

European Patent Procedure Explained

Patents in Europe

When protecting an invention in Europe, you can either file a single European patent application covering 40 member states, or you can file individual national patent applications in each separate European state where you require patent protection.

In general, if you require patent protection in more than a single national European state, it is likely to be more cost effective to file a European patent application under the European Patent Convention.



European patent applications can take quite a long time to process. The average prosecution from filing to a decision on grant is around 44 months.

Prosecution can be quicker in some individual national states. This is particularly true in the United Kingdom and Republic of Ireland.

Additionally, short term patents (known as petty patents, or utility models), where there is generally a novelty requirement and either no inventive step requirement, or a lower level of inventive step requirement than for a European patent or a standard national patent, are available in some European states, for example Germany and Italy. These may have a cost or speed advantage over a standard national patent, or a European patent.

However, for most inventions originating outside Europe, the European patent under the European Patent Convention, is the primary form of protection.

European Patent - Overall Procedure

From filing to grant, the stages are:

- **Filing the application:** A full description, claims, abstract and where appropriate drawings, must be supplied at the point of filing. An application fee and search fee are also due on filing. The application can be filed in any official language of a member state, but a translation into English, French or German, the three official languages of the European Patent Convention, must be supplied shortly after filing. Around 80% of European patent applications are prosecuted in the English language.
- **Search:** The European Patent Office issues either a search report, or an Extended European Search Report (EESR). If a standard search report is issued, this simply gives a list of prior art documents, with an indication of the relevance for novelty and inventive step or otherwise, denoted by a "X", "Y", or for less relevant documents, "A".

Where an Extended European Search Report is issued, there is also a commentary which is similar to a substantive examination report.

- **Publication:** This occurs on or shortly after 18 months from the earliest priority date. Publication can be brought forward by specific request.
- **Translation of the claims as published (provisional protection):** Optionally, the applicant can file translations of the claims as published in the national language of each of the member states which have an official language other than the language of filing. This activates the time window for collecting damages or an account of profits in each state where claims translations are filed, to run from the time of filing translated claims during the patent pending phase.
- **Substantive examination:** The European Patent Office issues a substantive examination report. A typical reply period is 4 months from date of issue although extensions are available. On the first substantive examination it is normal to receive objections based on prior art, and in many cases, there would be minor formal matters such as placing references numerals in the claim, placing the claim into the preferred European two part form including the phrase “characterised in that” or “characterised by”.
- **Grant procedure:** The European Patent Office issues a communication setting out the text in which it intends to grant the patent (the Rule 71(3) EPC communication). Translations of the granted claims only into two other languages (usually French and German) need to be filed so that the granted specification has claims in all 3 European languages.
- **National validation:** After grant, the European patent must be “validated” in each national member state in which protection is to continue. Typically validation consists of filing a translation into the national language of that state and paying official fees to the national patent office. Having now left the European Patent Convention procedure, the European patent is now a bundle of individual national patents, and renewal fees are payable on each national patent separately.

According to the London Agreement, some states have a reduced requirement for national validation, which means that they relinquish the need to file a translation of the specification, or a translation of the claims. Notably, the UK, Germany and France will accept the European patent as granted without the need for further translations.

- **Opposition:** The patent is open to opposition for a period of 9 months from the date of grant. Oppositions occur in around 5% of European patent applications. The procedure is mainly written and around half of all oppositions are determined on the state of the written submissions on file without the need to visit the European Patent Office. The remaining oppositions result in an oral hearing at one of the EPO offices in the Netherlands, Germany or Austria.

Amendments During Prosecution

The European Patent Office will accept patent specifications in many written formats at the point of filing. However, the European Patent Office will require amendment to comply with European Patent Convention format after filing. Typical amendments include:

- Including a short description of the closest prior art item in the description. Provided that this is brief and factual, and relates solely to the prior art, this is not classified as “added matter”.

- Conversion of the claims to the European two part format. The claim is divided by the phrase “characterised in that” or “characterised by”.
- Inclusion of reference numerals into the claim. The reference numerals refer to features in the drawings, and are for ease of understanding. They place no limitation on subsequent interpretation of the claim.
- Generally, the summary of invention section needs to be brought into conformity with the amended claims prior to grant.

Form and Content of the Specification

The European Patent Office likes to see an explanation of the technical problem addressed by the invention, an explanation of prior art attempts at solving the problem, and the solution to the problem (being the claimed invention). Not all inventions fall into the problem-solution category, or arise out of a problem-solution type analysis, but where appropriate, the problem-solution format should be used.

The European Patent Office does not rigidly apply the problem-solution methodology, and typically many applications originating outside Europe are not drafted in the problem-solution format, but are still perfectly well accepted by the European Patent Office.

Patent specifications drafted in the international format under the Patent Cooperation Treaty Regulations are acceptable by the European Patent Office and indeed this is a preferred format.

Form and Content of the Claims

The European Patent Office prefer the European two part claim format, with the claim separated by the phrase “characterised in that”.

All technical features appearing before that phrase are features which either alone or in combination can be found in the prior art. Technical features appearing after the phrase are typically those which are particularly relevant to novelty or inventive step, although strictly, the novelty and inventive step is determined by the content of the claim as a whole.

In order to contain EPO workload, the European Patent Office charge excess claim fees for the 16th and subsequent claims up to 50. The official fee is a discouraging €210 per claim. For the 50th and subsequent claims, the official fee becomes more discouraging at €525 per claim. The fee structure strongly encourages claim sets of 15 or fewer.

Excess claims fees need not be paid on filing, however, any claims for which fees have not been paid will not be examined and will need to be deleted from the application prior to grant.

Unity of Invention

All claims fall into one of two categories, either apparatus or method. Apparatus and method claims must involve the same inventive concept. It is possible to have other subcategories of independent claim including:

- Product of a process;
- Apparatus for carrying out the method.

Similarly, for transmitter-receiver type inventions, both the transmitter and the receiver can be claimed as independent claims, provided they contain the same inventive concept.

National Validation Requirements

After grant, the European patent continues as a bundle of individual national patents, each of which has to be individually activated in a member state in order to avoid lapse. Renewal fees are payable in each individual national state until the end of the 20 year term from filing. The original filing date of the European patent is maintained for each of the national states.

The translation requirements differ from state to state, and there is a general trend towards reduction of translation requirements.

The present situation is set out in the following table.

Implementation of the London Agreement in its Contracting States

States dispensing with translation requirements (Article 1(1) of the London Agreement)	States requiring that the <i>description</i> of the European patent be supplied in the official language of the EPO prescribed by that state (as specified within the brackets) (Article 1(2) of the London Agreement)	States dispensing with translation requirements for the <i>description</i> (Article 1(2) of the London Agreement)	States requiring translation of the <i>claims</i> of the European patent into one of its official languages be supplied (as specified within the brackets) (Article 1(3) of the London Agreement)
France Germany Liechtenstein Luxembourg Monaco Switzerland United Kingdom	Croatia (English), Denmark (English), Finland (English), Hungary (English), Iceland (English) Netherlands (English) Sweden (English)	Latvia Lithuania Macedonia Slovenia	Croatia (Croatian) Denmark (Danish) Finland (Finnish) Hungary (Hungarian) Iceland (Icelandic) Latvia (Latvian) Lithuania (Lithuanian) Macedonia (Macedonian) Netherlands (Dutch) Slovenia (Slovenian) Sweden (Swedish)

European Unitary Patent and the Unitary European Patent Court

You may also have heard of a Community patent (now called an EU patent), which is a unitary patent covering all states of the European Union at once. This patent has been proposed for over 3 decades, is still not available, and is unlikely to be available in the immediate future, although there have been recent developments on agreeing the location of the Unitary European Patent Court which will be located in Paris, France with divisions in London and Munich.

The EU patent is the patent equivalent of a Community trade mark or a Community registered design, covering the whole of the European Union in a single registered right.

There have been proposals to tag the EU patent on at the end of the current European patent (European Patent Convention) as a designated territory, but these proposals have not yet come to fruition and are bogged down in political negotiations.

If the EU patent becomes a designated state/territory under the present European Patent Convention, then this would effectively remove the need for validation in each European Union member state, since it could all be done with a single European unitary patent, as a designated state of the European Patent convention patent, saving significant translation and subsequent renewal fee costs for patentees in Europe.

Alternatively, if the European Unitary patent ever does come into existence, it could effectively replace the current European Patent (under the EPC) altogether.