

GLOSSARY OF PATENT TERMINOLOGY

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Applicant

The person or company that applies for the patent and intends to "work" the invention (*i.e.* to manufacture or licence the technology). In most countries the inventor(s) does not necessarily have to be the applicant. In the United States, applicants must be the inventor(s), except in a few exceptional circumstances (*e.g.* legal representatives of a deceased inventor may make a patent application).

Applicant country

The applicant is the patentee at the date of the application. When counting patents by geographical area, they can be attributed to the country of residence of the applicant. Patent counts by applicant concentrate on patent "ownership" (*i.e.* the number of patents owned by residents of each country). For example, a patent application filed by IBM Belgium is allocated to Belgium, even though the ultimate ownership of IBM Belgium might be in another country.

Application for a patent

To obtain a patent, an application must be filed with the authorised body (Patent Office) with all the necessary documents and fees. The patent office will conduct an examination to decide whether to grant or reject the application.

Application date

The patent application date is the date on which the patent office received the patent application.

Citations

Citations may be made by the examiner or the applicant/inventor. They comprise a list of references that are believed to be relevant prior art and which may have contributed to the "narrowing" of the original application. The examiner can also cite references from technical journals, textbooks, handbooks and sources. The citations practices of the EPO differ substantially from the USPTO. Applicants to USPTO are legally required to include a full list of prior art known or believed to be relevant ("duty of candor"). At EPO, no such requirement exists for applicants.

Claim(s)

These define the invention that the applicant wishes to protect. A main claim will define the invention in its broadest form, by including its essential technical features. Further "dependant" claims can then relate to additional features of the invention.

Continuation

This is mainly relevant to the USPTO. Continuations are second or subsequent applications for the same invention claimed in a prior application and filed before the first application becomes abandoned or granted. Continuations must claim an invention which is part of or directly derived from the original application to gain the benefit of the parent filing date.

Designated countries

Countries in which patent applicants wish to protect their invention. This concept is specific to European patent applications and international patent applications filed under the Patent Cooperation Treaty (PCT). Since January 2004, all international applications filed designate by default all PCT contracting countries bound by the PCT treaty as of the filing date. For EPO patent applications, the applicant has to designate specific countries. However, if the applicant pays designation fees for seven countries, then it is considered that the designation fees for all the EPC member states have been paid and all the EPC countries will be automatically selected. However, designation of a country does not automatically provide patent rights in that country. A patent has to be validated in the designation country for it to be effective.

Disclosure

The first public disclosure of details of an invention. This may be deliberately revealed outside the patent system to make the invention unpatentable, or what is described in a patent application. In return for a patent (monopoly rights for a limited time period), the applicant must make a full disclosure of the invention for which protection is sought.

Equivalent

A patent that relates to the same invention and shares the same priority application as a patent from a different issuing authority.

European Patent Convention (EPC)

The Convention on the Grant of European Patents (European Patent Convention, EPC) was signed in Munich 1973 and entered into force in 1977. As a result of the EPC, the European Patent Office (EPO) was created to grant European patents. Currently, there are 31 EPC member countries (as at December 2005). In addition, extension agreements exist with five countries, which allow the possibility of extending European patents to those countries upon request. EPC member countries are Austria, Belgium, Bulgaria, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Liechtenstein, Lithuania, Luxembourg, Monaco, the Netherlands, Poland, Portugal, Romania, the Slovak Republic, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom. EPC extension countries are Albania, Bosnia and Herzegovina, Croatia, the Former Yugoslav Republic of Macedonia, and Serbia and Montenegro.

European Patent Office (EPO)

The European Patent Office (a regional patents office) was created by the EPC to grant European patents, based on a centralised examination procedure. By filing a single European patent application in one of the three official languages (English, French and German), it is possible to obtain patent rights in all the EPC member and extension countries by designating the countries in the EPO application. The EPO is not an institution of the European Union.

European patent

A European patent can be obtained for all the EPC countries by filing a single application at the EPO in one of the three official languages (English, French or German). European patents granted by the EPO have the same legal rights and are subject to the same conditions as national patents (granted by the national patent office). It is important to note that a granted European patent is a "bundle" of national patents, which must be validated at the national patent office for it to be effective in member countries. The validation process could include submission of a translation of the specification, payment of fees and other formalities at the national patent office. This is because once a European patent is granted, competence is transferred to the national patent offices.

Expiry date

The date when a patent has run its full term in a country and is no longer valid.

First to file

A patent system in which the first inventor to file a patent application for a specific invention is entitled to the patent. This law is increasingly becoming the standard for countries adhering to the so-called Trade-Related aspects of Intellectual Property (TRIPs) guidelines. At the EPO and JPO, patents are awarded on the first to file basis, whereas at the USPTO, patents are awarded on the first to invent basis.

First to invent

In the first to invent system a patent is awarded to the first person who made the invention, even if another person filed for a patent before the person who invented first.

OECD, STI/EAS Division 2006

Grant

A temporary right given by the authorised body for a limited time period (normally 20 years) to prevent unauthorised use of the technology outlined in the patent. A patent application does not automatically give the applicant a temporary right against infringement. A patent has to be granted for it to be effective and enforceable against infringement.

Grant date

The date when the patent office issues a patent to the applicant. On average it takes three years for a patent to be granted at the USPTO and five years at the EPO.

GERD

Gross domestic expenditure on research and development.

Infringement

Unauthorised use of a patented invention.

Intellectual property rights (IPR)

IPR allows people to assert ownership rights on the outcomes of their creativity and innovative activity in the same way that they can own physical property. The four main types of intellectual property rights are: patents, trademarks, design and copyrights.

International patent application

Patent applications filed under the Patent Cooperation Treaty (PCT) are commonly referred to as international patent applications. However, an international patent (PCT) application does not result in the issuance of "international patents", *i.e.* at present, there is no global patent system that is responsible for granting international patents. The decision of whether to grant or reject a patent application filed under the PCT rests with the national or regional (*e.g.* EPO) patent offices.

International Patent Classification (IPC)

The International Patent Classification, which is commonly referred to as the IPC, is based on an international multilateral treaty administered by WIPO. The IPC is an internationally recognised patent classification system, which provides a common classification for patents according to technology groups. The IPC is a hierarchical system in which the whole area of technology is divided into a range of sections, classes, subclasses and groups. There are eight sections that are broken down into classes and subclasses. IPC is periodically revised in order to improve the system and to take account of technical development. The current (eighth) edition of the IPC entered into force on 1 January 2006.

Inventive step

An invention is considered to include an inventive step if it is not obvious to a skilled person in the light of the state of the art. At the EPO, the inventive step is one of the most important criteria (along with novelty and industrial application) that need to be fulfilled in order to obtain a patent. The USPTO employs the concept of "non-obviousness", which is equivalent to the inventive step criterion of the EPO in a legal context.

Inventor country

Country of the residence of the inventor, which is frequently used to count patents in order to measure inventive performance.

Japan Patent Office (JPO)

The JPO administers the examination and granting of patent rights in Japan. The JPO is an agency of the Ministry of Economy, Trade and Industry (METI).

Lapse

The date when a patent is no longer valid in a country or system due to failure to pay renewal (maintenance) fees. Often the patent can be reinstated within a limited period.

Licence

The means by which the owner of a patent gives permission to another person to carry out an action which, without such permission, would infringe on the patent. A licence can thus allow another person to legitimately manufacture, use or sell an invention protected by a patent. In return, the patent owner will usually receive royalty payments. A license, which can be exclusive or non-exclusive, does not transfer the ownership of the invention to the licensee. In certain countries, patent law contains rules on compulsory licenses. The law empowers the courts to decide if a compulsory license should be issued and what should be the terms and conditions.

Licence of right

In some countries it is possible for anyone to get access to the use of patents under licence of right in return for payment of a licence fee. For example, in the United Kingdom, licence of right has been in existence for a number of years. Patent owners are able to get a discount on the renewal fee by offering licence of right for their patents.

Maintenance fees

See renewal fees.

Non-obviousness

See inventive step.

Novelty

If an application for a patent is to be successful, the invention must be novel (new). The invention must never have been made public in any way, anywhere, before the date on which the application for a patent is filed (or before the priority date).

OECD triadic patent families

The triadic patent families are defined at the OECD as a set of patents taken at the European Patent Office (EPO), the Japan Patent Office (JPO) and the US Patent & Trademark Office (USPTO) that share one or more priorities. Triadic patent families data are consolidated to eliminate double counting of patents filed at different offices (*i.e.* regrouping all the interrelated priorities in EPO, JPO and USPTO patent documents).

Opposition to the grant of a patent

Anyone can file an opposition to the grant of a European patent, within nine months of the mention of the grant of a European patent in the European Patent Bulletin. Opposition to a European patent can be filed on the grounds that: the patent's subject matter is not patentable, the patent does not disclose the invention clearly and completely, and the patent's subject matter extends beyond the content of the application filed. The opposition system does not exist in Japan (abolished in 2003) or the United States.

Paris Convention

The Paris Convention for the Protection of Industrial Property was established in 1883 and is generally referred to the Paris Convention. The Paris Convention established the system of priority rights. Under the priority rights, applicants have up to 12 months from first filing their patent application (usually in their own country) in which to make further applications in member countries and claim the original priority date. It was originally signed by eleven countries; currently 169 countries are party to the treaty (January 2005).

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Patent

A patent is an intellectual property right issued by authorized bodies to inventors to make use of, and exploit their inventions for a limited period of time (generally 20 years). The patent holder has the legal authority to exclude others from commercially exploiting the invention (for a limited time period). In return for the ownership rights, the applicant must disclose the invention for which protection is sought. The trade-off between the granting of monopoly rights for a limited period and full disclosure of information is an important aspect of the patenting system.

Patentability

Patentability is the ability of an invention to satisfy the legal requirements for obtaining a patent. The basic conditions of patentability, which an application must meet before a patent is granted, are that the invention must be novel, contain an inventive step (or be non-obvious), be capable of industrial application and not be in certain excluded fields (e.g. scientific theories and mathematical methods are not regarded as inventions and cannot be patented at the EPO).

Patent Cooperation Treaty (PCT)

As of July 2005, there were 128 countries party to this treaty, which was signed in 1970 and entered into force in 1978. The PCT provides the possibility to seek patent rights in a large number of countries by filing a single international application (PCT application) with a single patent office (receiving office). The PCT procedure consists of two main phases: (a) an "international phase"; and (b) a PCT "national/regional phase". PCT applications are administered by the World Intellectual Property Organisation (WIPO).

Pending application

In this case, an application is with the patent office. No decision has been made on whether to grant or reject the patent application (*e.g.* application is still waiting for search and examination). In 2004, the total number of pending applications at JPO and USPTO amounted to around 610 000 and 756 000, respectively. The number of total pending applications is expected to increase in the coming years.

Prior art

Previously used or published technology that may be referred to in a patent application or examination report, *i.e.* (a) in a broad sense, technology that is relevant to an invention and was publicly available (e.g. described in a publication or offered for sale) at the time an invention was made; or (b) in a narrow sense, any such technology which would invalidate a patent or limit its scope. The process of prosecuting a patent or interpreting its claims largely consists of identifying relevant prior art and distinguishing the claimed invention from that prior art. The objective of the search process is to identify patent and non-patent documents constituting the relevant prior art in order to determine whether the invention is novel and includes an inventive step.

Priority country

Country where the patent is first filed before being (possibly) extended to other countries.

Priority date

The priority date is the first date of filing of a patent application, anywhere in the world (normally in the applicant's domestic patent office), to protect an invention. The priority date is used to determine the novelty of the invention, which implies that it is an important concept in patent procedures. For statistical purposes, the priority date is the closest date to the date of invention.

Publication

In most countries, a patent application is published 18 months after the priority date. For example, all pending EPO and JPO patent applications are published 18 months after the priority date. Prior to a change in rules under the American Inventors Protection Act of 1999, USPTO patent applications were held in confidence until a patent was granted. Patent applications filed at the USPTO on or after 29 November 2000 are required to be published 18 months after the priority date. However, there are certain exceptions for the publication of pending patents. For example, an applicant can ask (upon filing) for the patent not to be published by certifying that the invention disclosed in the application has not and will not be the subject of an application filed in another country.

Publication date

The date on which the patent application is published (*i.e.* the information is available to public). This normally occurs 18 months after the priority date.

R&D

Research and experimental development (R&D) comprises creative work undertaken on a systematic basis in order to increase the stock of knowledge, including knowledge of man, culture and society, and the use of this stock of knowledge to devise new applications.

R&D expenditures

The basic measure of R&D expenditures is "intramural expenditures"; *i.e.* all expenditures for R&D performed within a statistical unit or sector of the economy.

Renewal fees

Once a patent is granted, annual renewal fees are payable to patent offices to keep the patent in force. In the USPTO these payments are referred to as maintenance fees. For example, all USPTO granted (utility) patents are subjected to maintenance fees which are due after three and half years, seven and half years, and eleven and half years following the date of the original patent grant.

Request for examination

Patent applications filed at the USPTO are automatically examined by a patent examiner to decide whether to grant (or reject) a patent. Patent applications filed at the EPO and JPO do not automatically enter the examination process. The applicant has to submit a request for examination within six months of the application at the EPO and three years at the JPO.

Search report

The search report is a list of citations of all published prior art documents which are relevant to the patent application. The search process, conducted by a patent examiner, seeks to identify patent and non-patent documents constituting the relevant prior art to be taken into account in determining whether the invention is novel and includes an inventive step.

Substantive examination

A full examination conducted by a patent examiner to determine whether to grant or reject the patent application.

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Trade-Related Aspects of Intellectual Property Rights (TRIPS)

Agreement on trade-related aspects of intellectual property rights requires members to comply with certain minimum standards for the protection of IPR. But members may choose to implement laws which provide more extensive protection than is required in the agreement, so long as the additional protection does not contravene the provisions of the agreement. The WTO's TRIPS agreement, negotiated in the 1986-94 Uruguay round, introduced intellectual property rules into the multilateral trading system for the first time.

United States Patent and Trademark Office (USPTO)

The USPTO administers the examination and granting of patent rights in the United States. It falls under the jurisdiction of the U.S. Department of Commerce.

Utility model

Also known as "petty patent", these are available in some countries (e.g. Japan). This type of patent involves a simpler inventive step than that in a traditional patent and it is valid for a shorter time period.

World Intellectual Property Organization (WIPO)

An intergovernmental organisation responsible for the negotiation and administration of various multilateral treaties dealing with the legal and administrative aspects of intellectual property. In the patent area, the WIPO is notably in charge of administering the Patent Cooperation Treaty (PCT) and the International Patent Classification system (IPC).

Sources: European Patent Office (<u>www.european-patent-office.org</u>)

Japan Patent Office (www.ipo.go.jp)

Thomson Scientific terminology (<u>scientific.thomson.com/support/patents/patinf/terms/</u>)

UK Patent Office (www.patent.gov.uk)

US Patent and Trademark Office (<u>www.uspto.gov</u>) World Intellectual Property Organization (<u>www.wipo.int</u>)