

Patents

What is a patent?

A patent is an intellectual property right that is granted for an invention or an innovation that meets certain criteria specified by the law of a country. It is an exclusive or monopoly type of right that gives the owner or people authorised by the owner the entitlement to commercially exploit the patented invention or innovation to the exclusion of everyone else in a particular jurisdiction for a period of time.

As an intellectual property right, the patent itself, as opposed to the invention, is an asset that can be traded by way of licensing the right to commercially exploit the invention or innovation conferred by the patent or selling the patent to another.

At law, inventions on their own are not an intellectual property right and need to be kept secret so that a patent can be applied for and then granted to create rights that may be enforced. Therefore it is important to obtain patents to create valuable intellectual property rights in inventions that can be enforced both in Australia and globally.

Where can I get a patent?

Patents are granted nationally, and in some cases regionally, by patent issuing authorities in the country or region, established by the governments of the countries concerned.

In Australia, patents are granted by the Commissioner of Patents of the Patent Office, which is administered by the government agency called IP Australia. IP Australia is a prescribed agency within the Department of Industry.

Most countries of the world have their own Patent Office as their patent issuing authority, which is controlled by the government of the country. For example, USA has the United States Patent and Trademark Office (USPTO), the United Kingdom has the Intellectual Property Office (IPO), Japan has the Japanese Patent Office (JPO) and China has the State Intellectual Property Office (SIPO).

There are also regions, where certain countries have joined together and established an intergovernmental organisation as a patent granting authority that grants patents with effect across or within the region. For example, Europe has the European Patent Office (EPO), Africa has the African Regional Intellectual Property Organization (ARIPO) and the African Intellectual Property Organization (OAPI), and Eurasia has the Eurasian Patent Organization (EAPO).

CORRESPONDENCE:

How do I go about obtaining a patent?

Getting a patent is not a simple process and you really must use a patent attorney who is qualified to help you obtain the patent.

The criteria involved is complex and varies from country to country, but generally follows the same formula thanks to the United Nations agency known as the World Intellectual Property Organisation (WIPO). WIPO has been working for decades to harmonise the laws between countries by establishing and administrating Conventions and Treaties to facilitate patent filing processes.

Luckily, the patenting process has been deliberately protracted to take into account these complexities, and align itself time-wise with a staged research and development process that may take many years to bring about the commercial exploitation of an invention after it has been invented. Most countries also provide a mechanism for expediting the granting procedure in special circumstances such as where there is an infringement occurring or there is a serious commercial or economic reason for the patent to be granted.

Importantly, one must apply for a patent and pay fees to the patent issuing authority to receive, examine and grant the patent if appropriate. In every instance, the application must be accompanied by a patent specification that:

- (i) technical describes the invention sufficiently in words and drawings if they are appropriate, and
- (ii) legally defines the monopoly being claimed, usually in the form of a device, substance, system, method or process in terms that satisfy the criteria for granting the patent.

The criteria that needs to be met in order to obtain a patent may be summarised as follows. The invention in every case must:

- (i) be of the appropriate subject matter for which the country or region grants patents;
- (ii) be novel (i.e. different) in some material way from what has previously been known, either by way of publication or by use;
- (iii) involve an inventive step (standard patent) or innovative step (innovation patent), depending upon the type of patent being sought, from what has previously been known; and
- (iv) be useful.

Depending upon the type of patent being sought, each patent specification will be examined as to whether it sufficiently describes the invention or innovation and clearly and unambiguously defines the invention. It also will be examined to determine whether it meets the criteria outlined above.

In Australia, there are two types of patents that can be obtained: a standard patent that can have a maximum term of 20 years; and an innovation patent that can have a maximum term of 8 years.

What is the procedure?

The procedure starts with the person wanting to obtain the patent being satisfied that they may be able to obtain a patent and pay the associated costs involved by having a patent specification prepared or what is called 'drafted'.

The person may choose to do some kind of searching to determine what is known and obtain an opinion from a patent attorney as to whether the invention or innovation is patentable before deciding to incur the costs and effort associated with drafting a patent specification. Alternatively, they may consider that the commercial imperative of filing a patent application is more important and choose to proceed directly with having a patent specification drafted and an application filed. Due to the protracted nature of the procedure, determining what is known can be attended to later, however, it is most always advisable to obtain the opinion of a patent attorney first on whether the invention or innovation is of the appropriate subject matter to obtain the grant of a patent.

The general procedure for obtaining a standard patent involves six stages:

- 1) filing an application
- 2) undergoing examination
- 3) obtaining acceptance or allowance
- 4) going through a pre or post grant opposition period available to third parties
- 5) obtaining grant
- 6) maintaining the patent throughout its lifetime by paying maintenance fees at regular intervals.

It can take anywhere from one year in expedited instances, or five years or more to obtain the patent grant at stage 5). In most countries, including Australia, the maximum term or lifetime of a patent is 20 years from the date that a complete application is filed for the patent.

The general procedure for obtaining an innovation patent involves two phases, firstly obtaining the patent, and then secondly having it certified. The second phase is optional unless the Commissioner or a third party requests that the patent be certified.

The first phase includes three stages:

- 1) filing an application
- 2) obtaining grant.
- 3) Maintaining the patent throughout its lifetime by paying maintenance fees at regular intervals.

There is no substantive examination undertaken during the first stage.

The second phase includes two stages:

- 1) undergoing examination
- 2) obtaining certification

There is no opposition period to progress through for an innovation patent before grant or certification, but an innovation patent can be opposed at any stage of its lifetime after it has been granted or re-examined after it has been certified.

Not all countries have innovation patents, or a similar type of second tier patent known as a utility model, but almost every country has a standard patent (in USA they are called utility patents, but the US does not provide for the grant of any second tier patent).

In some countries, including Australia, it is possible (and most advisable) to file a provisional application first, and then file a complete application within 12 months of the provisional filing date. The period from filing a provisional application to filing a complete application is not counted as part of the 20 year term and can provide up to another 12 months to the lifetime of the patent from the date that the first application is filed (priority date).

A patent specification is generally not published until 18 months has elapsed from the earliest priority date. However, most countries will treat the date that a complete application has been filed for the invention or innovation, whether the patent specification has been published or not, as the date from which no other person can obtain a patent for the same invention, even if that complete application subsequently lapses.

Hence there is always a risk involved in not being able to obtain a granted patent (which can be insured against if the applicant wants to) despite the best of efforts and expense in conducting prior art searches and obtaining opinions from a patent attorney. Thus a patent may be refused to be granted by the patent issuing authority for reasons that the application or patent may not meet the particular criteria required for granting patents in that country, regardless of how fair this may seem to the applicant. However, these reasons are generally always made known to the applicant and most countries have an appeal system for allowing the applicant to challenge the decision of the patent issuing authority and have the reasons and decision reviewed independently.

Overseas Procedure

The patent procedure followed in Australia and overseas is integrated by virtue of two main agreements, one known as the Paris Convention and the other known as the Patent Co-operation Treaty (PCT).

The Paris Convention provides for member countries to equally treat applicants and applications for patents filed in the member country, whether they are local or foreign, individual or corporate, and deals with priority dates. In the case of the latter, the Paris Convention provides for the filing of a patent application in one member country to serve as a priority filing for the invention or innovation disclosed in the patent specification accompanying it, in another member country, on the condition that a complete application is filed in the other member country within 12 months of the filing of the application in the one member country. This means that any application filed in Australia serves as a priority filing for every other member country of the Paris Convention for a period of 12 months, as long as a complete application is filed in the other member country before that 12 month period expires.

The PCT provides for the single filing of an international application within a Receiving Office of the PCT in accordance with the terms of the Treaty, as the filing of a complete application in every

member country and region of the PCT. The PCT involves the international application proceeding through an International Phase, where a prior art search is conducted and a Written Opinion on a number of formalities and three substantive criteria is provided by an International Searching Authority. An opportunity is also provided for commenting on the Written Opinion and making amendments to the patent specification to address and overcome deficiencies and/or for a Preliminary Examination Authority to provide a positive statement about the three substantive criteria in respect of every claim of the patent specification eligible for preliminary examination. Before the completion of the International Phase, the PCT applicant must enter the National or Regional Phase in a country or region for the international application to be converted into a national or regional application in that country or region and be subjected to the remaining stages after the first stage outlined under the general procedure above to have a patent granted on the application.

Under the PCT, an applicant can effectively defer entering the national or regional phase from the first priority filing of an application filed in Australia (or for that matter any other member country) for up to 30 months in the majority of countries and 31 months in a significant number of other countries, including Australia. This can help delay the cost involved in filing complete applications in a large number of countries and regions, without losing priority rights back to the first filed application(s) in Australia.

How much does it cost?

The costs involved with obtaining a patent can be quite significant. The procedure and typical costs involved are outlined in the accompanying Patent Cost Time Chart.

Essentially if you are only interested in obtaining a patent in Australia, costs can be as much as \$10,000 to \$20,000 or more, including the drafting of the patent specification, although these costs are not incurred all at the one time and are spread out over several years.

The same patent specification can be used as the basis of filing an application in each other country or region, although some slight changes need to be made to it in from country to country to conform to the nuances of the law and practice in each country. So this can represent a significant saving in cost. However, the costs involved with obtaining a patent in another country are generally much higher than they are in Australia. In some countries a translation needs to be filed in respect of the patent specification. These translations need to be of a high standard and thus are expensive to obtain, often being the same price as would be involved in preparing the patent specification in the first place. You also need to engage a patent attorney skilled in the law and practice of the country concerned to be your address for service and deal with the patent granting authority on your behalf, which adds to the cost.

Typically you need to allow for costs in the order of \$7,000 to \$20,000 or more to obtain a patent in an overseas country and more if you are seeking to obtain a patent in a region.

How do I know if my invention is patentable?

It is usual to have some kind of subject matter search conducted at the outset and obtain the opinion of a patent attorney. Generally an external searching agency is engaged to conduct the

search. We can organise the search depending on what type of search you wish to be conducted and provide with the opinion on patentability.

However, there are a number of options available to go about this, one of which is not to use any external agency but adopt a service provided by IP Australia in providing an international-type search. Such a search will only be conducted on a patent application that is filed with an adequate patent specification, so it is necessary in that instance to prepare a patent specification and file a patent application first.

We can also conduct a very cursory search at the outset for about \$600 to \$1,000, but this search is not exhaustive and should only be used for providing an initial guide to the patentability of your invention. After about \$1,000, it is better to use an external agency or IP Australia who will provide a more extensive and comprehensive search from \$1,500 and a fully comprehensive search from about \$2,500.

Please also note that these types of searches do not consider whether you are able to commercially exploit your invention within a particular jurisdiction, they only provide a guide to informing you of whether your invention is known or not.

If you want to know whether you can commercially exploit your invention in a particular country or region, you need to conduct what is called a freedom to operate search or a product or method availability search. These searches are country specific and are generally much more expensive to conduct than prior art subject matter searches.

In Australia, for example, the search would be conducted in two stages, firstly a relevant patent and patent application identification search needs to be conducted, which produces a list of patents and patent applications that are in force and need to be reviewed to determine their scope. Then secondly an infringement review needs to be conducted of each patent and patent application in the list to determine whether your invention or innovation infringes any of the patents or patent applications in the list.

The typical cost of conducting the first stage is in the order of \$6,000 and the cost of conducting the second stage is in the order of \$15,000 or more.

Conducting a similar search in the USA may entail costs in excess of \$50,000, depending upon how many patent specifications are identified to be included in the list at the first stage.

How do I start?

We have an Invention Description Guide that can be completed by you to help us understand what your invention is about. It is best to start there and provide us with all of the information you can in relation to the invention or innovation. Once we have this information, we will be able to advise you as to what needs to be done, the costs involved and the best way of proceeding.