



Substantial Patentability Requirements

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Substantial Patentability Requirements

- Novelty (art. 54 EPC)
- Inventive Step (art. 56 EPC)
- Susceptibility of Industrial Application (art. 57 EPC)
- In national laws: inventions the commercial **exploitation** of which would be contrary to "**ordre public**" or **morality** (exceptions to patentability/requirement of lawfulness of the invention in national laws).

Materiality? Utility?

Novelty (art. 54(1) EPC)

- An invention shall be considered to be new if it does not form part of **the state of the art**. (art. 54(1) EPC)

Where **state of the art** is defined as

“everything made available to the public by means of a written or oral description, by use, or in any other way, before the date of filing of the European patent application.” (art. 54(2) EPC)

Anticipation

- Patent applications:
 - Even from other countries;
 - Even if still secret (first-to-file principle).
- Various types of publications;
- Prior uses by third parties;

Non-prejudicial disclosures



Art. 55 EPC

- (1) For the application of Article 54, a disclosure of the invention shall not be taken into consideration if it occurred **within six months preceding the filing of the European patent application** and **if** it was due to, or in consequence of:
- (a) an **evident abuse** in relation to the applicant or his legal predecessor, or
 - (b) the fact that **the applicant** or his legal predecessor **has displayed the invention at an official, or officially recognised, international exhibition** falling within the terms of the Convention on international exhibitions signed at Paris on 22 November 1928 and last revised on 30 November 1972.

Except for those two cases, disclosure by the applicant in the six months preceding patent filing destroys novelty of the invention.

Inventive Step

“An invention shall be considered as involving an inventive step if, **having regard to the state of the art, it is not obvious** to a **person skilled in the art**. If the state of the art also includes documents within the meaning of Article 54, paragraph 3, these documents shall not be considered in deciding whether there has been an inventive step.” (art. 56 EPC)

Determining inventiveness

- Determining the invention → must be inventive and its key technical features;
- Determining the priority date and the prior art at that date;
- Skilled addressee/a Person of Ordinary Skill in the Art (POSITA)

- Rationale of the requirement and differences with respect to the rationale behind the novelty judgment;
- Different delineation of the state of the art.
- Possibility of combining pieces of prior art (*obvious to combine*).

Problem solution approach

In order to render the assessment of inventive step more objective, the EPO applies the so-called "problem-solution approach", which should be applied consistently.

In the problem-solution approach, there are **three main stages**:

- (i) determining the "closest prior art",
- (ii) establishing the "objective technical problem" to be solved, and
- (iii) considering whether or not the claimed invention, starting from the closest prior art and the objective technical problem, would have been obvious to the skilled person.

Originality as a strategic key

- Flash of genius

Implications?

Pros and Cons



Susceptibility of Industrial Application

«An invention shall be considered as susceptible of industrial application if it can be **made** or **used in any kind of industry**, including agriculture.» (art.57 EPC).

Susceptibility of Industrial Application

According to the case law:

*“It would be at odds with the purpose of the patent system to grant exclusive rights to prevent the commercial activities of others on the basis of a **purely theoretical or speculative patent application**. This would amount to granting **a monopoly over an unexplored technical field**. ”*

(T 0898/05 Hematopoietic receptor/ZYMOGENETICS)[2007].

Susceptibility of Industrial Application

According to case law:

«A vague and speculative indication of possible objectives that might or might not be achievable by carrying out further research with the tool as described is not sufficient for fulfilment of the requirement of industrial applicability.»

T 0870/04 (BDP1 Phosphatase/MAX-PLANCK)[2005]

Concrete benefit and materiality of invention?

Susceptibility of Industrial Application

- The role of the requirement in the past;
- The renewed importance of the industriality requirement today..
 - «The industrial application of a sequence or a partial sequence of a gene must be disclosed in the patent application. » (Art. 5(3) DIRECTIVE 98/44/EC)

Exceptions to patentability (lawfulness of the invention)



Article 53 EPC (☞ art. 50 c.p.i.):

European patents shall not be granted in respect of:

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