

Patents. Notion of patentable invention and excluded subject matters. Features of the exclusive rights conferred by a patent.

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Course on EU Innovation Law and Policy

Rationale of protection

- Exclusive rights and recoupment of investments in R&D;
- Exclusive rights as incentive to innovation through a temporary monopoly;
 - Is it really a monopoly?
- Exclusive rights and the *public domain*.
- The mandatory disclosure and publication of the patented invention.

Features of patent protection

- Is it patentability mandatory?
 - Patent protection vis-à-vis trade secret;
- Patents as instruments within a capitalistic economy:
 - costs associated to grant and enforcement;
 - failure of the system in other economic context: the example of orphan drugs and developing countries.

Patentable Subject Matter

What is meant by invention?

- Distinction between patentable invention and innovation.
- Looking for a definition: invention as solution to a specific technical problem.

What kind of inventions can we conceive?

- Process inventions (industrial process, method)
- Product inventions (industrial machinery, tool, chemical compound, etc.).
- New use inventions.

Patentable Subject Matter and Requirements of Patentability

Article 52(1) EPC (☞ art. 45, 1° , c.p.i.):

European patents shall be granted for any inventions, **in all fields of technology**, provided that they are **new**, involve an **inventive step** and are susceptible of **industrial application**.

Non-inventions

Article 52(2) EPC (☞ art. 45, 2° , c.p.i.):

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.

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They are not patentable only if *claimed as such*.

Exceptions to patentability

Art. 53, b) and c) EPC

(☞ art. 45, 4° , c.p.i.)

(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 to patentability



Rule 28 EPC (implementing art. 6(1) EU Biotech Directive):

(1) Under Article 53(a), European patents shall not be granted in respect of **biotechnological inventions** which, in particular, concern the following:

(a) processes for **cloning human beings**;

(b) processes for modifying the germ line **genetic identity of human beings**;

(c) **uses of human embryos** for industrial or commercial purposes;

(d) processes for modifying the **genetic identity of animals** which are likely to cause them **suffering without any substantial medical benefit** to man or animal, and also animals resulting from such processes.