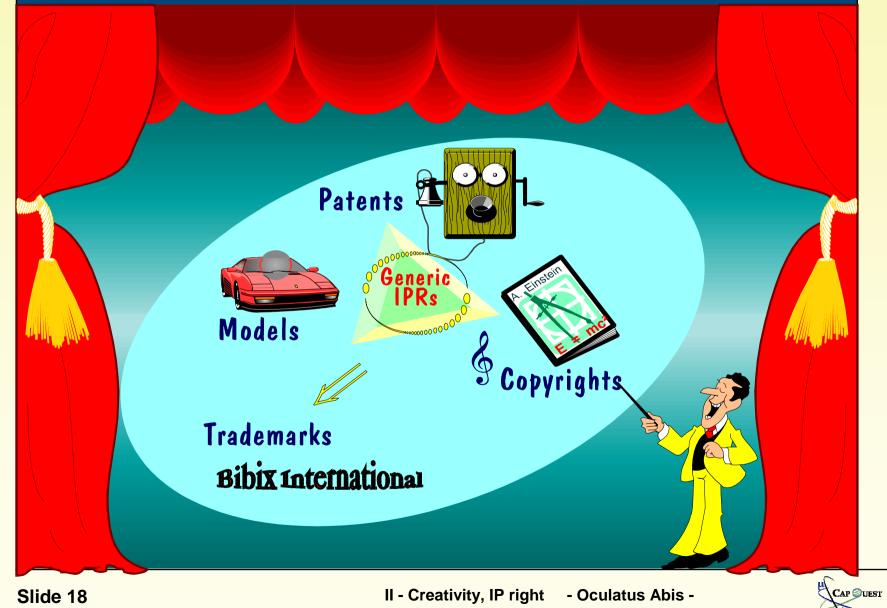




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## **Basics with Generic IPRs**

#### As a result of creativity let's consider the standards of IPRs



# A straightforward view on Copyright law

**Copyright law** covers **cultural artefacts** from the areas of education, entertainement, and all forms of arts ; As **designs** and **trademarks** can be seen as applied-**arts** creations, they are also covered by copyright.

In most countries, copyright is automatically acquired without formality (excepting in the USA),

#### A limited lenght and breadth of protection

The **duration of copyright** will last for **50 years** from the start of the year following the death of the author.

#### Within the EC, Copyright duration is 70 years

#### In the UK, the employee author has no moral right to be named

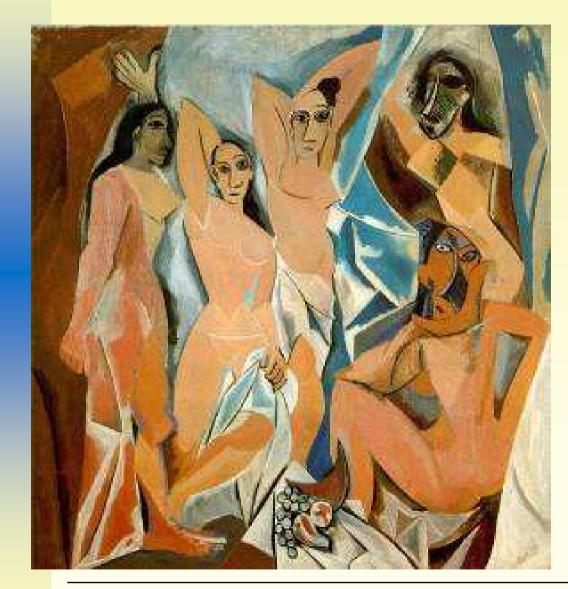
#### Additional comment:

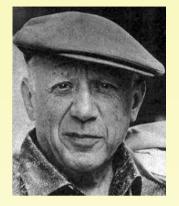
Copyright is often considered as a "weak monopoly" since it will only protect the actual expression of a work and not the underlying idea, concept or system. Such a restriction is clearly not present in patent law. Furthermore copyright is subject to a number of automatic exceptions dubbed as 'fair uses' whereby acts that would be otherwise infringing are permited for the public good : e.g. the reproduction of passages from litterary works for educational purposes.



#### Unguided (genuine) creation

## Art works are protected by copyright





Pablo Picasso, 1881-1973 *Ruiz Blasco* 

His heirs are assignees until 2043

Concept : Droit de suite

*Les demoiselles d'Avignon 1907* 



# Unquided (genuine) creation Pieces of music & copyright



RACHMANINOFF ALBUM





#### Commissioned creations Softwares are protected under Copyright...

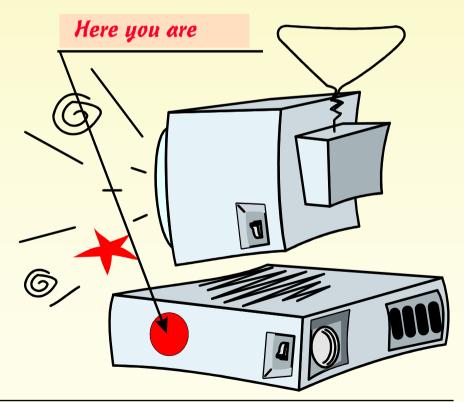
Classical copyright is imposed to protect **computer programs** by TRIPs agreements : they are **excluded from patents** (as such).

Computer experts consider fitting the square peg of softwares into the round hole of literary work as a major absurdity proving the failure of law makers to understand what are computer programs.

As a result, many firms (USA), have sought to strengten their proprietary rights through seeking and gaining patent rights over softwares.

A way to do so is to include the software within a PIC or FPGA device with sensors and actuators...

A Trick of the trade...



#### **Commissioned creations**

# A straightforward view on registered designs

**Registered designs as models** relate the features of shape, configuration or pattern and ornementation of a useful article – for example the distinctive shape of a piece of furniture, the pattern or motif on a set of crockery, or the visual appeal of a woven fabric or of a wallpaper.

#### A limited lenght of protection

3x5y in the UK (T.Blakett, Trademarks), 2x25y in France but 5x5y with the EC (dir.17, 3 oct. 1998, Galloux §845)

For the employed authors, the owner of any model is the employer... The moral right to be named depends on the contract...





A model relates exclusively to the aesthetics of the article



**Commercial creations** 

## A straightforward view on Trademarks

**Trademarks are words or symbols** used to distinguish products or services of a given manufacturer or supplier from those of another. As a trademark is registered, the supplier is granted in the relevant country a monopoly in his trademark in relation to specified goods and services (42 classes).

Unlike other forms of IP, **the duration of this monopoly can be unlimited**, provided the registration is renewed (every **10 years**) and otherwise maintened.

**Brand owners** often use all different IPRs ; as an example, the distinctive logo design, as well as being a registered trademark, can be also protected by copyright. Specific machines and processes are protected by patents.

A firm can "ring-fence" its valuable IP and protect it from the **depredations** of third companies. *Infrigements...Copy, plagiarism, forgery...* 

An example of such a company



The dynamic ribbon device...

**Commercial creations** 

## The commercial strength of the brand

As a design, a logo enforces the goodwill of the brand...



The Marlboro logo is estimated around 40 000 000 \$





A best known trademark of the UK. The lack of relation between the animal and books is the strength of the brand.

The pneumatic Monsieur Bibendum is a powerful suggestive trademark.



The grown thin Bibendum



#### Commercial creations

# Where trademarks will go too far ?

While **designing logos**, the authors are deprived of any patrimonial or moral right, since related copyright depends on their commercial contract.



The McDonald golden arches® device...

The Lego® logo

Such a trademark has moved with time, just as the products it represents.

# **Ring-fenced** policy

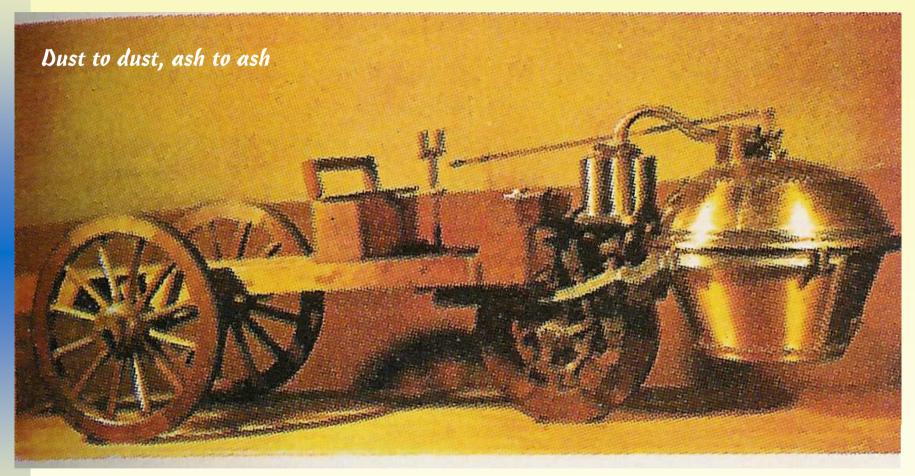
Famous "design marks" act as powerful mnemonics for their brands





#### **Technical creations**

## **Considering technical creations...**



Fardier devised by Joseph Cugnot 1725-1804 A somewhat cumbersome contraption... moved with a vapor engine, not a winner on battlefields...

Slide 27



## A straightforward view on Patent law

Patent law deals with technical innovation. As such, one can name an **invention** as **a technical solution given to a technical problem**. Sheer aesthetic items are excluded as so are games, methods and discoveries.

#### Patent Laws grant strong temporary monopoly rights

#### A limited lenght and breadth of protection

#### The duration of a patent is typically 20 years

Comment : Within the EC, the day of application stresses the begining of the life of the patent. A limited exception has been devised to allow an increased duration (<5 years) of protection to pharmaceutical products.

## As a monopoly, patent law is a right to forbid

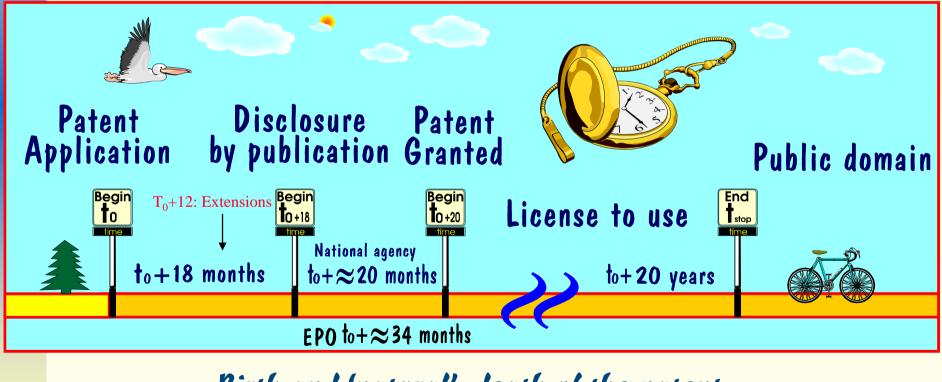
Any third party is prevented to fabricate, commercialise, export or import any item covered in the scope of the claims of the patent



## **Patented invention: Great expectations**

Althougt the patented technique is made **a proprietary good**, as a contract with the general public, the invention is made available to the public **18 months** after patent application.

After 20 years, or in case of the assignee stops paying the annual fees, the invention belongs to the public domain.



Birth and 'natural' death of the patent



## What about technical creativity ? Indeed, a technical solution given to a technical issue...



The cart or suppermarket trolley Raymond Joseph, 1934, 160 patents since...

#### The rolling suitcase Rou-let it be...



**FR2440167** 1980-05-30 Assignee: Delsey,

No name for the inventor...

Typical french breach of the moral right to be named: CPI: Art L-611-9 EPO: Art. 62

Would you have thought those two contraptions as the most profitable inventions of the  $XX^e$ ? (for the assignees...)



## **Patentable inventions**

Specific criteria have to be met for granting a patent

## Four primary criteria are required

**1]** The Novelty is mandatory: the invention must be **no part of the state of the art** as established through written or oral description, or through use. Novelty is destroyed if relevant information is publicly available before the priority date of the patent application.

**2]** The invention must present an **Inventive step**, commonly described as **non-obviousness to the person skilled in the art**.

3] The principle has the **Susceptibility to industrial application**. (in the singular)

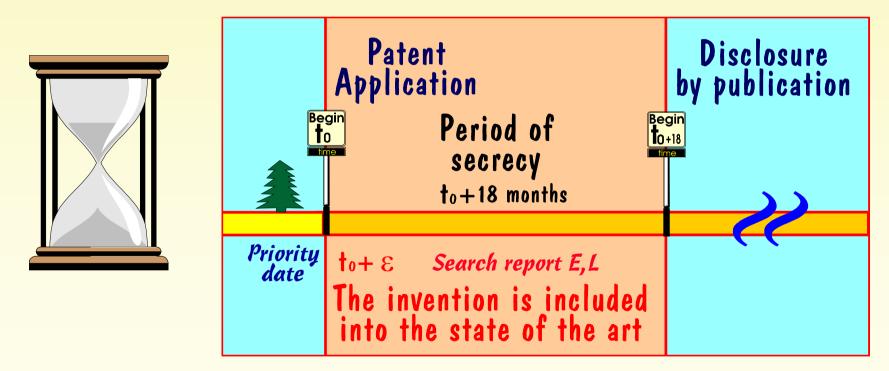
**4]** The **subject matter** must be patentable. Some subjects are **explicitely ruled out by law,** e.g. methods of treating the human or animal body, computer programs, inventions **contrary to the Peace** (*ordre public* or morality).

**Comment**: In the USA the criteria are similar although there is not direct equivalent of the *ordre public* or morality aspects of **the patentable subject matter criterion**.



## A straightforward view on Patent law The whole content approach

**1] About novelty**: as soon as filing the application, the invention is included into the **state of the art**. Any prospective other applicant can't know of the invention during the **period of secrecy** : a similar invention would'nt meet the criterion of novelty. The **whole content approach** describes such a fact.



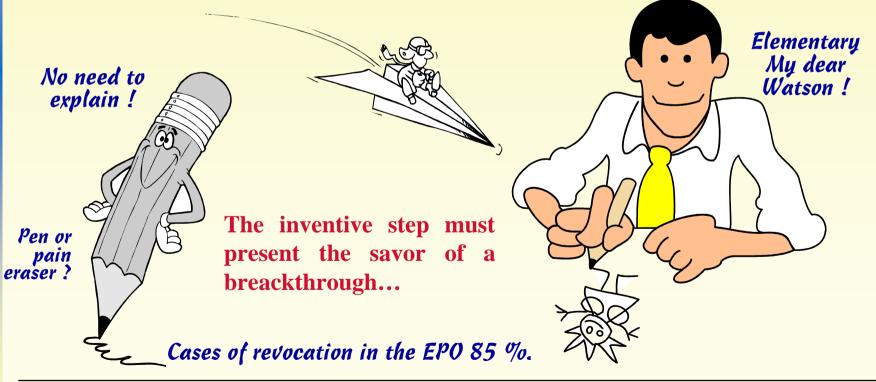
About novelty : Cases of revocation with the EPO 15 %.



## A straightforward view on Patent law

2] About the inventive step: the one skilled in the art is unable to invent being just a super-technician of all trades: with his own knowledge (the whole state of the art less its secret part), he must prove unable to solve the issue the same way the applicant does.

The **non-obviousness** for the person skilled in the art is a concept more and more abstract in today's science. The notional person becomes a research worker in a lab or even an entire research team.





## **Non-obviousness is not...that obvious**

#### Post-it ? Think about it!

The second innovation for 3M (after the Scotch, 1929). In 1968, Silver Spencer came up with the Post-it. His assignees waited 5 years to understand the interest of the product...

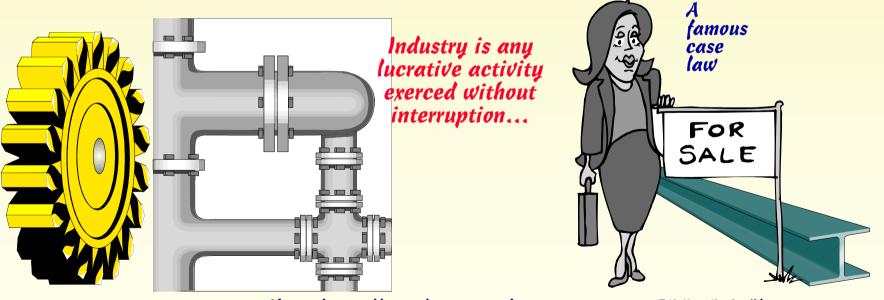


# A straightforward view on Patent law

**3] About the susceptibility of industrial fabrication**: The meaning is very permissive with a wide scope as is considered in the latin *industria*.

The approach aims at **excluding sheer methods**, abstraction of the mind and **discoveries**.

Lawers resort to this criterion if it happens that the description given in the patent is not clear enought to allow its realisation by a person skilled in the art.



Very few alleged cases of revocation in EPO: 0.3 %.



## A straightforward view on Patent law 1/3

**4] About the patentable subject matter**: Entities related to pure abstraction of mind are considered as discoveries belonging to the mankind patrimony. As such, scientific theories and intellectual methods are explicitly excluded.



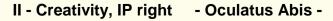
Ideas are freerange and cannot be patented

Materialisation is required

Perfumes are excluded From all IPRs as an international custom



When the strategy of secrecy remains the only one...

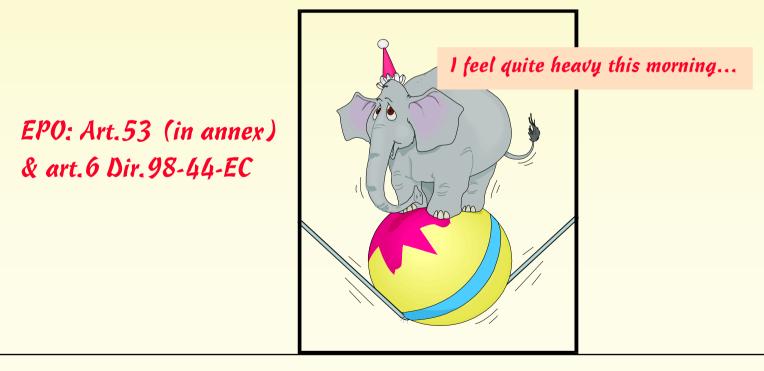




# A straightforward view on Patent law 2/3

**4] About the patentable subject matter**: Here come **Ethics** with technical fields expressed as issues of control. As such genetic research is often seen as sensitive technologies assuming companies or individual out of control.

Comment: That implies an undesirable outcome in a 'public' sense : e.g. reduction of biodiversity by extinction of non-cost-effective creatures, genetic manipulation yielding undesirable side-effects on the subjects, and eugenic manipulation of population by states.





## About the patentable subject matter criterion 2/3



Questionable trade in the hen house Cubic eggs: handy to pack, no worry to bother which side to open



# About the patentable subject matter criterion 3/3

**4] About the patentable subject matter**: As known with undesirable outcome, drugs and each piece of trimming related with, are considered **against morality**.

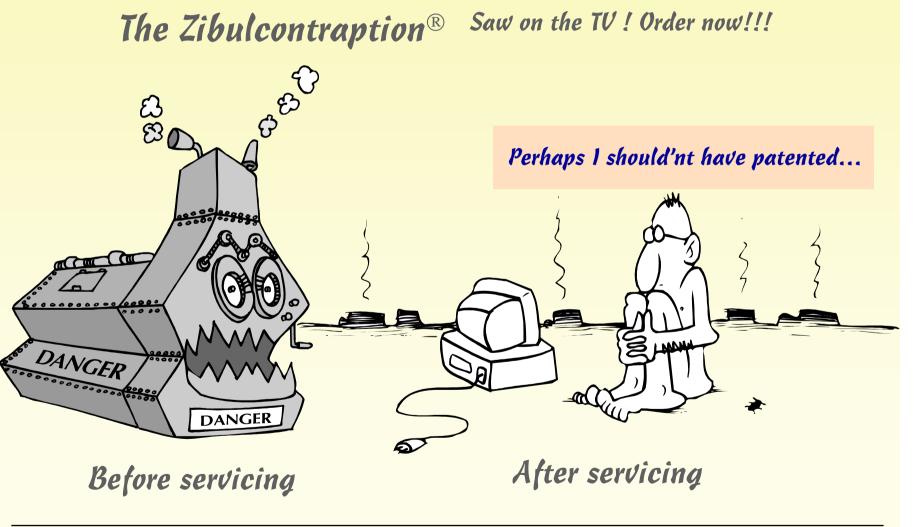


#### This wonderful opium pipe is an unpatentable device



# About the patentable subject matter criterion 3/3

A fairly simple drawing tells you more than a long gloss





#### A short classification of patentable inventions Technically, 4 categories are considered

1] New product: as such, it is a material item, with structural and dimensional characteristics, mechanical an chemical distinctive properties. Don't mix up the product and his results since results are immaterial and abstracted.

A natural product is unpatentable, as a humankind patrimony.

**2]** New process: characterized by his way (material or not), his application, and his function (technical effect).

**3] New application of known processes**: Then an unexpected result comes up, as such processes are operated together. The invention relies on the original path from the processes to the result. (*Differs from a simple new way to apply*)

e.g. The chemical DDT\* (known as a dye before being an insecticid)

**4] New combination of known processes**: the association yields an added value. The result is distinctive from what would be expected from each process. (*Differs from a simple juxtaposition*)

e.g. The Velcro band (to fix fabrics together)

\* DDT : Dichloro-Diphenol-Trichlorethan



# **Illustration about the Velcro® band**

#### Twin protection with both a patent and a perennial trademark



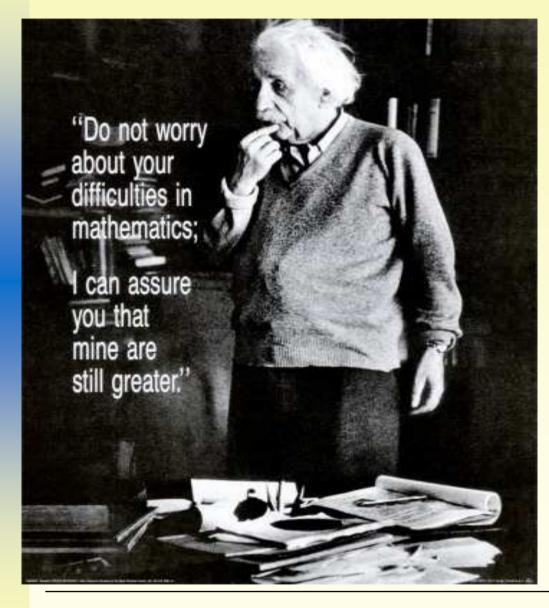
#### New combination of known processes

It allows the dressmaker (fashion designer) to fix fabrics together





# Academic standpoint about patrimonial rights...



According to Albert Einstein (1879-1955)

Science is a wonderful thing if one does not have to earn one's living at it.

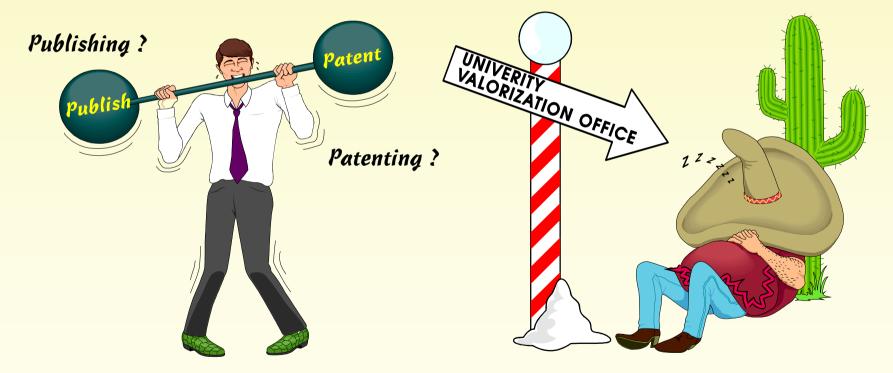
OK, we shall think about it... As it's quite the same problem with technology...



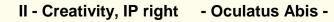
#### Academic structures A real dilemma for scientists

The **interest of authors** deserves to be seen according to **moral rights** especially the **right to be named**. By way of authorship, a **publication** naturally affords such rights by the **acknowledgment of paternity** to the authors.

Conversely, in universities, especially with small structures, **patenting** can be a **discouraging daredevil road** or the ordeal of a calvary...



A discouraging yet crucial task in the next coming future...



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#### Academic structures Most required skills in universities

#### A need for real experts

Academic scientists have to **acquire special skills** so as to negotiate the IPR system (Intellectual Property Rights) ang get patent protection for their work. As **the most useful ones**:

- the ability to distinguish legal from scientific novelty and utility
- the ability to **re-write scientific work in patent style**
- the access to and capacity **to search and use patent literature**
- an ability and preparedness to work around existing patents
- the **capacity to delay or alter publication** so as to protect potential patent rights
- an ability **to communicate with patent professionals** and industrial liaison staff
- an ability to get in touch with relevant expertise and **voice out the interest of the findings**.



#### Academic structures Ambivalent view: Institution & Actors

#### On the one hand:

Funding patent applications is an expensive and uncertain business.

It is unlikely that many universities will find the big winners they are looking for...

Academic institutions have to consider whether it is worth investing in such a risky endeavor.

#### On the other hand:

With sometimes unexpected results, Creativity comes from enthusiasm,

often that of the youth.

Isn't it yours?

Such a moot point may rise questions...



# In the little theater of ordinary life...

Are IPRs directed with or against creativity ?

*IP rights seem mostly prone to protect pecuniary interests of the assignees' creators...* 

Is creativity a banknote printing plate ?

On the other hand, proceeding on living on the earth with dignity demands a high level of creativity...

Is creativity a brilliant spark of eternity ?

As a conclusion, Creativity, whatever its operating field, is a most salient quality of human beings



#### Thank you for your kind attention



Oculatus Abis...





# Annex about a famous lawcase The nylstop SELF-LOCKING nut

Patent N°:FR2481766 (A1) Date de pub:1981-11-06 Inventeur(s):SIMMONDS OLIVER Demandeur(s):EFG LTD [BS] N° de demande:FR19810008731 19810430

The patent about this piece relying on **a ring made of polymer nylon**, was infringed by a firm pretending that such a title should be revocated due to a blatent lack of inventive step. The case went into the courtroom, and here were the arguments:

The claimant of the action for nullity contended the **obviousness** of the way to lock such a nut on a rod with a polymer.

As a defence, the owner of the patent highlighted that the polymer nylon was notoriously known for its **sliding properties** and in any case never thought before to block pieces. As a breakthrough, the personn skilled in the art could'nt imagine the proposed solution...

Then, the juge decided to maintain the patent.

As a result the counterfeiting firm losed both cases of actions (for nullity & infringement)



# Company<br/>structuresAnnex upon the variety of rewardsThe Employee Author creation

The relationship between employee and employer is the subject of IP law as well as employment regulations and varies from a country to another.

In the **UK**, employees are entitled to rewards for outstanding inventions and cannot have their rights to IP removed by employment contract. Moreover, if the employer does not exploit a patentable invention, within a given period of time, the employee(s) concerned can try to commercialise it themselves.

In the **USA** employees generally do not have rights over their inventions although some companies offer reward programmes.

In **Japan**, the situation is similar to that in the USA with smaller rewards for individuals.

In Germany, the rights of employees are stronger than all of these other countries.

Generally, as well as employees' invention laws there is an agency to mediate in the event of dispute (litigation).

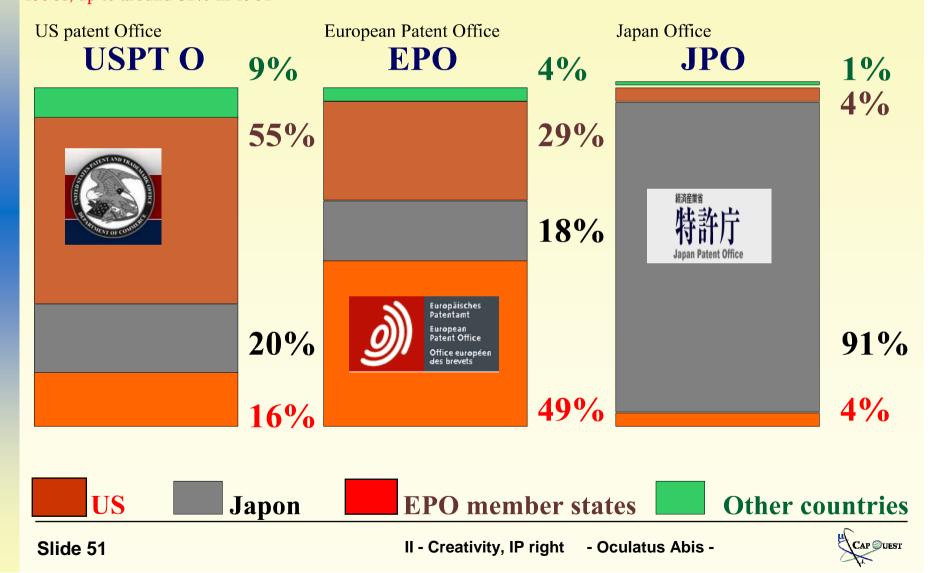
Source : Innovation & the Intellectual Property System, Andrew Webster, Kathryn Packer, Kluwer law International



# **Annex on International offices for patent filing**

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20% held by individuals in the 1990s, up to around 81% in 1901



# Annex on the patentable subject matter criterion

#### Regarding the EPO : Munich 3 oct. 1973

#### Article 53: Exceptions to patentability

European patents shall not be granted in respect of:

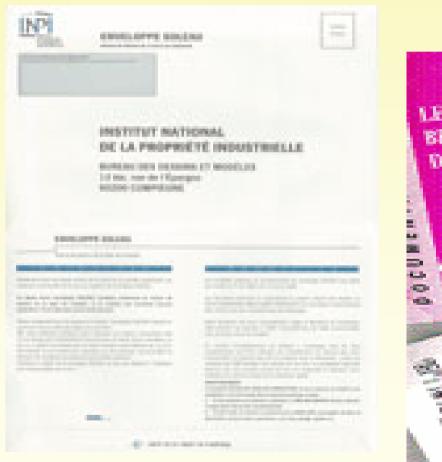
(a) inventions the publication or exploitation of which would be contrary to "ordre public" or morality, provided that the exploitation shall not be deemed to be so contrary merely because it is prohibited by law or regulation in some or all of the Contracting States;

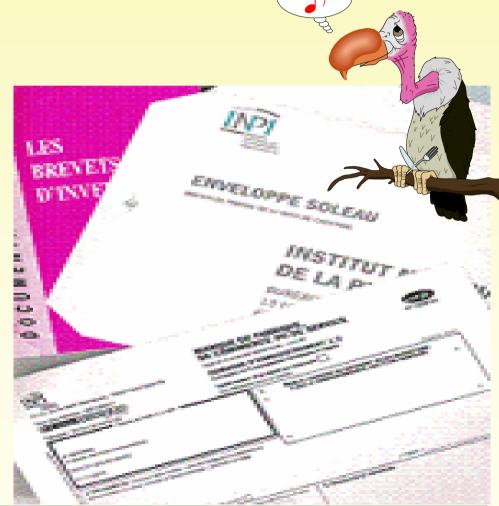
(b) plant or animal varieties or essentially biological processes for the production of plants or animals; this provision does not apply to microbiological processes or the products thereof.



### **Annex about Proof & datation**

# Proof & datation formalised into a legal document is the most detering tool against predators...







# Annex about the search report

#### International Search Report to analyse the patentability of the invention According to International Patent Classification (ICP) Documents considered to be relevant Special categories of cited documents

A document defining the general state of the art which is not considered to be of particular relevance

**E** earlier document but published on or after the international filing date

L document which may throw doubts on priority claims or which cited to establish the publication date of another citation or other special reason (as specified)

O document referring to an oral disclosure, use, exhibition or other means

 ${\bf P}$  document published prior to the international filing date but later than the priority date claimed

 $\mathbf{T}$  later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

X document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

 $\mathbf{Y}$  document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more of such documents, such combination being obvious for the person skilled in the art.



#### **Annex about PCT application**

PATENT COOPERATION TREATY Indication of EPO PCT allowable application claim(s) (in INTERNATIONAL SEARCH REPORT an Office Priority action or a (PCT Article 18 and Rules 43 and 44) claim positive EESR\*) or Applicant's or agent's file reference see Form PCT/ISA/220 as well as, where applicable, item 5 below Grant FOR FURTHER CMC-123-PCT ACTION Request International application No. International filing date (day/month/year) (Earliest) Priority Date (day/month/year) US PCT/US07/00150 05 April 2006 (05.04.2006) 05 April 2007 (05.04.2007) for PPH application Applicant ACME FASTENER CORPORATION This international search report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau. This international search report consists of a total of \_\_\_\_\_ sheets. X It is also accompanied by a copy of each prior art document cited in this report. 1. Basis of the report Paris convention 12 a. With regard to the language, the international search was carried out on the basis of: application X the international application in the language in which it was filed. a translation of the international application into which is the language of a translation furnished for the purposes of international search (Rules 12.3(a) and 23.1(b)). b. This international search report has been established taking into account the rectification of an obvious mistake authorized by or notified to this Authority under Rule 91 (Rule 43.6bis(a)). Local 21 date examination c. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, see Box No. I. PCT NP priorty 30 application Certain claims were found unsearchable (see Box No. II) 2 X Unity of invention is lacking (see Box No. III). from 3 39 Local 4. With regard to the title, Months 1 X the text is approved as submitted by the applicant. examination the text has been established by this Authority to read as follows: Pay Grant Modified 42 fee examination 5. With regard to the abstract, Pay Grant Modified X the text is approved as submitted by the applicant. 60 fee examination the text has been established, according to Rule 38.2, by this Authority as it appears in Box No. IV. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority. 6. With regard to the drawings, a. the figure of the **drawings** to be published with the abstract is Figure No. 3 Grant X as suggested by the applicant. as selected by this Authority, because the applicant failed to suggest a figure. as selected by this Authority, because this figure better characterizes the invention. b. none of the figures is to be published with the abstract. Form PCT/ISA/210 (first sheet) (April 2007) (Revised)



## **Annex with Albert Einstein...**

"Equations are more important to me, because politics is for the present, but an equation is something for eternity."

"Great spirits have always found violent opposition from mediocrities. The latter cannot understand it when a man does not thoughtlessly submit to hereditary prejudices but honestly and courageously uses his intelligence."

"...One of the strongest motives that lead men to art and science is escape from everyday life with its painful crudity and hopeless dreariness, from the fetters of one's own ever-shifting desires. A finely tempered nature longs to escape from the personal life into the world of objective perception and thought."

"The important thing is not to stop questioning. Curiosity has its own reason for existing.

"Technological progress is like an axe in the hands of a pathological criminal."

"The secret to creativity is knowing how to hide your sources."

"Science is a wonderful thing if one does not have to earn one's living at it."

"The only real valuable thing is intuition."

"Imagination is more important than knowledge."



# A short bibliography

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**D]** Andrew Webster & Kathryn Packer, "Innovation & the Intellectual property System", Ed. Klewer Law International Ltd, © 1996.

E] Code de la propriété intellectuelle, Ed. Dalloz, 2008.

**F]** Harrap's Dictionnary of Law & Society, Harrap's reference, Harrap Books Ltd, © 1989.

G] Yann de Kermadec, "Innover grâce au brevet", Ed. INSEP, 1999.