

# THE PATENT SYSTEM: A DRIVING FORCE TO PROMOTE INNOVATION

**M.L. González Arias**

*European Patent Office, Dg1, NL-2280 HV Rijswijk (ZH), The Netherlands*

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## Summary

A patent is a legal title which allows its holder the exclusive exploitation of his invention within a particular territory, for a limited time. Patents are published. The result of the inventions being made public stimulates research and motivates technical progress. Patent granting is subjected to the patent laws of the countries. Patent applications relating to water technology have considerably increased in the last years.

### 1. What is a patent?

A patent is a legal title granting its holder the exclusive right to make use of an invention for a limited area and time by stopping others from, amongst other things, making, using or selling it without authorization.

Thus, a patent owner has only the exclusive right to exploit his invention within a particular territory, and for a limited time, usually for a maximum of 20 years.

The basic principle behind the patent system is that inventors or patent owners allow their patent applications and patents to be published in return for exclusive rights of exploitation. A patent is therefore also a technical publication.

Thus, a patent is a legal document which is issued by a Governmental Office or another competent and qualified authority granting the inventor or the applicant of the patent a monopoly for the use of the invention. It can be regarded as being a contract between a national authority and an inventor/applicant.

All patent applications and granted patents are published. Patents are therefore a unique and original source of technical information; 80% of the information they contain is never published elsewhere.

## **2. The Advantages of Patents**

Patents protect inventions. An invention protected by a patent -- be it a product, device, chemical substance or process -- may not be produced, offered for sale, exploited or used in any other way for industrial or commercial purposes, by third parties. Patents also prohibit the import of protected products from countries where the invention is not patented.

The patent system plays a major part in the transfer of technology, which acts as a stimulus to technical innovation.

Basically, in return for the monopoly of rights, the owner of a patent has to put the enabling technology of his invention into the public domain. The result is that the inventions being made public stimulate research in the field of the invention by others. This in turn may result in further inventions improving on the original one, and hence technical progress is made.

The exclusive right to exploit an invention commercially makes it easier for companies to finance research and development, which in turn form the basis for further technical innovation, which for its part is the bottom line for economic growth and competitiveness. As exclusive rights:

- Patents strengthen a company's market position;
- Patent inventions encourage research into alternative solutions;
- The licensing of patents promotes the dissemination of new technologies;
- Patents indicate the level of innovative activity in a particular market. They generate new investment and are a motivating force behind technical progress.

The economic importance of patents is wide-ranging and derives from the fact that patentees can exploit their inventions for up to 20 years to the exclusion of all competition. During this time, they can recoup their development costs and obtain a fair return on their investments.

## **3. What is Patentable?**

Patent laws may differ in the different countries, and therefore the criteria for granting a patent may be different from country to country. However, in many of them three basic criteria of patentability are considered: Novelty, Inventive Step and Industrial applicability.

In the European Patent System, the European Patent Convention (EPC) in its Article 52 defines the patentable inventions:

"European Patents shall be granted for any inventions which are susceptible of industrial application, which are new and which involve an inventive step".

### *Novelty*

An invention is "considered to be new if it does not form part of the state of the art". The "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 or the "priority date".

### *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".

Novelty and inventive step are different criteria. Novelty exists if there is any difference between the invention and the prior art. The question of inventive step only arises if there is novelty.

### *Industrial application*

An invention is susceptible of industrial application if it can be made or used in any kind of industry, including agriculture.

By definition, the patent must be the teaching of a new way to perform an industrial activity; in the European System, a patent is granted only for the physical embodiment of an idea -- e. g. the description of a chemical compound dispenser -- or for a process that produces something saleable or tangible. It can not be the disclosure of a discovery, a scientific principle, an idea, an abstract theorem, a medical treatment of the human body etc. Article 52 and Article 53 of the EPC further defines the exceptions to patentability.

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### **Bibliographical Sketch**

Maria L. Gonzalez Arias is an examiner at the European Patent Office in The Hague. The opinions expressed in this article are those of the author and they should not be considered as necessarily the policy of the European Patent Office (EPO), or imply any commitment by the EPO to any particular course of action.