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## International Patent Protection — A Brief Guide for Clients



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## Obtaining patents in overseas countries

# A summary of the issues and procedures involved in patenting inventions around the world

### Is it possible to obtain an International Patent?

No. There is no such thing as a single international or world-wide patent. In order to obtain patent protection for an invention overseas, it is necessary, in most cases, to file separate **national patent applications** in each country in which protection is sought, and to prosecute each patent application before the corresponding national patent office. However, various systems exist for filing international patent applications, which help to streamline at least the early stages of the international patenting procedure, and effectively postpone the need to file national patent applications.

### How do I obtain patent protection overseas?

There are three commonly-used ways of obtaining foreign patent protection:-

- (i) file separate national patent applications in each country of interest;
- (ii) file an international Patent Cooperation Treaty (PCT) patent application; and
- (iii) (for European countries) file a European patent application.

Each of these options is discussed below.

### What is a foreign national patent application?

A foreign national patent application is one that is filed directly at the national patent office of a foreign country in which patent protection is required, for example the United States, Canada, China, Japan, Australia, New Zealand, etc. In order to file a foreign national application, we use the services of a **local patent attorney** in each country of interest. We have a large network of foreign associates, who assist us by filing and prosecuting foreign patent applications in their home country on behalf of our clients.

The cost of filing national patent applications varies from country to country, and depends on whether or not the patent specification needs to be **translated** into the local language. For example, in order to file a Japanese national patent application, the complete specification must be translated into Japanese, and for a Chinese patent application, a Chinese translation is required, and so on. Of course, for English-speaking countries, such as USA, Canada, Australia, New Zealand, etc, there is no need to translate the specification. For an average case, the cost of filing a national patent application in English-speaking countries will be **£1500 to £2500 plus VAT** including official fees and foreign attorney charges. The cost for a non-English speaking national application will typically be **£2000 to £5000 plus VAT** including translation charges.

Once the national patent application has been filed at the local patent office, it must be **prosecuted** through to acceptance, resulting hopefully in a granted patent, and this may take between 1 and 3 years for most countries. However, some countries, such as Canada and Japan, can take much longer. Prosecution involves dealing with **search** and **examination reports**, and other formalities, until the application is either accepted, resulting in a granted patent, or refused. Prosecution costs can range from about **£1000 to £5000 plus VAT** for a typical case in most countries.

In order to keep a granted patent alive, it is necessary to pay renewal fees, usually annually. In addition, in some countries renewal fees also have to be paid while the application is still pending.

### **When do national patent applications need to be filed?**

Fortunately, most countries belong to the **Paris Convention**. This enables a national patent application that is filed in one country (eg at the Japanese Patent Office) to claim “**priority**” from an initial priority patent application for the **same invention** that has been filed in another country (eg at the UK Intellectual Property Office), provided that the foreign application is filed within **12 months** of the UK priority application. Therefore, for the majority of countries, it is possible to delay filing a national patent application for up to 12 months after the filing date of a UK patent application.

### **What is a PCT patent application?**

The most common way to obtain patent protection overseas is to use the **Patent Cooperation Treaty (PCT)**. This is an international patent system, coordinated by the **World Intellectual**

**Property Organisation** (WIPO – [www.wipo.int](http://www.wipo.int)), which allows the filing, in English, of a single international PCT patent application, provisionally covering over 150 foreign countries that are party to the Treaty. More countries join the PCT system from time to time; we can provide an up-to-date list of countries on request. Notable omissions from the PCT include Argentina and Taiwan, in which patent protection can only be obtained by filing separate national patent applications.

It is important to note that the PCT enables the filing of an **international patent application**, but this must eventually be followed by the filing of **separate national and regional patent applications** covering every country in which patent protection is required. Hence, the PCT does not itself result in a single granted international patent, but it is an effective way of facilitating the early stages of the patenting process by allowing the filing of a single international patent application before national patent applications need to be filed.

### **When should I file a PCT patent application?**

The PCT must usually be filed within **12 months** of the earliest priority date, ie the filing date of the earliest UK priority patent application on which the PCT is based (please refer to the "Timeline for a typical PCT Application" at the back of this leaflet). The PCT is normally filed at the International Unit of the UK Intellectual Property Office, which carries out certain formalities, and then sends copies of the PCT application documents to WIPO. WIPO is responsible for the PCT application after it has been filed and until the international phase comes to an end about 18 months later.

### **What are the advantages of a PCT patent application?**

A significant advantage of the PCT is that it allows you to **keep your options open** by filing a single international patent application, and deferring the deadline by which national/regional patent applications have to be filed. The PCT helps to delay the costs for translations, local patent office fees, and local attorney charges, which would otherwise be incurred when prosecuting the various national phase applications in each country of interest. It is therefore much **cheaper** in the short-term to file a single PCT application instead of filing numerous national applications in each foreign country. The PCT procedure includes a rigorous International Search, and an optional International Examination procedure, both of which provide the applicant with useful feedback concerning the patentability of the invention. Therefore, filing a PCT enables a large number of countries to be effectively "covered" for an initial assessment period before national patent applications have to be filed. This provides the

applicant with more time (an extra 18 months or so) to investigate whether the invention is commercially viable, and if so, in which countries patent protection should be sought during the national and regional phases of the procedure.

### **What is the cost of a PCT patent application?**

For an average case, the cost of preparing and filing a PCT application, including payment of the official fees, is about **£3000 to £5000 plus VAT**. The cost includes our charges for reviewing the initial UK priority application, making any changes which may be required, ensuring that the claims and abstract are in good order, and preparing any formal drawings that may be required.

### **How long does the PCT application last?**

The PCT normally lasts for a maximum of 18 months, ie until 30/31 months from the earliest priority date. This is when the PCT international phase comes to an end; it is followed by the national/regional phases, as illustrated in the timeline at the back of this leaflet.

### **What is the International Search Report and Written Opinion?**

Once the PCT application has been filed, the European Patent Office acting as an International Searching Authority conducts a detailed search on the claims of the PCT, and issues an **International Search Report (ISR) and Written Opinion**. This provides the Patent Office's view on the patentability of the invention with respect to the prior art documents located by the search. The cost at this stage is typically between **£100 and £700 plus VAT**, depending on the number and length of documents cited in the ISR and Written Opinion, and how much input you require from us.

Normally after issuance of the ISR and Written Opinion, about 18 months after the priority date, the patent application is officially **published** by WIPO. Full details of the invention are then publicly available.

## What is International Preliminary Examination?

The **International Preliminary Examination (IPE)** procedure is completely **optional**. It is the process by which an applicant has the opportunity to respond to the Written Opinion with amendments to the claims and/or arguments in support of the patentability of the claims. IPE must be requested by 22 months from the priority date (or 3 months after issuance of the ISR and Written Opinion, if later).

Whether or not IPE is requested, an **International Preliminary Report on Patentability (IPRP)** will be drawn up and sent by WIPO to all Patent Offices covered by the application before entry into the national/regional phase. The IPRP is **not binding** on any national/regional patent office, but it is taken into account by them, and if it is favourable then it may be persuasive, and it could indicate that the prospects for the application are good. If IPE is requested and the appropriate official fee is paid, the examiner will draw up the IPRP on the basis of any amendments and/or arguments that have been filed by the applicant. However, if IPE is not requested, the IPRP will simply be a copy of the Written Opinion, which issued earlier with the ISR.

## How much does International Preliminary Examination cost?

The cost of requesting IPE is about **£2000 plus VAT**. However, additional professional charges for preparing a full response to the Written Opinion are typically in the range **£200 to £1000 plus VAT**.

## Is it advisable to request International Preliminary Examination?

This depends on the particular circumstances applicable to each case.

Sometimes, IPE is advisable. IPE provides the applicant with a **preliminary opinion** regarding the patentability of the invention from an EPO Examiner, and this is normally received well before the deadline for entry to the national/regional phase. The applicant therefore gains an idea of the **scope of patent protection** that is likely to be obtainable, particularly in Europe, before any commitment needs to be made to the expense involved upon entry into the national/regional phase.

Also, at least some of the costs of IPE should be recouped during later stages of the patent application procedure. The official examination fees payable on entry to the regional phase in Europe are reduced when the EPO has handled the IPE. Also, where a PCT application has undergone IPE, the examination procedure in individual patent offices in the national/regional phase may be streamlined, leading to a reduction in prosecution costs before the national patent offices. For these reasons, the **costs of IPE may be recovered** at least in part, and possibly in full, depending on the number of countries in which the application is followed nationally.

In many other circumstances, however, IPE is not advisable. IPE is necessarily conducted over a very short timescale, and this often does not allow for proper dialogue with the examiner, with the result that it is unlikely that any objections raised in the Written Opinion will be overcome.

We will advise you whether or not it is prudent to request IPE for a PCT application once we have reviewed the ISR and Written Opinion.

### **What happens at the end of the PCT phase?**

The PCT application leaves the **international phase** at **30/31 months** after the priority date, and effectively comes to the end of its life. At this time, the application now enters the **national and regional phases** of the patent process.

The term “**regional phase**” means the filing of regional patent applications via one of several regional patent systems that are available. We are able to file a European regional patent application at the European Patent Office (EPO) on your behalf, and details of this procedure are provided below. Other regional phases that may be filed include a Eurasian patent application, which covers the Russian Federation and other states of former Soviet Union. In Africa, there are two separate regional patent systems, ARIPO and OAPI.

The term “**national phase**” means the filing of separate national patent applications in accordance with the patent law of each country chosen. National applications resulting from a PCT in this way are equivalent to national applications that are filed directly in those countries in the first instance. In order to file separate national patent applications in each country in which you are interested, we need to engage local patent attorneys who, liaising through us, will act as your representatives in each country.

Hence, when the international phase comes to an end, a key decision needs to be made regarding the territories (eg Australia, Canada, China, India, Japan, United States etc) or

regions (eg Europe, Eurasia etc), in which national and regional patent applications need to be filed.

The cost for entry into the national/regional phase depends greatly on the length of the patent specification, and also whether or not the specification needs to be translated into the local language. For an average case, the cost for filing a European regional phase, which we can do on your behalf, will be between **£2500 and £3000 plus VAT**. The cost for filing a US patent application will be about **£1500 to £2500 plus VAT** including the US attorney's charges. The cost for filing in other English-speaking countries is likely to be about **£1500 to £2500 plus VAT**, and the cost for filing in countries in which a translation into the local language is required will typically be between **£2000 and £5000 plus VAT**.

Once the various national/regional applications have been filed by local attorneys on your behalf, the separate applications must then be **prosecuted** before the corresponding national patent office. Prosecution involves dealing with search and examination reports, and other formalities required by the various national/regional patent offices. It may be necessary to file amended claims at each patent office in order to highlight how the claimed invention differs from the prior art. The results of the ISR and Written Opinion, and IPRP (if IPE was requested) may be taken into account by each national patent office during examination of each national application. However, each national patent office can, and often does, raise new objections against the application. Therefore, in order to secure grant of each national patent application, different amendments may be required by each patent office. Therefore, if granted, each national patent may provide different scopes of protection.

**Prosecution** of each national patent application may take 1 to 3 years (or longer) until they are either accepted, resulting in a granted patent, or refused. Prosecution costs can range from about **£1000 to £5000 plus VAT** for a typical case.

**Renewal fees** are also payable in each territory in which a patent is granted, and also in some territories, such as Europe, whilst the application is pending, in order to maintain the patent or patent application in force. These renewal fees are typically paid as annual fees, which increase gradually during the lifetime of the patent. Annual renewal fees are normally in the range of **£100 to £700 plus VAT** (for example, for a UK patent) and **£500 to £1500 plus VAT** (for example, for a European patent application).

## What is a European patent application?

In Europe, a European patent application may be prosecuted using a centralised procedure before the **European Patent Office (EPO)**. A single European patent application is filed, in English, designating over 30 European countries (Contracting States), including UK, France, Germany, Spain etc. It is also possible to designate certain **Eastern European Extension States** in the application. An up-to-date list of the Contracting States and Extension States of the EPO can be provided on request.

The single European patent application is prosecuted until it is, hopefully, granted as a European Patent. Ultimately, the European Patent must be **validated** before each European national patent office in which patent protection is required, thereby resulting in a number of individual national patents, each of which is enforceable before the appropriate national Court. The EPO does **not** act as a Court for enforcing the granted European patent; it is only involved with streamlining the European patent application procedure through to eventual grant (or refusal) of a European patent.

## What are the advantages of a European patent application?

The main advantage of a European patent application is that a **single patent application** may be filed in English, and then searched and examined by the EPO, hopefully leading to the acceptance of a single granted European Patent. This obviates the need to file separate national patent applications for each European State which, in all countries except the UK and Ireland, would not be in English. Furthermore, when a PCT application has been filed it is in some countries only possible to obtain patent protection by subsequently filing a European patent application, rather than a national application for that country.

## When should I file a European patent application?

A European patent application may be filed:

- (i) as the first step of the patent application procedure, instead of a UK patent application;
- (ii) within 12 months of a first UK priority filing; or
- (iii) as a European regional phase application following an international PCT application, as discussed above (ie a UK patent application is filed first, followed by an international PCT application, which is then followed by a European regional application).

The specific procedure, timings and costs for the European application vary for each of options (i) to (iii) above. However, the following sections provide details of the key elements of the European patent application procedure.

### **What steps are involved in filing and prosecuting a European application?**

In the case of a European patent application that is not derived from a PCt application, the first step is to file the application either at the International Unit of the UK Intellectual Property Office or at the European Patent Office itself. The cost is likely to be about **£2000 to £3000 plus VAT**, including official fees and our charges for reviewing the specification based on a prior UK or PCT application.

After the European application has been filed, the EPO conducts a detailed search of the claimed invention. The search results are sent to us in a European Search Report, which is accompanied by a written opinion that gives an indication of the EPO's view concerning the novelty and inventive step of the invention.

The European application is published about 18 months from the earliest priority date, at which point the entire contents of the specification become publicly available.

Within six months of the publication of the European Search Report, it is necessary to pay a **substantive examination fee** and the **designation fee**. If any of the Extension States are required, then these must be individually designated at this time, and a fee of about £100 plus VAT per extension state, must be paid. For a typical case in which no extension fees are paid, then the cost including the examination fee will be about **£2000 plus VAT**. It is generally also necessary at this stage to submit a response to the issues raised in the written opinion.

The EPO then subjects the patent application to a rigorous **examination**, and will normally issue an Examination Report setting out any objections against the application. We will be given the opportunity to try and overcome such objections. We can try to refute the objections if we feel that they are unjustified, or we can file amended claims and appropriate argumentation in an attempt to meet the Examiner's objections. The costs involved with dealing with the Examination Report varies widely depending on the complexity of the case, but could be anything from £100 if no major objections are raised, to **£2000 plus VAT** if a number of serious objections are raised. In complex cases, the EPO may issue one or more further Examination Reports setting out additional objections, which need to be addressed before the application can continue to grant.

For a European patent application that is derived from a PCT application, the procedure, particularly in the early stages, is somewhat different, largely as a result of the fact that the EPO will have handled the PCT stage of the procedure, and therefore does not carry out a further search in the regional phase.

### **What happens at the end of the European patent application?**

If the examination stages are successfully concluded, the EPO issues an official communication indicating that the application has been accepted. It is then necessary to pay a **grant fee**, and also file **translations of the claims** of the patent into French and German. For a typical case, this stage costs about **£1200 to £1500 plus VAT**.

Once these formalities have been addressed, the EPO then publishes the European Patent. This step triggers a **9 month period** during which anyone may file an **opposition** against the Patent, for example on the grounds that the patent should not have been granted because it lacked novelty or was obvious in view of the prior art. Oppositions are filed only in a small minority of cases, but if successful can lead to the European Patent being reduced in scope, or in some cases even revoked in its entirety.

### **How is the granted European patent 'validated' in the designated states?**

Upon grant, the European Patent effectively becomes a **collection of separate national patents**. However, in order for each of these separate national patents to be effective in each country, it is first necessary to “**validate**” each of them. The grant and validation stage of the European patent is usually the most expensive part of the process, and can cost many thousands of pounds depending on the length of the specification (for those countries that require translations), and the countries in which the European patent is validated.

Validation of the European patent in **English-speaking countries** (ie the UK and Ireland) involves only modest charges, relating to the appointment of a local patent attorney in each country to act on your behalf should any action need to be taken during the life-time of the patent. We would be your representative for the **European (UK) Patent**.

Many **non-English speaking countries** have now dispensed with the requirement for a full translation, and this has substantially reduced the costs of validation in those countries. Other countries, however, still require a **full translation** of the **entire text** of the patent specification into their language. For example, to validate the European Patent in Italy, the complete

specification must be translated into Italian. To validate the Patent in Poland, the specification must be translated into Polish, and so on. In addition, local attorneys will need to be appointed, and official fees must be paid at the local patent office. For a typical case, this can cost about **£1000 to £3000 plus VAT for each country**. For this reason, it is customary to be selective at this point, and to validate the patent only in the countries of greatest interest, or where the costs involved are commercially justified.

### **What about European Patent Renewal Fees?**

It is necessary to pay annual renewal fees to the EPO while the European patent application is **pending** (ie before grant). The cost for the first year is about £400, but the fee rises each year until the patent is granted. Once the European patent has been granted, **annual renewal fees** must then be paid to every national patent office in which the European patent has been validated to keep it in force. The renewal fees increase yearly throughout the life-time of the patent, which can be up to 20 years from the filing date of the European patent application. Any or all of the European national patents may be allowed to lapse by non-payment of a renewal fee.

### **How can AdamsonJones help?**

We would be happy to discuss with you the best way to protect your invention overseas. Please feel free to contact us to arrange a meeting.

NB: We have endeavoured to ensure that the information in this note is accurate and up-to-date. However, this note is for general guidance only, and is not a substitute for professional advice.



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## Timeline for a typical PCT application

