

Chapter 1

Objectives and Scope of the Manual

The aim of this manual is to provide basic information about patent data used in the measurement of science and technology (S&T), the construction of indicators of technological activity, as well as guidelines for the compilation and interpretation of patent indicators.

Alongside other science and technology indicators, such as R&D expenditure and personnel, innovation survey data, etc., patents provide a uniquely detailed source of information on inventive activity. Patent data complement other S&T data, and it is generally good to use several types of data in conjunction (R&D, innovation, patents) as a means of cross-validation and to help in interpretation. These indicators have their strengths and weaknesses; they also reflect various stages in the innovation process. This manual is part of the “Frascati” family of OECD manuals, which includes the *Frascati Manual* on R&D, the *Oslo Manual* on innovation, the *Technology Balance of Payments (TBP) Manual*, and the *Canberra Manual* on human resources for science and technology.

Patent statistics have been used to assess S&T activities for a long time. Widely reported work was carried out in the 1950s by Jakob Schmookler, a US scholar, who used patent counts as indicators of technological change in particular industries. The use of patent data expanded in parallel with the power of computers. The OECD held a conference on new S&T indicators in 1985, at which patent statistics were central to several presentations, and S&T publications increasingly included a section on patent indicators. Reflecting a broadening use of patent data by academics, Zvi Griliches published in 1990 a now classic paper assessing ways of using such data. The OECD produced its first *Patent Manual* in 1994. At the same time, patent offices were expanding efforts to monitor patenting activity through extensive statistics. Several companies have flourished by selling patent-based business intelligence using a statistical approach. Data increasingly became available electronically, and the EPO Worldwide Patent Statistics Database (PATSTAT), which gathers standardised data from almost all of the world’s patent offices, was published in 2006 by the European Patent Office.

Patents are a means of protecting inventions developed by firms, institutions or individuals, and as such they may be interpreted as indicators of invention. Before an invention can become an innovation, further entrepreneurial efforts are required to develop, manufacture and market it. Patent indicators convey information on the output and processes of inventive activities. Patents protect inventions and, although the relationship is not a simple one, research has

shown that when the proper controls are applied, there is a positive relationship between patent counts and other indicators related to inventive performance (productivity, market share, etc.). This relationship varies across countries and industries and over time. Along with the information reported in patent documents, the statistical exploitation of these data offers unique insight into invention processes. Patents provide information on the technological content of the invention (notably its technical field) and the geographical location of the inventive process. Because patents identify owners and inventors, they can reveal the organisation of the underlying research process when matched with complementary data (e.g. alliances between firms or between firms and public research organisations, the respective role of multinationals and small firms, size and composition of research teams, etc.). Patents can also provide information about inventors' mobility and networks, and they make it possible to track the diffusion of knowledge (the influence of particular inventions on other, subsequent inventions).

Another advantage of patent data is broad availability at relatively low cost. Patent data are administrative data. Patent databases are compiled by patent offices for internal purposes in order to manage their administration of patent examinations and to disseminate information. They are available on the Internet for public consultation. Adapting these databases for statistical use requires further investment, but they are now quite broadly available. The reduction in computer costs makes it easier to use these data on a large scale and in decentralised and open way. No confidentiality rules forbid access to published patent information, although publication generally only takes place 18 months after the first filing. As a result, patent data are publicly available for most countries across the world, often in long time series.

Patent indicators have drawbacks as well, which is why they must be used and interpreted with caution. Not all inventions are patented. Companies can prefer secrecy, or rely on other mechanisms in order to gain market dominance. There is evidence of differing patenting behaviour across industries and countries and over time. The value distribution of patents is known to be skewed, as a few have very high technical and economic value whereas many are ultimately never used. Simple counts, which give the same weight to all patents regardless of their value, can therefore be misleading, notably in the case of small samples. Different standards across patent offices and over time affect patent numbers although underlying inventive activities may remain unaffected.

Patent data are complex. It is necessary to have precise knowledge of patenting laws and procedures and the patenting behaviour of companies to be able to apply proper controls and filters to the data, obtain meaningful indicators, and interpret them correctly. The complexity of patent data is due to various factors, e.g. the diversity of patent offices and procedures (which

can be national or regional in their judicial scope); the variety of ways to file for patent protection (national or international) and the changing behaviour of applicants in this regard; and the patent document's differing status and dates in line with the complexity of procedures (applications, grants, international phase, etc.). In addition, experts may still be debating some patent information (value indicators, number of citations/claims, etc.).

With the burgeoning of patent-based statistics, it is necessary to share knowledge on how to use the data and to develop standards that will improve the quality of indicators and reduce the scope for possible misinterpretation. For instance, it is still common for analysts to compare patent counts from different patent offices to assess countries' performance, although these are usually not directly comparable. This manual: i) provides background information necessary to understand or to compile patent-based statistics; and ii) proposes standards (formulae for indicators and vocabulary) for compiling patent indicators. However, standards are proposed only in areas in which experts have reached some consensus. In certain areas, notably the most recent, no consensus has yet emerged, and the manual will indicate the various options under discussion. The target audience of the manual is: i) users and compilers of patent statistics in statistical agencies and S&T agencies; and ii) users of patent databases who conduct analytical work on the dynamics of technology at the company, regional or national level.

This is a revised version of the 1994 OECD manual (*The Measurement of Scientific and Technological Activities: Using Patent Data as Science and Technology Indicators*), which marked a first step in the process of clarifying and harmonising patent-based indicators. It described the legal and economic background of patents – a necessary step before designing statistics – and listed indicators that could be constructed from patent databases. It also named a number of methodological problems encountered when calculating indicators based on patents. Since 1994, experience with patent data has developed substantially, and it is the ambition of this revised version of the manual to take account of that experience. The manual reflects notably, but not exclusively, the experience of the OECD and members of the Taskforce on Patent Statistics in developing statistical standards for compiling patent indicators for measuring inventive activity. Members of this task force are: the European Patent Office (EPO), the Japan Patent Office (JPO), the United States Patent and Trademark Office (USPTO), the World Intellectual Property Organization (WIPO), Eurostat, and the US National Science Foundation (NSF).

Today, most if not all national and international S&T statistical reports include a section on patents (see Box 1.1). At the same time, an increasing number of policy reports use patent data to monitor developments in particular technical or institutional fields. A new field of academic research has emerged which makes use of patent data.

Box 1.1. A sample of regular patent statistics

I. S&T publications

United States (2006): *Science and Engineering Indicators* (National Science Foundation).

Patents granted to US and foreign inventors by country/economy of origin.
Top patenting corporations.

Japan (2004): *Science and Technology Indicators* (National Institute of Science and Technology Policy – NISTEP).

Number of domestic and foreign patent applications originating in selected national patent offices.

Eurostat (2007): *Statistics in Focus*, statistical books and pocket books on science, technology and innovation in Europe.

EPO and USPTO patents, by country, by region.
Triadic patent families.

OECD (2007): *Compendium of Patent Statistics*.

Triadic patent families, ICT, biotechnology and nanotechnology patents.
Cross-border ownership of inventions, cross-border co-inventorship in patents.

France (2006): *Observatoire des Sciences et Techniques, Indicateurs de sciences et de technologies 2006*.

Finland (2006): *Patenting*, Statistics Finland.

II. Patent offices and related organisations

WIPO Statistics (2006): *PCT Statistical Indicators Report*.

PCT international applications (by origin, language of filing, technical field).
PCT international applications by receiving office.

Trilateral Statistical Report (Yearly): EPO, JPO and USPTO.

Patent activity by blocs: first filings, origin and targets of applications, grants.
Inter-bloc activity: flows of applications, patent families.

European Patent Office: *Annual Report*.

Japan Patent Office: *Annual Report*.

US Patent and Trademark Office: *Patent Statistics Reports*.

US Patent and Trademark Office: *Annual Report and Patent Statistics Reports*.

This manual is structured as follows. Chapter 2 addresses the meaning of patent indicators: the legal foundations, the economic dimension, the information contained in patent documents, and the type of analytical questions that patent indicators can address. Chapter 3 details patenting procedures, focusing on Europe, Japan, the United States and the international procedure (Patent Cooperation Treaty). Chapter 4 reports the general rules

that apply when compiling patent indicators: reference date, reference country, international vs. national patent applications, and patent families. Chapter 5 describes the various classifications which can apply to patents: technical field, industry, institutional sector and region, and reviews methods of attributing patents to particular companies or inventors. Chapter 6 deals with patent citations: their meaning and their use in indicators. Chapter 7 reviews patent-based indicators of the internationalisation of S&T activities. Chapter 8 discusses indicators of patent value, such as renewal, family size, number of technical classes, etc.

Reference

Griliches, Z. (1990), "Patent Statistics as Economic Indicators: A Survey", *Journal of Economic Literature*, No. 28, pp. 1661-1707.

Acronyms

AFA	Activity of Foreign Affiliates Database
ARIPO	African Regional Intellectual Property Organization
BEA	Bureau of Economic Analysis (United States)
CAFC	Court of Appeals of the Federal Circuit (United States)
CIP	Continuation-in-Part
CIPO	Canadian Intellectual Property Office
DPMA	Deutsches Patent- und Markenamt (Germany)
ECLA	European Classification System
EPC	European Patent Convention
EPLA	European Patent Litigation Agreement
EPO	European Patent Office
EU	European Union
FhG-ISI	Fraunhofer Institute for Systems and Innovation Research
GATT	General Agreement on Trade and Tariffs
ICT	Information and communication technologies
IIP	Institute of Intellectual Property (Japan)
INID	Internationally agreed numbers for the identification of bibliographic data
INPI	Institut National de la Propriété Intellectuelle (France)
IPC	International Patent Classification
IPRP	International preliminary report on patentability
ISA	International search authorities
ISIC	International Standard Industrial Classification
ISR	International search report
NACE	Classification of Economic Activities in the European Community
NAICS	North American Industry Classification System
NBER	National Bureau of Economic Research (United States)
NISTEP	National Institute of Science and Technology Policy (Japan)
NSF	National Science Foundation (United States)
NUTS	Nomenclature of territorial units for statistics (<i>Nomenclature des unités territoriales statistiques</i>)
OECD	Organisation for Economic Co-operation and Development
OST	Observatoire des Sciences et des Techniques (France)

PATSTAT	Worldwide Statistical Patent Database (EPO)
PCT	Patent Co-operation Treaty
SIC	Standard Industrial Classification
SIPO	State Intellectual Property Office of the People's Republic of China
SMEs	Small and medium-sized enterprises
STAN	Structural Analysis Database
TL	Territorial level
TRIPS	Trade-related intellectual property rights
USPC	United States Patent Classification System
USPTO	United States Patent and Trademark Office
WIPO	World Intellectual Property Organization
WOISA	Written opinion of the international search authorities
WTO	World Trade Organization

Glossary

Appeal: A procedure by which the applicant or patent holder can request reversal of a decision taken by the patent office.

- **USPTO:** An applicant for a patent dissatisfied with the primary examiner's decision in the second rejection of his or her claims may appeal to the Board of Patent Appeals and Interferences (BPAI) for review of the examiner's rejection. The Board is a body of the USPTO which reviews adverse decisions of examiners in patent applications and determines priority and patentability of invention in interferences. Decisions of the Board can be further appealed to the *Court of Appeals for the Federal Circuit (CAFC)* or to a district court.
- **EPO:** Decisions of the first instances of the EPO can be *appealed* before the Boards of Appeal of the EPO, in a *judicial* procedure (proper to an administrative court), as opposed to an *administrative* procedure. These boards act as the final instances in the *granting* and *opposition* procedures before the EPO. In addition to the Boards of Appeal, the European Patent Office has an Enlarged Board of Appeal. This instance takes decisions only when the *case law* of the Boards of Appeal becomes inconsistent or when an important point of law arises.
- **JPO:** An applicant who receives a rejection can appeal. The panels consist of three or five trial examiners in the Appeals Department of the JPO. Decisions of the panels can be further appealed to the Intellectual Property High Court, a special branch within the Tokyo High Court.

Applicant: The holder of the legal rights and obligations on a patent application. It is most often a company, a university or an individual.

Application date: The date on which the patent office received the completed patent application. A unique number is assigned to a patent application when it is filed.

Assignee: In the United States, the person(s) or corporate body to whom all or limited rights under a patent are legally transferred by the inventor (equivalent to "applicant" in this context).

Citations: References to the prior art in patent documents. Citations may be made by the examiner or the applicant. They comprise a list of references which are believed to be relevant prior art and which may have contributed to defining the scope of the claims of the application. References can be made to

other patents, to technical journals, textbooks, handbooks and other sources. **USPTO:** Applicants before the USPTO are required to disclose prior art known to them that is material to patentability; **EPO:** No such obligation for the applicant; **JPO:** The requirement for disclosure of information on prior art documents was introduced as of 1 September 2002 and entered into full force on 1 May 2006.

Claim(s): Definition of the scope of the invention and the aspects of the invention for which legal protection is sought.

Continuation(s) (USPTO): Second or subsequent applications for the same invention claimed in a prior non-provisional application and filed before the first application is abandoned or patented. Continuations must claim the same invention as the original application to gain the benefit of the parent filing date. At the time of filing the claims are often the same but the claims may change during prosecution so that they are not exactly the same but not patentably distinct. There are three types of continuing applications: division, continuation and continuation-in-part.

Designated countries: In international and regional patent systems, countries in which patent applicants wish to protect their invention if/when the patent is granted. International application filing automatically includes the designation for all PCT contracting countries that are bound by the PCT on the international filing date (since 2004). A similar rule will apply to the EPO from April 2009, as European patent applications designate all contracting states as in the PCT procedure.

Direct European route (application): A patent application filed under Article 75 EPC (also known as an “Euro-Direct application”). With the direct European route, the entire European patent grant procedure is governed by the EPC alone while with the Euro-PCT route, the first phase of the grant procedure (the international phase), is subject to the PCT.

Division: If the patent office decides that an application covers too broad an area to be considered as a single patent, the application is split into one or more divisional applications, which may or may not be pursued by the applicant. A division can also be requested at the initiative of the applicant.

Equivalent: A patent that protects the same invention and shares the same priority application as a patent from a different issuing authority.

Euro-PCT route: A way to obtain a European patent by designating the EPO in a PCT application (Article 11 PCT). The first phase of the grant procedure (the international phase) is subject to the PCT, while the regional phase before the EPO as designated or elected office is governed primarily by the EPC.

- **Euro-PCT application** – international phase (or Euro-PCT application or PCT international): A PCT application designating the EPO [Article 150(3) EPC]. With

the Euro-PCT route, the first phase of the grant procedure (international phase) is subject to the PCT, while the regional phase before the EPO as designated or elected office is governed primarily by the EPC.

- **Euro-PCT application – regional phase (or PCT regional):** PCT application entering the European (or regional) phase once the applicant has fulfilled the conditions under Article 22 or 39 PCT, Article 158 and Rule 107 EPC.

Euro-PCT search (or PCT Chapter I): Search carried out by the EPO acting as International Searching Authority for a Euro-PCT application in the international phase (Article 16 PCT).

European patent: A European patent can be obtained for all 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 in order to be effective in member countries. The validation process may include submission of a translation of the specification, payment of fees and other formalities of the national patent office (once a European patent is granted, competence is transferred to the national patent offices).

European Patent Convention (EPC): The Convention on the Grant of European Patents was signed in Munich in 1973 and entered into force in 1977. It is a multilateral treaty instituting the European Patent Organisation and providing an autonomous legal system according to which European patents are granted. The EPC provides a legal framework for the granting of European patents, via a single, harmonised procedure before the European Patent Office. It enables the patent applicant, by means of a single procedure, to obtain a patent in some or all of the contracting states. As of January 2008 there are 34 EPC member countries. In addition, extension agreements exist with five countries, offering the possibility to extend European patents to those countries upon request. EPC member countries are Austria, Belgium, Bulgaria, Croatia, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Liechtenstein, Lithuania, Luxembourg, Malta, Monaco, the Netherlands, Norway, Poland, Portugal, Romania, the Slovak Republic, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom. EPC extension countries are Albania, Bosnia and Herzegovina, Croatia, Former Yugoslav Republic of Macedonia, and Serbia.

European Patent Office (EPO): The European Patent Office (a regional patent 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 or German), it is possible to

obtain patent rights in all EPC member and extension countries. The EPO is not an institution of the European Union.

Family: a set of patents (or applications) filed in several countries to protect the same invention. They are related to each other by one or several common priority numbers. There are different definitions of patent families (*e.g.* triadic patent families, extended families including continuations, etc.). Depending on the use sought, a different family concept can be chosen, *e.g.* equivalents, triadic family or trilateral family.

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 Trade-related Aspects of Intellectual Property (TRIPs) guidelines. In the EPO and the JPO, patents are awarded on a first-to-file basis, whereas in the USPTO the patent is awarded on the first to invent basis.

First to invent (USPTO): A system in which 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.

Grant: 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.

Infringement: Unauthorised making, using, offering for sale or selling any patented invention in the country in which the patent is enforceable or importing that invention into said country during the term of the patent.

Intellectual property rights (IPR): The exclusive legal rights associated with creative work, commercial symbols or inventions. There are four main types of intellectual property: patents, trademarks, design and copyrights.

International patent application: See “PCT application”. A patent application filed under the Patent Cooperation Treaty (PCT) is commonly referred to as an “international patent application”. However, international patent (PCT) applications do not result in the issuance of “international patents” (*i.e.* at present, there is no global patent system that issues and enforces international patents). The decision of whether to grant or reject a patent filed under PCT rests with the national or regional (*e.g.* EPO) patent offices.

International Patent Classification (IPC): 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 eight sections broken down into classes, subclasses and groups. IPC is periodically revised in order to

improve the system and to take account of technical development. The eighth edition of the IPC entered into force on 1 January 2006.

International Searching Authority (ISA): An office with competence to carry out the international search for a PCT application. It may be either a national office (Australia, Austria, Canada, China, Finland, Japan, Korea, the Russian Federation, Spain, Sweden, the United States) or an intergovernmental organisation (EPO), (Article 16 PCT, Article 154 EPC).

Inventive step: At the EPO and JPO, an invention is considered to include an inventive step if it is not obvious to a person skilled in the art. Inventive step is one of the criteria (along notably with novelty and industrial applicability) that need to be fulfilled in order to obtain a patent. See also “non-obviousness”(USPTO).

Inventor country: Country of residence of the inventor.

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 owing 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 party to carry out an action which, without such permission, would infringe the patent. A licence can thus allow another party to legitimately manufacture, use or sell an invention protected by a patent. In return, the patent owner will usually receive royalty payments. A licence, which can be exclusive or non-exclusive, does not transfer the ownership of the invention to the licensee.

National application: A patent application that is filed at a national patent office according to a national procedure.

Novelty: An invention cannot be patented if certain disclosures of the invention have been made.

Non-obviousness (USPTO): Something is obvious if the differences between the subject matter to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person with ordinary skills in the art to which said subject matter pertains. See also “inventive step”(EPO, JPO).

Opposition: This is a procedure usually before the issuing patent office, initiated by third parties to invalidate a patent:

- EPO: Opposition to the grant of a European patent can be filed within nine months of the mention of the grant in the European Patent Bulletin.

- **JPO:** Opposition to a grant could be filed within six months of the issue of the grant before the reform of appeals for invalidation was introduced in January 2004.

Paris Convention: The Paris Convention for the Protection of Industrial Property was established in 1883 and is generally referred to the Paris Convention. It established the system of priority rights, under which applicants have up to 12 months from first filing their patent application (usually in their own country) in which to make further subsequent applications in each signatory country and claim the original priority date. There are 172 countries party to the treaty (March 2008).

Patent: A patent is an intellectual property right issued by authorised bodies which gives its owner the legal right to prevent others from using, manufacturing, selling, importing, etc., in the country or countries concerned, for up to 20 years from the filing date. Patents are granted to firms, individuals or other entities as long as the invention satisfies the conditions for patentability: novelty, non-obviousness and industrial applicability. A patent is known as a utility patent in the United States.

Patent Cooperation Treaty (PCT): As of March 2008, there were 138 countries party to the treaty, which was signed in 1970 and entered into force in 1978, enabling a patent applicant, by means of a single procedure, to obtain a patent in some or all of the contracting states. 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). PCT applications do not result in the issuance of “international patents”. The decision on whether to grant or reject patent rights rests with national or regional patent offices. The PCT procedure consists of two main phases: i) an “international phase”; and ii) a PCT “national/regional phase”. PCT applications are administered by the World Intellectual Property Organization (WIPO).

PCT international search: A search carried out by a designated office (international searching authority) for PCT applications.

Pending application: An application has been made at the patent office, but no decision has been taken on whether to grant or reject the patent application

Prior art: Previously used or published technology that may be referred to in a patent application or examination report. In a broad sense, this is 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. In a narrow sense, it is any technology that 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 worldwide before being extended to other countries. See “Paris Convention”.

Priority date: The priority date is the first date of filing of a patent application, anywhere in the world (usually 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. Among procedural data, priority date can be considered as the closest date to the date of invention. In the United States the date of conception comes into play during interferences.

Priority rights: see “Paris Convention”.

Processing time: Duration of a process in the patent procedure (*e.g.* search, examination, grant, and possible opposition and appeal).

Publication: In most countries, a patent application is published 18 months after the priority date:

- **EPO:** All patent applications are published in this manner, whether the patents have been granted or not.
- **JPO:** Patent applications that are no longer pending in the JPO, *e.g.* granted, withdrawn, waived or rejected, are not published. While official patent gazettes are only published in Japanese, the abstracts and bibliographic data of most of the unexamined patent applications are translated into English, and are published as the Patent Abstracts of Japan (PAJ).
- **USPTO:** 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. Also, if the patent is no longer pending or subject to a secrecy order, then the application will not be published.

Renewal fees: Once a patent is granted, annual renewal fees are payable to patent offices to keep the patent in force. In the USPTO they are referred to as “maintenance fees”. In most offices, renewal fees are due every year. USPTO-granted (utility) patents are subjected to maintenance fees which are due three-and-a-half years, seven-and-a-half years, and eleven-and-a-half years from the date of the original patent grant.

Request for examination: 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 transmission of the search report at the EPO, and within three years of filing at the JPO. Patent applications filed at the USPTO are automatically examined by a patent examiner without the need for a separate request by the applicant.

Revocation: A patent is revoked if after it has been granted by the patent office, it is deemed invalid by a higher authority (appeal body within the patent office or a court).

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.

Triadic patent families: The triadic patent families are defined at the OECD as a set of patents taken at the European Patent Office (EPO) and the Japan Patent Office (JPO) and granted by the US Patent and Trademark Office (USPTO) which share one or more priorities. Triadic patent families 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).

Trilateral patent families: A trilateral patent family is part of a filtered subset of patent families for which there is evidence of patenting activity in all trilateral blocs. It is then similar to a triadic family, except that it would also include applications filed in any EPC state that do not go to the EPO (in addition to going to the JPO and USPTO). Trilateral patent families are usually counted in terms of individual priorities, without consolidation.

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 US Department of Commerce.

Utility model: This type of patent, also known as a “petty patent”, is available in some countries. It usually involves less stringent patentability requirements than a traditional patent, it is cheaper to obtain and it is valid for a shorter time period.

Withdrawal: Under the European Patent Convention, the applicant can withdraw an application at any stage of the procedure either by informing the office or by abstaining from one or more of the following: pay fees in due time, file a request for examination within the given time period, or reply in due time to any communication within the examination procedure.

World Intellectual Property Organization (WIPO): An intergovernmental organisation responsible for the 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 Paris Convention, the Patent Cooperation Treaty (PCT) and the International Patent Classification system (IPC).

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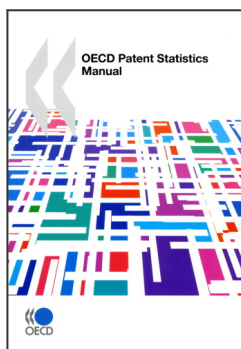
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