

Obtaining Patents in the United Kingdom

A Summary of the procedures and costs involved in patenting inventions in the UK

What is a patent?

A granted patent is a form of Intellectual Property Right (IPR), and provides a monopoly or **exclusive** right that is granted for an **invention**. The invention may be a **product** or a **process** that provides a new way of doing something, or offers a new technical solution to a problem.

Who grants patents?

A patent is granted by a **national patent office**, such as the **UK Intellectual Property Office (UKIPO)** (www.ipo.gov.uk), or by a **regional patent office** that does the work for a number of countries, such as the **European Patent Office (EPO)** (www.epo.org). The **Patent Cooperation Treaty (PCT)** provides for the filing of a single **international patent application** which has the same effect as national applications filed in a number of designated countries (please see our guide to International Patent Protection for more information). In order to obtain a granted patent for an invention, normally one would initially file a **UK patent application**, which is referred to as **pending** until it is granted or refused by the UKIPO.

What does a UK patent do?

A patent provides powerful **protection** for the invention to the owner of the patent. The protection is granted for a limited period, which in the UK and most other countries is 20 years, provided that annual renewal fees are paid. If the renewal fees are not paid, the patent lapses and third parties may exploit the invention without infringing the patent.

What kind of protection does a UK patent offer?

The owner of the patent has the legal right to stop a third party from commercially making, using, distributing, selling or importing the patented invention in the UK. Any of these actions are called patent infringement. Patent rights are usually enforced in a Court, which has the authority to stop patent infringement. Patent rights may be enforced should a third party directly copy the invention, or even if they arrive at the invention independently.

However, a patent is a negative right. This means that simply having a patent does not necessarily mean that you can exploit your own invention yourself, but rather that you can stop others using the invention. If your invention requires the use of an earlier patented invention, and the patent for that invention is still in force, permission from the earlier patent owner must be obtained before you can use your invention.

What rights does a patent owner have?

A patent owner has the right to decide who may, or may not, use the patented invention for the period in which the invention is protected. The patent owner may give permission to third parties to use the invention on mutually agreed terms. This is called **licensing** the patent, and may be used to generate revenue via licensing fees. The patent owner may also sell the right to the invention to someone else, who will then become the new owner of the patent. This is called **assigning** the patent. Once a patent expires, the protection ends, and an invention enters the **public domain**. Once this occurs, the owner no longer holds exclusive rights to the invention, which then becomes available for commercial exploitation by others.

What are the requirements for an invention to be patented in the UK?

An invention must, in general, fulfil a number of conditions to be protected by a patent. It must have an element of **novelty**, ie some new characteristic or feature, which is not known in the body of existing knowledge in its technical field. This body of existing knowledge is called **"prior art"**. The invention must also involve an **inventive step**, ie it must not merely be a minor, obvious development of existing technology, which would have been routinely deduced by a person with average knowledge of the relevant technical field. The invention must also have a **practical use**, and not merely be an abstract idea. Finally, the subject matter of the invention must be accepted as being "patentable" under UK law. For example, in the UK and many other 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.

When should I file my UK patent application?

It is absolutely essential that a patent application is filed while the invention is still **confidential**. While it may be generally permissible to discuss the invention with third parties before a patent application has been filed, it is imperative that such discussions are in strict confidence, and that all parties to the discussion have signed a **Confidentiality Agreement** (also called a **Confidential Disclosure Agreement** (CDA) or **Non-Disclosure Agreement**

(NDA)). Any non-confidential disclosure of the invention would seriously prejudice the validity of a patent application filed after such a disclosure.

Should I conduct any patent searches?

There are two key considerations that should be borne in mind when wishing to patent and use your invention. The first is whether anyone else has already made your invention or something similar. If they have, then your invention may not be novel or sufficiently inventive to be accepted by a patent office. You can conduct free online patent searching yourself using the EPO online patent database at http://ep.espacenet.com. We recommend that at least an initial check is conducted to assess how new and inventive your invention is. We can also conduct a more detailed **keyword search** in-house or by engaging a professional search company, which should give us a better idea of the chances of obtaining patent protection for your invention. The cost of a keyword search conducted in-house is likely to be from about £450 plus VAT. However, more involved searching can be carried out by either investigating a specific technical field or using the name of a specific company or an inventor. The cost of such searches will vary from case to case, but is likely to be from about £450 plus VAT for in-house searches, and from about £1,000 plus VAT when employing the services of a professional search company. It is important to note that patent applications are only officially published 18 months after filing. Hence, when conducting searches for prior art using any of the above strategies, there is an 18 month window of uncertainty in which there may be a pending patent application that is potentially relevant to the patentability of your invention, but which has not yet been published, and so would not be located by any search.

The second consideration is whether anyone else has an earlier patent, which may present you with a risk of **infringement** if you try to exploit your invention. In cases where a significant amount of time and resources is being invested, we recommend that a detailed infringement or **freedom-to-operate search** is carried out before proceeding in order to highlight any potential problems. We would normally employ the services of a professional search company in order to locate potentially problematic patents or patent applications. We would then review the documents located by the search company ourselves, and advise you if they may present you with an infringement risk. Costs of freedom-to-operate searches vary widely depending on the subject matter being searched, but may be anywhere between £1,000 and £10,000 plus VAT, and possibly more.

Adamson**Jones** also provide regular alerts that are based on specific subject matter of interest, as well as on particular competitors' activities. We also provide regular searches for

clients wishing to embark upon a particular line of research or product development. Such searches can keep you informed of competitor activity, and also provide you with information regarding existing technology and potential infringement issues at an early stage of the R&D process. This can save a considerable amount of wasted effort and cost.

How do I obtain a UK patent?

The first step in securing a patent for your invention is to prepare a patent **specification**. The specification includes the title of the invention, as well as an indication of **its technical field**. The specification must also include a **detailed description** of the invention, in clear language and sufficient detail that an individual with an average understanding of the field could use or reproduce the invention. Such descriptions are often accompanied by drawings, plans or diagrams to better describe the invention. The application also contains a set of "**statements of invention**", which define the invention, and determine the extent of protection sought by the eventual patent, if granted. The specific wording of these statements is critical as they will be examined by the UKIPO during examination of the patent application, and by a Court if the patent is ever litigated. If these statements are not drafted well, the protection provided by the patent could be unnecessarily restricted.

The specification forms the basis for the subsequent patent application procedure, and it is important to ensure that the specification is correctly worded throughout in order to increase the chances of securing optimum patent protection for the invention. Therefore, we normally require a meeting with the inventor(s) so that we have a good understanding of the invention before we prepare the specification. It is often helpful if you provide us with a detailed summary of the invention including appropriate drawings, and details of how you think the invention differs from the closest prior art of which you are aware.

Once completed, the specification is filed at the UKIPO as a UK patent application, thereby setting the **priority date** (please refer to the attached diagram of "Typical Procedure and Timeline"). The cost to get to this stage depends on the complexity of the invention, but is likely to be between £3,000 and £6,000 plus VAT. Once the application has been filed, it is possible to disclose details of the invention to third parties, for example, during negotiations with potential commercial partners. However, it is important that you only disclose what has been covered in the patent application, and nothing else.

Within 12 months of the priority date, it is necessary to submit an abstract, which is a brief summary of the invention, and, if not already submitted earlier, a set of **claims** based on the statements of invention. It is also necessary to file a request for an official search, and to

pay the official search fee. If the specification contains drawings, it may also be necessary at this stage to submit "formal" drawings that satisfy all the statutory requirements. In an average case, the cost of completing the formalities and paying the official fee is approximately £500 to £800 plus VAT.

In some cases, the claims may be submitted, and the search fee paid, when the initial application is filed. It may be advantageous to have the official search carried out during the first year of the patent application because the results of the search may influence whether or not you proceed with the patent application later on, and could in the long run save costs. We can advise you whether or not to request an **early search**.

It is not possible to add any information to a patent application once it has already been filed. Therefore, if during the 12 months from the priority date any modifications or improvements are made to the invention, it is not possible to add them to the application currently on file. However, it is possible to file a second application within 12 months of the priority date of the first application, which includes full details of the first application, as well as the modifications or improvements. The second application benefits from the priority date of the first application, which can then be allowed to lapse as it is no longer required. The second application then proceeds in place of the first application. It is important that the improvements that have been made to the invention are confidential at the time of filing the second application. Otherwise, it may not be possible to secure valid patent protection for these changes. The costs at the 12 month stage depend to a large extent upon the time taken to prepare an updated specification.

Upon payment of the search fee, the UKIPO conducts a detailed search on the claims of the patent application. The Office issues an official **Search Report**, normally 2 to 6 months after filing the request for the search. The Search Report lists any documents that the Office believes to be relevant to the novelty and inventive step of the invention as set out in the claims of the application. If it appears that the claimed invention is either not novel or is not sufficiently inventive in view of the Search Report, then it is possible to **amend** the claims (ie make careful changes to the wording of the claims) to differentiate the claims from the prior art located in the search. Claim amendments can only be based on wording that is already in the patent specification, and we can advise you about this at the appropriate time. The cost for this stage could be between £200 and £800 plus VAT depending on the complexity of the claims and the relevance of the prior art.

Approximately 18 months after the priority date, the patent application is officially **published**. When this happens, the abstract, description, claims (which may now include any amendments) and drawings are made available to the public. Although it is not possible to enforce a patent until it has been granted, once the patent application has been published it does confer some rights on the applicant. Provided a patent is eventually granted with claims that are at least similar to those of the published application, then it is possible to back-date to the publication date any **damages** for patent infringement committed by third parties.

Within 6 months of the publication, it is necessary to submit a request to the UKIPO for **substantive examination** and to pay the applicable official fee. The cost for requesting examination is around £250 plus VAT.

The UKIPO then considers whether the invention defined in the claims of the published application meet the requirements of novelty and inventive step. If no objections are raised, and the Office is happy that the claims are acceptable, then it issues a Notification of Grant letter, and the Patent is granted. There will be a modest administrative cost involved with reporting the grant of the patent to you. Almost always, however, the Office raises objections against at least some of the claims, and these objections are detailed in a substantive examination report to which we will be given a period (usually 6 months) to respond. We then have the opportunity to argue against the objections if we feel they are unjustified, or to file a set of amended claims and appropriate argumentation, if we believe the objectives are well-founded. When amending the claims, we aim to limit their scope sufficiently to differentiate them from the prior art, while at the same time limiting the scope of protection as little as possible. If the Office is convinced by our arguments, they will issue a Patent. However, if our arguments are not persuasive, then the application will be refused (though usually not without giving us a further opportunity to amend the claims). The cost for prosecuting the patent application during the substantive examination stages can be anywhere between £200 and £2,500 plus VAT, depending on the complexity of the case.

Provided that **annual renewal fees** are paid to the UKIPO, the granted patent will remain in force. However, the **validity** of the patent may be challenged throughout its life by anyone who may be able to demonstrate that the patent should not have been granted, perhaps because the invention was not new or was obvious.

How do I enforce my UK patent?

If someone infringes your granted patent, you have the option of requesting either the UK Patents County Court or the UK High Court to: (i) grant an **injunction** to stop the infringer; (ii) award **damages** in respect of financial losses resulting from the infringing activity; and (iii) pay a proportion of the legal **costs** incurred.

It is only possible to bring a legal action against a third party for infringing a granted patent. It is not possible to sue on the basis of a pending patent application, although as mentioned above, an infringer may be liable to pay damages for infringement from the date of publication of the application. We can advise you in relation to patent infringement actions, including working with solicitors and barristers. Such actions can be very expensive (several hundred thousand pounds or more). However, the vast majority of patent disputes are settled without recourse to litigation, eg by the infringer withdrawing from the market or through the grant of a licence.

How do I obtain foreign patent protection?

Most countries are party to **The Paris Convention**, an international treaty which enables patent protection to be obtained overseas, provided that foreign patent applications are filed within 12 months from the UK priority date. The foreign patent applications are effectively back-dated to the priority date of the first UK patent application. Hence, filing a UK patent application effectively gives you the option of obtaining patent protection in most countries of the world, so long as foreign patent protection is sought within 12 months from the priority date.

Individual national patent applications may be filed in each country in which protection is required. However, two systems exist that avoid the need to file a large number of applications immediately. These are:

- (i) The **Patent Cooperation Treaty** (PCT), to which a large number of countries are party; and
- (ii) The European Patent Convention (EPC), which covers most European countries.

These systems operate in different ways, but each streamlines the procedure involved in obtaining patents in a range of countries.

For more information about patent protection overseas, please refer to our guide to International Patent Protection.

How can AdamsonJones help?

We would be happy to discuss your invention and advise you concerning obtaining patent protection in the UK and 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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