

Practical Guide to Patenting in the United Kingdom

A Practical Introduction to Patents

This guide provides an introduction to the Patent process, the key elements of a Patent application and some guidance on preparation by inventors. This guide is written for the use of inventors in the United Kingdom, although much of the advice will be relevant for inventors in other countries.

1.0 Overview

2.0 Preparation for Inventor's meeting with Patent Attorney

3.0 Key points for Inventor's meeting with Patent Attorney

4.0 Activity after Inventor's meeting

5.0 Key elements of Patent

6.0 Checklist of Information Required

For additional copies of the guide or further information on any aspect of Intellectual Property, please contact Murgitroyd.

1.0 Patent Protection - Overview

This provides an outline of the patent system and the procedures for obtaining a Patent.

1.1 Introduction

A Patent gives the owner of an invention the right to prevent others using it for a period of time, generally a maximum of twenty years. In return, the person seeking the Patent has to provide full details of the invention and allow these to be published by the national or regional Patent Office. A Patent can be used to give you a competitive advantage while exploiting the invention yourself, or it can provide a legal basis for licensing someone else to make use of the invention.

1.2 Patentability

To be patentable, an invention must meet three requirements:

- (i) It must be capable of industrial application and not, for example, a scientific theorem or an artistic creation.
- (ii) It must be new.
- (iii) It must have an "inventive step", that is it must improve on what was previously known in some manner which is more than merely an obvious modification.

Each of these criteria can present difficulties of judgement and if you are in any doubt, consult a Patent Attorney rather than assuming that Patent protection is ruled out.

1.3 Initial Filing

The normal route for patenting in the United Kingdom starts with the filing of an initial Patent Application at the UK Intellectual Property Office (UKIPO), formerly known as the Patent Office. This must be done before there is any public disclosure of the invention, and provides a twelve month period during which time the technical and commercial viability of the invention can be assessed before a complete Patent Application is made. During this period, the legend "Patent Applied for" or "Patent Pending" may be used, which can be of considerable deterrent value, and can continue to be used until the Patent Application matures into a Patent. The Application may be filed with or without claims.

The filing of an initial Application also gives a twelve month period in which to decide about Patent protection abroad. Any foreign Patent Applications filed within this period are examined as if they were filed on the same date as the original UK Application insofar as the subject matter is the same as that originally filed.

1.4 Information Required

To allow a Patent Attorney to prepare and file the Provisional Application, the Attorney will require enough information to allow him/her to understand the nature and advantages of the invention and how it relates to what was used previously. This is best done either by arranging a meeting to discuss the invention or by providing descriptive notes and sketches.

Normally one to three weeks is required to prepare the documents and file them at the

UKIPO, but it is possible to proceed much more quickly in cases of urgency, for example if an invention is about to be disclosed publicly.

The Patent Application must give sufficient detail to allow a "person skilled in the art" to perform the invention e.g. someone with knowledge of the particular area should be able to re-create the invention from the description in the application. This should be taken into consideration when preparing documents for sending to a Patent Attorney.

It should be emphasized that it is essential to have an Application actually on file at the UKIPO before the inventor makes any disclosure of the invention (apart from disclosures in circumstances of confidentiality).

It is possible to file an early search request at the UKIPO, if an early indication of the patentability of the invention is required, for example before filing in other countries. Such a search should preferably be requested at the time of filing the application, or soon thereafter

In some circumstances, the extent of work required to prepare and file a Patent Application at a professional level may incur costs which are difficult to meet or justify. As an alternative to a full, professionally prepared Provisional Patent Application, the Patent Attorney may be able to offer a service which allows an official application number and filing date to be secured making use of the Client's own description and drawings, at a significantly lower initial outlay. Again, there is a maximum period of twelve months in which to take the Patent process further. In this case more substantial amendment may be required before the end of the initial twelve month period. However, this route has many risks and may not result in a valid, granted Patent, so we recommend that a full Patent Application is prepared by a Patent Attorney wherever possible.

1.5 Completion

Within the twelve month period, the preparation and filing of a complete Application, including an updated Specification, Claims and Abstract must be undertaken, if not included in the initial Application. Formal Drawings should be filed as required by the UK-IPO. Once all the documents and the appropriate fee have been filed, the UK-IPO will carry out a search through earlier Patents and will issue a search report which gives an indication of the novelty of the invention.

1.6 Publication

The Application will then proceed to publication, which marks the start of a six month period during which substantive examination of the Application has to be requested.

1.7 Prosecution

Once the request for substantive examination has been filed, the Examiner at the UKIPO considers the invention in the light of any documents located in the search report and makes observations as to patentability. Some expense may be incurred in overcoming any objection the Examiner might raise, and the extent of this expense will be determined by the standpoint taken by the Examiner.

1.8 Grant

Once the Examiner is satisfied that the invention is patentable, the Patent is granted and lasts for a term of twenty years from the filing date of the complete Application, subject to payment of annual renewal fees.

It is possible to have the UKIPO carry out these procedures very much more quickly, at the Applicant's request. This may be desirable for example if infringement occurs, or to support a licence agreement. It is also possible to pursue a rapid UK Application of this type while proceeding also with international Applications.

1.9 Other Countries

So far as other countries are concerned, as noted above, the filing of a UK Application in effect gives a twelve-month option period for filing Patent Applications elsewhere. Patents operate mainly on a national basis, with a Patent in a particular territory giving its owner rights only in that territory. There are a number of international arrangements which aid filing the applications.

Prior to the end of twelve months after filing an initial Patent Application, it is necessary to decide which countries should be covered. Any foreign Applications must be filed within twelve months from the original application date, to retain the priority of that date. The priority is essential if the invention has been disclosed on any non-confidential basis.

2.0 Patent Protection - Preparation for Meeting with Patent Attorney

Although it is not always possible, it is recommended that inventors prepare thoroughly for a meeting with patent specialists. This helps ensure that:

- (i) Sufficient information is provided to the Patent Attorney;
- (ii) The Patent Description and Claims can be written to take account of possible modifications and variants;
- (iii) The Patent Application is dealt with as cost effectively as possible;
- (iv) The best possible protection for the invention is obtained.

The preparation for the meeting should where possible include:

- (i) The collection and preparation of a brief summary of all known relevant publications and products and a summary of the technical problems with prior systems.
- (ii) Where appropriate, preparation of sketches of the invention including basic diagrams, graphs and tables. Drawings can be freehand and informal as long as they are clear and uncluttered.
- (iii) The preparation of a list of key words and terms in the form of a glossary.
- (iv) List as many ways as possible of:
 - a. Putting the idea into practice.
 - b. Using the invention for commercial gain.
 - c. Improving on the original idea.
- (v) A description of the best way in the inventor's view of implementing the invention.
- (vi) A description of the advantages of the invention and its use(s).

Meetings with Patent Attorneys can be very informal, and may take place at a very early stage of a particular project, so that they may not result in the preparation of a Patent Application in the short term. It is still advisable, however, to consider the above matters prior to the meeting.

It should be emphasised that the initial filing of a Patent application will usually be influenced by the following considerations:

- (i) Is the invention commercially interesting?
- (ii) Is the invention new?

3.0 Patent Protection - Key points for meeting with Patent Attorney

The Patent Attorney will usually be knowledgeable about the inventor's field of study but may not be an expert in the inventor's specialised research area.

In order to get the best out of the meeting:

- (i) The inventor should be prepared to explain the invention at a reasonably basic level, e.g. don't assume that the Patent Attorney knows the area of research in detail.
- (ii) Discussions relating to the actual embodiment of the invention should not be restricted to the "preferred embodiment" - all possible variants should be highlighted.
- (iii) Any existing physical embodiments should be shown along with relevant files, research papers etc.

In deciding on the territory to be covered, it should be borne in mind that a Patent in any particular country gives the right to prevent others making, using or selling the patented goods in that country. Thus, the countries of greatest interest are sometimes those with the greatest manufacturing capacity or, more often, the largest markets for the product.

4.0 Activity after Inventor's meeting

Following the meeting, the Patent Attorney has a number of options:

- (i) Recommend that the inventor undertakes further research or information gathering for review at a set date in the future, emphasising the need to maintain confidentiality.
- (ii) Prepare a draft of the Patent application for review by the inventor.

If option (ii) above is adopted, the papers will be filed at the UKIPO subject to any comments from the inventor. If required, the Application will be filed with claims and a search request, so that the UKIPO carries out an early search to determine whether the invention is new.

Within a 12 month period from the preparation and filing of an Application, the filing of an updated or complete Application, Claims and Abstract is required, unless the initial application was filed with claims and there have been no changes to the invention. The updated Application will be prepared by the Patent Attorney after further discussion with the inventor.

The process of Patent prosecution over the next 2-4 years will also require input from the inventor. Following the issue of the search report, the Patent Examiner will often reject some or even all of the Claims based on the results of the search. The Patent Attorney will receive this report, termed an Official Action, setting out the objections and setting a date for a response. The inventor is asked to comment on the objections and may need to provide information to show the differences between the invention and the various references cited by the Patent Examiner.

The Patent Attorney can then prepare a response that will modify the scope of the original claims or ensure that the Examiner has interpreted it correctly.

The Examiner will consider the claimed invention again and could allow or reject some or all of the Claims.

The process will continue until such time as the Claims required are allowed or there is a final rejection.

The inventor's support in this process is essential in assisting to obtain a Patent with Claims that are not too narrow in scope and contribute to a commercially useful final Patent.

5.0 Patent Protection - Key elements of a Patent

The intention of a Patent is to disclose an invention to the public including information on how it can be used and what distinguishes this particular invention from what has been done before.

In addition to a written specification, the Patent may include drawings and tabulations. The written specification will normally include several sections:

- (i) Field of the invention.
- (ii) Background information.
- (iii) Summary of the invention.
- (iv) Description of associated figures, e.g. drawings, graphs and tables.
- (v) Detailed description of the invention, e.g. how it works and could be used.
- (vi) Claims.
- (vii) Abstract.

(i) Field of the invention.

This describes in a few lines the general field of the invention, and is used by the UK-IPO to allocate the application to specific examiners.

(ii) Background Information

The purpose of the background information is to describe what has been done before and highlight what has prompted the invention - normally a "problem" requiring to be solved. The background information is termed 'prior art' and this section of the specification is prepared on the basis of the inventor's knowledge of, e.g. articles in journals and other published research forming part of the background information the invention may relate to. Restrictions or shortcomings of the work referenced can be discussed and the advantages of the inventions described.

By addressing each part of the prior art the inventor is to a large degree anticipating the process undertaken by a patent examiner in reviewing the patent claims.

(iii) Summary

The summary of the invention will normally describe in general terms what the inventor regards as the invention that provides the advantages over existing technology.

(iv) Description of associated figures, e.g. drawings, graphs and tables.

Most applications require drawings or figures to describe clearly the invention.

(v) Detailed Description

The detailed description should contain enough information for a person 'skilled in the art' to understand how the invention could be put into practice. It should fully describe at least one form of the invention and how it can be implemented. Where appropriate the inventor should provide additional items to assist in understanding the invention. These could include sketches, schematics, graphics and/or chemical or mathematical formulae as appropriate.

(vi) Claims

The Claims summarise the key elements of the invention and should be consistent with the written information provided. They define the monopoly which the patent gives. The first claim is normally the broadest with subsequent claims narrowing the scope of protection for the invention. In providing information to a Patent Attorney, the inventor should give considerable thought to the

end use of the invention. Patents with Claims that are too narrow are normally easier to get but may have limited commercial value. The Patent Attorney will work with the inventor to determine the broadest acceptable Claims and therefore hopefully obtain the most scope for commercial applications.

(vii) Abstract

The Abstract is a brief summary of the invention which appears on the front page of the published application.

6.0 Patent Application - Checklist of information required

The need for detailed technical information from the inventor and for a full understanding by the Patent Attorney means that the preparation of a Patent Application will very frequently involve direct inventor/Patent Attorney contact. However, the more written information that the inventor can provide to start with the quicker the Patent Attorney can begin the preparation of the specification.

Further Information

The Application may be made in the name of one or more individuals and/or more corporate bodies. The inventor(s) named must be the actual devisor(s) of the invention. In the most common case, the applicant is a company and the inventor is an employee of the company.

Please supply:-

1. Applicant's full name and address []
2. Inventor's full name and address []
3. Relationship between Applicant and inventor,
e.g. employer/employee []

Technical Information

The Patent Application must contain sufficient technical information to allow a person of reasonable competence in the relevant technical field to put the invention into operation.

Please supply:-

1. All technical information relating to the invention
which is readily available, including technical
write-ups, drawings and photographs []
2. Brief details of existing similar products or processes []
3. An indication of any disadvantage of the existing products/processes []
4. A brief indication of the advantages given by the invention
and/or the ways in which the disadvantages of the previous
technology are overcome []

EUROPEAN PATENT AND TRADE MARK ATTORNEYS

UNITED KINGDOM**ABERDEEN**

Unit G10
The Enterprise Centre
Exploration Drive
Aberdeen, AB23 8GX
Tel: +44 (0)1224 706 616

BELFAST

5th Floor, The Potthouse
1 Hill Street
Belfast, BT1 2LB
Tel: +44 (0)2890 320 441

GLASGOW

Scotland House
165-169 Scotland Street
Glasgow, G5 8PL
Tel: +44 (0)141 307 8400

LONDON

Corinthian House
17 Lansdowne Road
Croydon
London, CR0 2BX
Tel: +44 (0)20 8688 3490

LONDON CITY

CityPoint
1 Ropemaker Street
London, EC2Y 9HT
Tel: +44 (0)20 7153 1255

NEWCASTLE

Collingwood House
3 Collingwood Street
Newcastle Upon Tyne
NE1 1JW
Tel: +44 (0)191 211 3550

YORK

Unit F3, IT Centre, Innovation
Way, Heslington, York, YO10
5NP, United Kingdom
Tel: +44 (0)1904 898 881

FINLAND**HELSINKI**

Mannerheimintie 12B 5th
Floor, 00100 Helsinki
Finland
Tel: +358 (0)92516 6388

FRANCE**NICE**

Immeuble Atlantis
55 Allée Pierre Ziller
06560 Valbonne
Sophia Antipolis, France
Tel: +33 (0)4 97 21 52 00

GERMANY**MUNICH**

Bernhard-Wicki-Straße 7
D-80636 Munich,
Germany
Tel: +49 (0)89 3090 71100

IRELAND**DUBLIN**

Unit 1, Block 8
Blanchardstown Corporate
Park, Cruiserath Road
Blanchardstown, Dublin 15,
Ireland
Tel: +353 (0)1 882 9400

ITALY**MILAN**

Piazza Borromeo 12
Milan 20123
Italy
Tel: +39 (0)2 87 39 85 50

NICARAGUA**MANAGUA**

Embajada de Mexico, Una
Cuadra Arriba, A la Esquina,
Casa #100, Managua,
Nicaragua
Tel: + 1 (919) 474 8300

UNITED STATES OF AMERICA**DURHAM**

4721 Emperor Blvd
Suite 430
NC 27703, USA
Tel: +1 (919) 474 8300

SAN FRANCISCO

5201 Great America Parkway
Suite 320
Santa Clara, CA 95054, USA
Tel: +1 (408) 542 2970

General Email:

mail@murgitroyd.com

General Fax:

+44 (0)141 307 8401