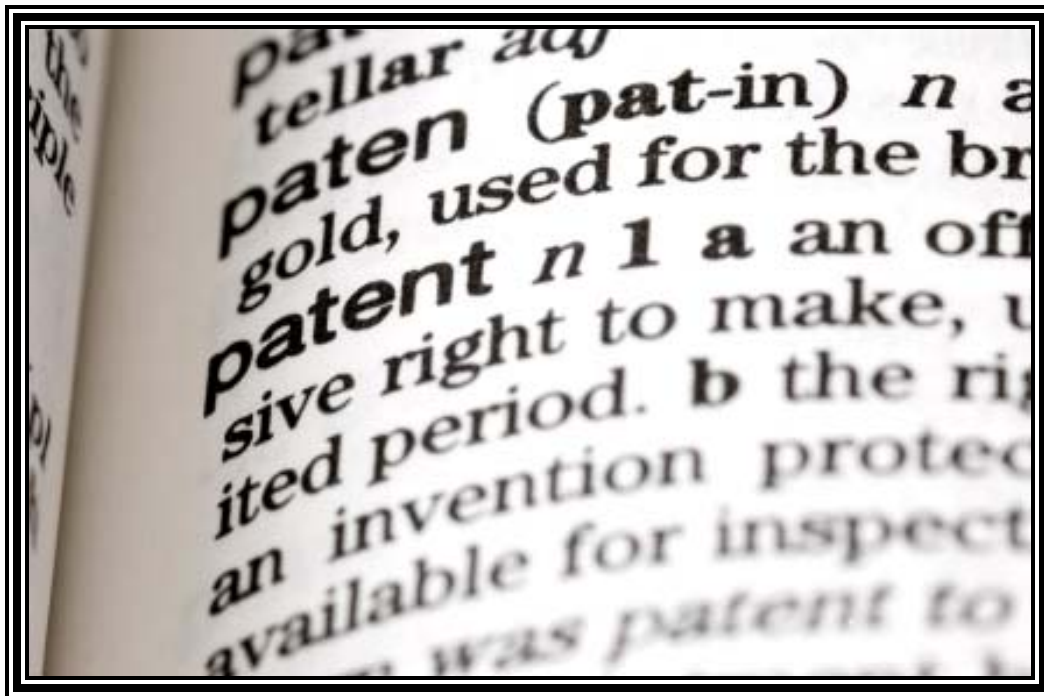




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How to File an International Patent Application

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How to file an international patent application

Guide for applicants

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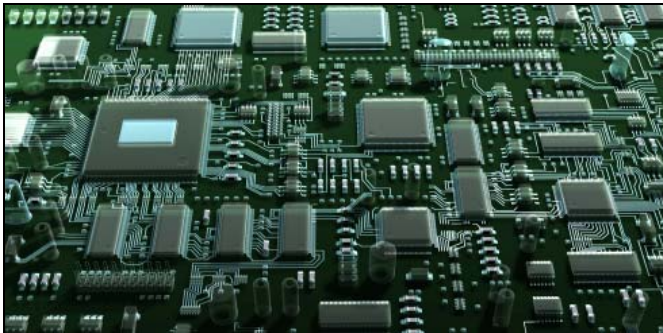
General procedure

I. Introduction

This ‘Guide for applicants’ aims to provide companies, inventors, and their representatives with an outline of the procedure for filing international patent applications, offering practical advice to smooth the way to a patent. This initial version describes and explains the route to an international patent and the associated procedures.

This Guide cannot go into all the details, issues, and ramifications of international patent filing, and it does not constitute an official commentary on international patent filing. As with any other patent grant procedure, you need to be thoroughly familiar with patent matters if you are to steer your way successfully through the international route. So if you lack the requisite experience, you are advised to turn to a professional representative.

A patent grants an owner the exclusive right for an invention, which provides, in general, a new way of doing something, or offers a new technical solution to a problem. The protection is granted for a limited period, generally 20 years. Patent protection means that the invention cannot be commercially made, used, distributed, or sold without the patent owner's consent. The patent owner is given sole authority to give permission to, or license, other parties to use the invention on mutually agreed terms. The owner may also sell the right to the invention to someone else, who will then become the new owner of the patent. Once a patent expires, the protection ends, and an invention enters the public domain, that is, the owner no longer holds exclusive rights to the invention, which becomes available to commercial exploitation by others.



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Both high technology and “low” technology are patentable subject matter

The first step in securing a patent is the filing of a patent application. The patent application generally contains the title of the invention, as well as an indication of its technical field. The patent application generally also must include the background and a description of the invention, in clear language and enough detail that an individual with an average understanding of the field could use or reproduce the invention. Such descriptions are usually accompanied by graphic materials such as drawings, plans, or diagrams to better describe the invention. The purpose of the requirement of adequate disclosure guarantees that the public will receive the full benefit of the knowledge of the patent in exchange for the limited monopoly granted to the inventor. The application also

contains various ‘claims,’ that is, information which determines the extent of protection granted by the patent.

An invention must, in general, fulfill the following conditions to be protected by a patent. It must be of practical use; it must show an element of novelty, that is, some new characteristic which is not known in the body of existing knowledge in its technical field. This body of existing knowledge is called ‘prior art.’ In addition, the invention must show an inventive step that could not be deduced by a person with average knowledge of the technical field. Finally, its subject matter must be accepted as ‘patentable’ under law. In many countries, scientific theories, mathematical methods, plant or animal varieties, discoveries of natural substances, commercial methods, or methods for medical treatment (as opposed to medical products) are generally not patentable.



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At present, no “world patents” or “international patents” exist. In general, an application for a patent must be filed, and a patent shall be granted and enforced, in each country in which you seek patent protection for your invention, in accordance with the law of that country. In some regions, a regional patent office, for example, the European Patent Office (EPO) and the African Regional Intellectual Property Organization (ARIPO) accept regional patent applications, or grant patents, which have the same effect as applications filed, or patents granted, in the member States of that region. To obtain protection in other countries, you generally have two choices:

- (1) to file separate patent applications in each country. This can be cost-effective when you file in only a few countries; or
- (2) to file a single international application under the Patent Cooperation Treaty (PCT) which is administered by the World Intellectual Property Organization (WIPO).

This path gives your application automatic effect in over 100 countries and allows you further time to decide whether you want to pursue patent protection and in to choose in which countries to do so.¹

¹ See, e.g., the International Patent Application Kit, Australian Government, March 2006.

No matter which option you choose, you will still end up with separate patent applications in each country. This application guide outlines the process of applying for international patents. It is a matter of balancing the cost of patent protection in particular markets with your business strategies for those markets.

II. General Patent Process

Generally, the life of a patent has several phases, and each phase has costs. The first phase is Application. This phase includes the preparation of the patent application itself, including any required drawings and all supporting documents. When all of the necessary application documents have been submitted, along with the Official Filing Fee, the Application phase is over. The second phase is Prosecution. In this phase a patent examiner looks for prior art, and other reasons to deny the grant of a patent to the applicant. The patent examiner details his objections and grounds for rejecting the patent application. Generally, the examiner will argue that the invention is NOT patentable, and the inventor will argue that it is. When the inventor prevails, the third phase is Issuance and Maintenance.



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After being notified that the application is in condition for allowance, the payment of an Official Issue Fee is required in order to receive the patent grant. Further, periodic payments called Maintenance Fees are necessary to keep a Utility patent in an enforceable condition. Figure 1 details the basic patent process.

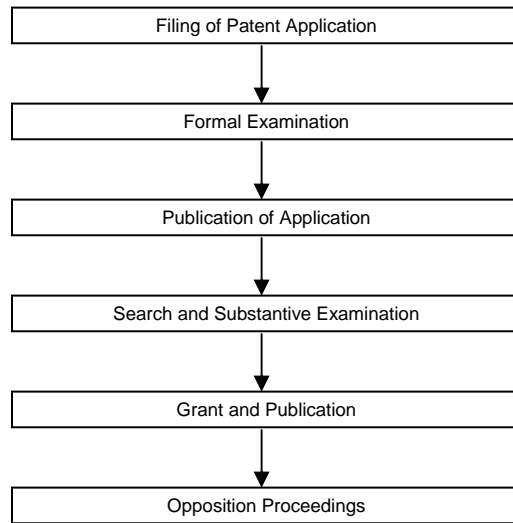


Figure 1: General Patent Process²

Moreover, all patent applications (including international applications) have a priority date. Priority dates are extremely important when considering whether an invention claimed in a patent application is new (the technical term is novel). If two applicants file two patent applications (on separate occasions) claiming the same invention, the patent will be given to the application with the earlier priority date, all other matters being equal. Therefore, it is important to get any patent applications filed as soon as possible. Note that in the United States the patent will be given to the applicant able to prove the earliest date of invention, not the earliest filing date.³

To reserve an early filing date, a provisional patent application can be filed prior to a traditional patent application. A provisional patent application is a patent application which is designed to be a simple and inexpensive application that will not be examined except for certain formal requirements. The provisional application provides a method by which applicants can quickly establish an early effective filing date in a patent application and gives an inventor up to twelve months to further develop an invention, determine marketability, acquire funding or capital, seek licensing, etc. before filing a full application. A provisional application cannot mature into a patent, so a full application must be filed within *twelve months* of the provisional filing date to preserve the original filing date. During this one-year period, the invention has *patent pending* status. This is critical since most companies will not discuss an invention with an individual until the invention is at least patent pending.

² Hintermann B., *Inventing the Future; An Introduction to Patents for Small and Medium-sized Enterprises*, World Intellectual Property Organization, 2006

³ However, there is current legislation (HR 2795) to amend the United States practice to become a first-to-file system.

In addition, an applicant can file a divisional patent application. A divisional patent application is an application claiming priority from some previously filed patent application and known as a *parent application* in which more than one invention was disclosed; accordingly, the divisional application is considered to have the filing date of the parent application. The divisional patent application has claims directed to a different invention than that claimed in the parent application.

II. Types of Patent Applications

Generally there are three types of patents. A utility patent protects the way an article is used and works and usually lasts for 20 years from its filing date. A **utility patent** generally contains the following sections:

- (1) *An abstract* (a brief summary of the contents of the specification);
- (2) *A complete/full-text specification*, which has two parts: a clear and complete description of the invention and its usefulness and a list of the claims, which set out the essential features and define the boundaries of patent protection being sought;
- (3) *Drawings - if applicable*, showing all features of the invention, as defined by the claims.



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An oil drill is comprised of several utility patents

A **design patent** protects only the ornamental appearance of an article, and not its structure or utilitarian features (as in a utility application). A design patent has a term of usually 14 years from the date of issuance.



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A design patent can apply to non-useful aspects of a useful object, like an elongated blender base

Finally, a plant patent protects the rights of an individual who is first to appreciate the distinctive qualities of a plant and reproduces it asexually (by means other than seeds). All three types of patents must meet the requirements of novelty and non-obviousness.



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In addition, in some countries, petty patents can be obtained. **A petty patent** provides cheaper and easier protection than a utility patent, but the invention claimed is also limited in scope and the patent life is shorter (e.g., 6 years - Australia, 10 years - Germany). Technically, petty patents are similar to utility patents in most respects, but they have a few important differences.

A petty patent:

(1) Lasts for shorter time;

- (2) Is examined automatically (i.e., not examined or are examined only as to form, and not novelty) and is usually granted within 6 to 12 months;
- (3) Has a smaller number of claims; and
- (4) The overall cost of a petty patent is usually much less than that of a standard patent application.

III. Choosing a route: national or international

The PCT procedure has not superseded the national grant procedures. So when seeking patent protection in one or more countries, you have a choice between following the national procedure in each country for which you want protection and/or taking the PCT route, which in a single procedure confers protection in all the contracting states that you designate.

The next section summarizes the chief legal and economic factors that are likely to influence your choice between the PCT and national procedures.

If an applicant files patent applications directly with the foreign patent offices, the applicant will have to prepare patent applications that comply with the particular formalities requirements, (i.e. the size of the paper used, margins requirements, arrangement of the part of the application) of each such office. The formalities requirements can vary from country to country. Accordingly, an applicant wishing to obtain patent protection in a number of different countries may have to prepare different versions of the application for each of those countries.



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Additionally, the applicant will be required to have the application translated into the other languages if those countries do not accept the same language as a language of filing. Most foreign patent offices do not allow applicants to represent themselves during patent prosecution. Therefore, applicants may be required to obtain the services of a

patent agent registered to practice before each foreign patent office. As a result, the direct filing of patent applications in multiple countries can be an expensive endeavor at the onset. However, this process can be cost-effective if filing in only a few countries.

On the other hand, an applicant may choose to file an international application under the PCT as the means for filing foreign patent applications. The PCT is an international treaty that is administered by the World Intellectual Property Organization (WIPO), in Geneva, Switzerland. There are currently over 100 Contracting States that are party to the PCT. Under the provisions of the PCT an applicant only needs to file a single international application that is in compliance with one set of formalities requirements. The international application is filed in one country and in one language and that single international application has the effect of a regular national filing as of its international filing date in each PCT Contracting State designated by the applicant. Thus a single international application can have the effect of filing for patent applications in over 100 countries.

An international application filed under the PCT is usually filed with the patent office of the country in which the applicant is a resident or national. Therefore, a U.S. applicant can file his or her international application with the U.S. Patent and Trademark Office as the receiving office. Receiving office is the national office where the international application is filed then checked and processed. The original of the application is sent to the International Bureau of WIPO and a copy to the International Searching Authority who will conduct the international search. Many inventors take advantage of the PCT when filing foreign patent applications.



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For an applicant who has filed a patent application in a particular country, a PCT application offers a way to postpone having to make decisions about filing patent applications in other countries. If there were no such thing as the Patent Cooperation Treaty, then the only opportunity to postpone making decisions about foreign filing would be the opportunity provided by the Paris Convention. Under the Paris Convention, someone who files an application in one country is forced to make a decision, within one

year, as to whether to file patent applications in other countries which would claim priority from the first application.

A PCT application offers a way to extend the time during which a decision must be made about foreign patent filings, for a longer period than the decision-postponement period provided by the Paris Convention. By filing a PCT application, the applicant can postpone for 30 months (rather than 12 months under the Paris Convention) the decision, in many countries, about whether or to spend the money for foreign patent filings. In addition, assuming that the first application was filed in a country that has adhered to Chapter II of the Patent Cooperation Treaty, it is possible to perform a step called ‘demanding preliminary examination’ which entitles the applicant to receive an *International Preliminary Examination Report* which may be helpful in assessing the likelihood of patentability.

The PCT process is helpful to those who don't have enough money to file in several countries, but who expect to have enough money at a later time. A PCT application provides a convenient way to keep the options open for foreign filing for up to thirty months.

Applying for patents in several countries through the PCT system nearly always costs more than applying for patents in the same countries without using the PCT system. Thus, the inventor who is sure that she wishes to file in several countries, and who has enough money now to pay for the filings in those countries, will be saving money by filing directly in those countries (through the Paris Convention) rather than through the PCT.

IV. Filing an international patent application

After deciding which route to follow in filing an international application, an international application can be prepared. We now summarize the general procedures for filing directly or using the PCT.

To file a patent application directly in different countries, the rules and procedures of the individual countries must be followed.

Generally, the following steps are necessary to file an international application directly:

- (1) Fill in the form(s) required by that Office;
- (2) Pay the fees for each application in foreign currencies;
- (3) Meet the formality standards set by each country;
- (4) Provide an address for service in each country;
- (5) If required, provide a translation into the local language;
- (6) Provide a description — including drawings, if necessary;
- (7) Provide a claim or claims; and

(8) Provide a certified copy of foreign application if claiming priority.⁴

To file a PCT application generally there are two phases: international and national. Each of these phases is discussed in turn below.

International Phase: In the international phase the PCT application is actually filed with WIPO. Generally to file a PCT application, the following steps are generally taken:

- (1) Fill in a PCT Request form or lodge your application electronically using PCT-SAFE;
- (2) Pay the relevant PCT fees in domestic currency;
- (3) Provide a description — including drawings, if necessary;
- (4) Provide a claim or claims;
- (5) Provide a certified copy of foreign application if claiming priority;
- (6) International search carried out;
- (7) International search report and written opinion produced;
- (8) Application published 18 months from earliest priority date;
- (9) International Preliminary Examination is requested (optional); and
- (10) Establish an International Preliminary Report on Patentability at 30 months if no demand requested.⁵ Table 1 below summarizes the International Phase.

<p>Stage One The PCT application is filed</p>	<p>The Receiving Office (RO) checks the application for mistakes. The RO then assigns the application a filing number.</p>	<p>This part of the process usually takes six to eight weeks.</p>
<p>Stage Two An International Search is carried out</p>	<p>An international search is carried out by the International Search Authority (ISA) to look for any relevant documents describing similar inventions related to the one you have described in your PCT application. The findings of the search are compiled in a search report called an International Search Report (ISR). An examination report called a Written Opinion of the International Searching Authority (ISO) is also</p>	<p>As a PCT requirement, the ISR and ISO must be issued within three months of the application's lodgment date, or nine months of the earliest priority date, whichever is later.</p>

⁴ *International Patent Application Kit, supra.*

⁵ *Hintermann, supra.*

	<p>produced.</p> <p>These reports are sent to your agent and the IB.</p> <p>You can amend your claims (under Article 19 — see <i>In more depth</i>) based on the findings of your ISR and ISO – amendments must be made within two months of receiving the ISR and ISO or within 16 months of the earliest priority date.</p>	
<p>Stage Three The application is published by the IB</p>	<p>There is no provision for delay in publishing the application — it can be published without the completed ISR if necessary.</p> <p>At this point, if the applicant wishes to avoid or postpone publication, a notice of withdrawal of the international application, or of the priority claim, must reach the IB before the completion of the technical preparations for international publication —this must be done no later than 15 working days before it is due to be published.</p>	<p>18 months from the earliest priority date, the IB publishes the application and the ISR.</p> <p>At 30 months from the earliest priority date the IB uses the ISO to establish the IPRP1 which is communicated to all designated offices.</p>
<p>Stage Four — Optional An International Preliminary Examination is requested</p>	<p>You can request an optional International Preliminary Examination (IPE) of the application — this request is called a demand.</p> <p>The IPE is based on the ISO and any amendments you file and helps you refine your application before you decide to proceed with the national phase.</p> <p>If you have requested an IPE, and the international preliminary examiner</p>	<p>The examiner must in any event establish the IPRPII by 28 months after the earliest priority date. This will be an adverse report if you have not overcome all deficiencies.</p>

	<p>considers that there are still deficiencies in your application, you will be given a Written Opinion (IPEO) otherwise the examiner will establish an International Preliminary Report on Patentability (Chapter II) (IPRP II).</p> <p>The IPEO, like the ISO, explains why documents have been cited and alerts you to any problems your application may have in relation to novelty, inventiveness, and industrial applicability, as well as to any problems of clarity in your specification.</p> <p>You can then file amendments to your application at the time of filing the demand or in response to an IPEO any time up to the establishment of the IPRP II.</p> <p>Please note – the decision on granting a patent remains the task of the national or region offices where you enter the national phase — the IPRP II is authoritative but it is not binding in these offices.</p>	
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Table 1: PCT International Phase⁶

National Phase: In the national phase, individual applications are filed in each country where protection is desired. The requirements for each country must be determined before filing national applications, as described above. Table 2 below summarizes the differences between a PCT application and filing patent applications directly to national offices in foreign countries and Figure 2 provides a general timeline for an international application under the PCT.

⁶ Based on a table in the International Patent Application Kit, *supra*, at p. 15.

Filing directly to the national office of each country requires you to...	Filing a PCT application to the Receiving Office requires you to...
fill in the form(s) required by that Office	fill in a PCT Request form or lodge your application electronically using PCT-SAFE.
pay the fees for each foreign currencies	pay the relevant PCT fees in Australian dollars
meet the formality standards set by each country	meet the formality standards of the PCT
provide an address for service in each country	
if required, provide a translation into the local language	
provide a description — including drawings, if necessary	provide a description — including drawings, if necessary
provide a claim or claims	provide a claim or claims
provide a certified copy of your priority application if claiming priority	provide a certified copy of your Australian application if claiming priority

Table 2: Differences between PCT and filing directly in national patent offices⁷

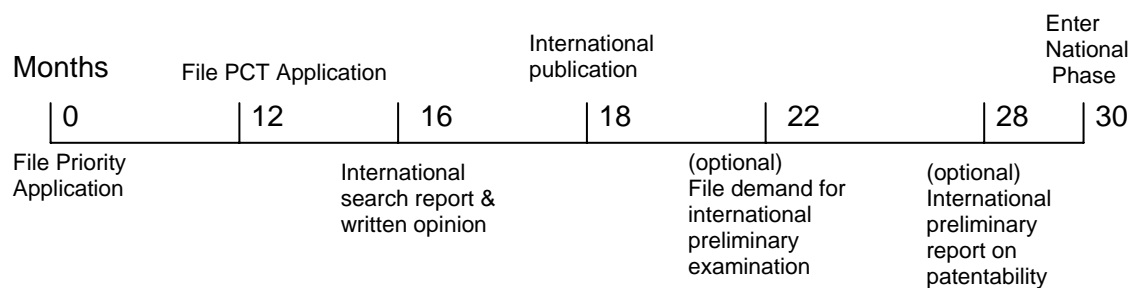


Figure 1: Timeline for PCT Application⁸

⁷ *International Patent Application Kit, supra.*

⁸ *International Patent Application Kit, supra.*