

■ USPTO/UPOV TRAIN THE TRAINER COURSE

The use of plant variety protection and other intellectual
property rights in the development of agriculture
Role of patents and trade secrets

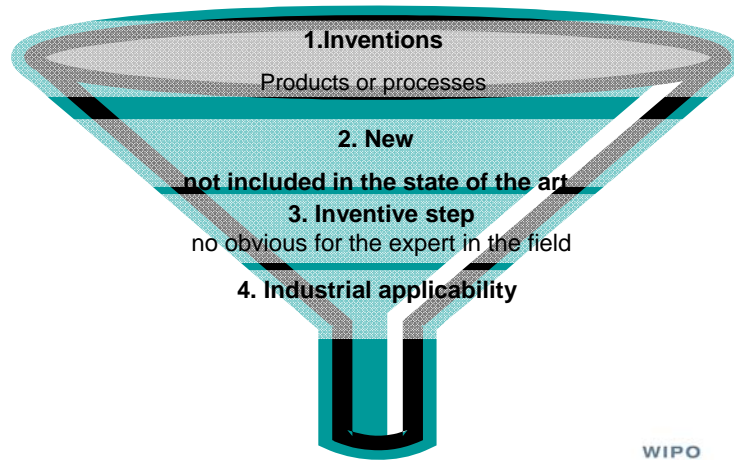
Marco M. ALEMAN
Acting Director, Patent Law Division, WIPO

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Main features of patent rights

- Right to *stop others* from making or selling the invention without a patent owner's consent
 - NOT a right to make or sell the invention
- Only available for *new* inventions in a field of *technology*
 - Need to fulfill conditions of patentability
- Geographically limited under *national* patent laws
 - but there are *regional* and *international* treaties
- Limited duration, *20 years* from filing date
- Annual renewal or maintenance *fees* (increasing with time)
- Some *limitations* to the rights
- *Property rights in inventions*
 - may be sold or licensed

The Patent System



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The international legal framework

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Paris Convention, 175 MS (few substantive obligations);
specialized agreements (Art. 19 Paris):

- PCT (1970, 148 CP); IPC (1971, 62 CP); Budapest Treaty (1977, 78 CP); PLT (2000, 36 CP)

WTO

TRIPS Agreement

- Minimum standards; enforcement of IPRs; WTO dispute settlement procedures

Regional agreements (e.g. EPO, EAPO, ARIPO, OAPI, GCC)

Preferential Trade Agreements (FTAs, EPAs)

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■ Patentable subject mater

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TRIPS Agreement Implementation: Art. 27

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Explicit obligation to give protection

- Inventions - whether products or processes - in all fields of technology
- Micro-organisms



Explicit permission to exclude from patent protection

- Plants and animals
- Diagnostic, therapeutic and surgical methods



Implicit permission not to give protection

- Discoveries
- Substances existing in nature
- Incremental innovation

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■ Protection or exclusion from patentability of plants/Plants Varieties

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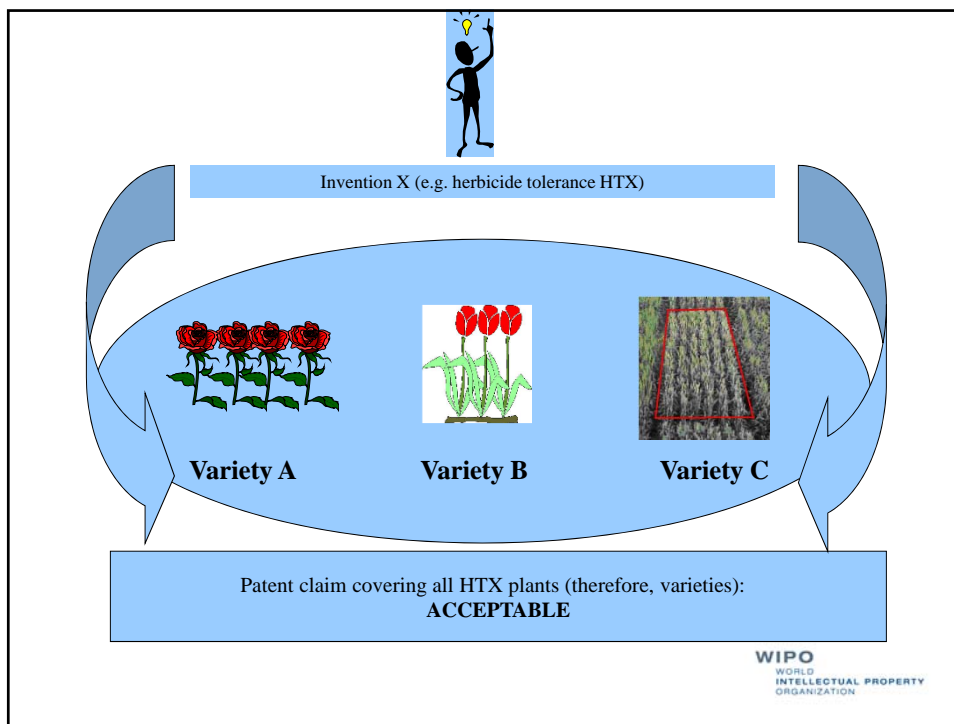
DIRECTIVE 98/44/EC

Article 4

1. The following shall not be patentable:

- (a) **plant** and animal **varieties**;
- (b) **essentially biological** processes for the production of plants or animals.

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- Patentability of Substances existing in nature

Discovery

- ARMENIA: *Section 10 (1) (a) and (3) of the Industrial Property Law of 10/06/2008*

Article 10 .The Exception to Legal Protection (1) Within the meaning of Article 9 of this Law the following shall not be subject to legal protection: (a) scientific discoveries;

- BELARUS: *Article 2 (2) of the Law No. 160-Z on Patents for Inventions, Utility Models and Industrial Designs of 16/12/2002 as last amended on 29/10/2004*

2. (2) The following shall not be recognized as inventions:

- discoveries, scientific theories and mathematical methods;

Substances existing in nature

- INDIA: *Section 3 (c) and (j) of the Patent Act No. 39 of 1970 as last amended by Act No. 15 of 2005*

3. What are not inventions. The following are not inventions within the meaning of this Act:

c) the mere discovery of a scientific principle or the formulation of an abstract theory or **discovery of any living thing or non-living substance occurring in nature;**

- PAKISTAN: *Section 7 (2) (a) and (e) and (4) (b) of the Patent Ordinance No. LXI of 2000 as last amended by Patent Ordinance No. 2(1)/2002*

7.-(2) Subject to sub-section (3), the following shall not be regarded as invention within the meaning of sub-section (1), namely:- (e) substances that exist in nature or if isolated therefrom

Specific provisions allowing

- SLOVAKIA: *Articles 5 (2) and (3) (a) and 6 (1) (b) and (d) of the Patent Act No. 435/2001 as last amended by Act No. 202/2009 Coll.*

Article 5 Patentable subjects

(2) Patents pursuant to paragraph 1 shall be also granted for biotechnological inventions concerning to a product consisting of or containing biological material, or to a process by means of which biological material is produced, processed or utilised, including cases when invention relates to

- a) biological material which is **isolated from its natural environment** or is **produced by means of a technical process**, already occurred in a nature,
- d) an element **isolated from a human body** or **produced by other means of a technical process**, including a sequence or partial sequence of a gene also in the case when the structure of such element is identical with a structure of a naturally existing element.

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Specific provisions excluding

- BRAZIL: *Sections 10 (I) and (IX) and 18 II of the Industrial Property Law No. 9.279 of 14/05/1996 (as last amended by Law No. 10.196, of 14/02/2001) and Article 31 of the Provisional measure No. 2.186-16*

10. The following are not considered to be inventions or utility models:

IX. all or part of natural living beings and biological materials found in nature, **even if isolated therefrom**, including the genome or germoplasm of any natural living being, and the natural biological processes.

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■ Scope of the exclusive rights

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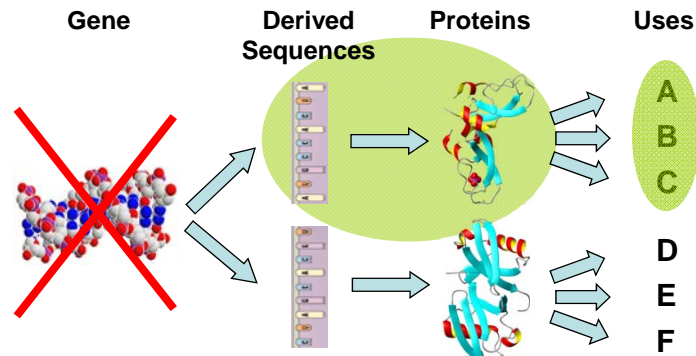
Scope of protection

Biological materials self replicate

- Should the patent protection extend to future generations, if so, to which extent?
- Is special exhaustion regime required?
 - In traditional fields of technology - the patent owner's rights are "exhausted" in the sold item
 - In the field of biotechnology - is self-replication of the patented item considered "making" or "using"?

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The approach of the Swiss Patent Law



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Protection of undisclosed information

Ex. manufacturing processes, sales methods, distribution methods,
consumer profiles, advertising strategies, lists of suppliers and clients

Criteria

- The information must be secret
- It must have commercial value because it is a secret
- It must have been subject to reasonable steps by the rightful holder of the information to keep it secret

Prevent unauthorized use of protected undisclosed information

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Protection of undisclosed information - comparison with patent protection -

Potential advantage

- No time limit
- No registration required
- Immediate effect
- Commercial information can be protected

Potential disadvantage

- Possibility of reverse engineering
- May be patented by an independent third party
- Once the information is made public, secrecy is lost
- Difficult to enforce

Thank you !

marco.aleman@wipo.int