



# A short guide to Software patents

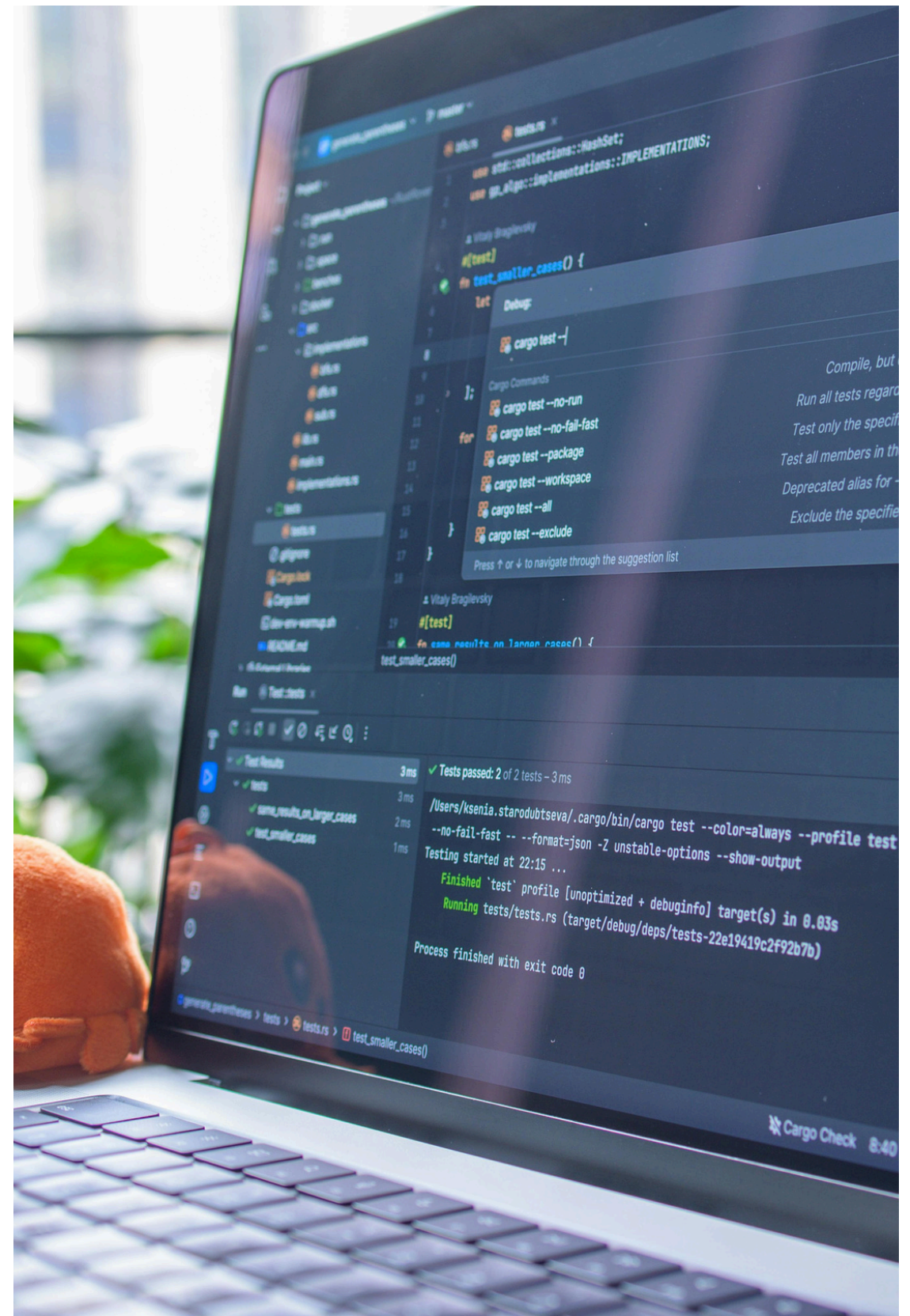
Software patents remain one of the most complex and contested areas of intellectual property law, particularly in the UK and Europe where the legal framework differs significantly from jurisdictions like the United States. While computer programs "as such" are explicitly excluded from patentability under the European Patent Convention, software innovations that provide a technical contribution to a known art can still qualify for patent protection.

### Are new ideas involving computers or new methods of doing business patentable?

The answer is yes in many cases, but not in all. It depends on your idea and where you want to obtain protection for this idea. Many thousands of patents have been granted in these fields. Often the existence of a patent, or even only a patent application, can provide a vital head start over competitors.

### Can I rely on copyright protection to protect my software?

Copyright does provide a degree of protection for computer software, but the protection is not as strong as patent protection. This is because copyright is only infringed by direct copying (rather than independent creation) which can be difficult to prove, and because copyright also cannot generally protect the fundamental new ideas and concepts that may lie behind a new piece of software. The purpose of patent protection, on the other hand, is to protect ideas and concepts, and not just the expression or implementation of those ideas.



### What makes computer-implemented inventions patentable in Europe?

The test applied by the European Patent Office (EPO) requires inventions to involve technical means and to provide a technical solution to a technical problem in order to be eligible for patent protection. This test is not usually a problem for inventions relating to improvements to computer hardware or computer-controlled devices and machines. However, where an invention lies in new software, the patent examiner must decide whether the improvement is sufficiently "technical".

It should be noted that European Patents granted by the EPO can continue to cover the UK, even after Brexit.

### Is the law the same in all countries in Europe?

Yes and no. Although the laws of individual countries in Europe should be aligned with the law of the EPO, there are subtle differences. However, as a general rule, applying the principles of the EPO gives a fair indication of patentability.

## What sort of software can be patented in Europe?

Generally speaking, the EPO allows patent protection in the following areas:

- Software for controlling an apparatus or machinery.
- Software which processes data representing images or data representing other physical entities.
- Software which improves the operation of hardware, for example improved operating systems or software achieving an increase in effective memory or speed.
- Software for implementing business inventions where a “technical” problem is overcome in order to implement the invention and the invention directly solves the technical problem.
- Any other software where there are sufficient “technical” considerations involved in the production of the software, or which produces a new technical effect.

## Are artificial intelligence (AI) and machine learning (ML) patentable in Europe?

In many cases, yes. The EPO allows patents for the use of AI and ML to achieve a specific technical purpose, or when the invention is a specific hardware implementation of an AI/ML technique.



## Is it easier to obtain patent protection for computer-related inventions in the USA?

Following a number of decisions in the USA relating to computer-related inventions in recent years, this is no longer a straightforward “yes”. The United States Patent and Trademark Office (USPTO) has become stricter when examining patent applications for computer-implemented inventions and it is not uncommon for the USPTO to object to inventions that the EPO has found to be acceptable.

## What is the test for computer-related inventions in the USA?

In the USA, the invention must not be “abstract”. What is and is not abstract has been the subject of many decisions with limited guidance being provided by the courts.

## What sort of software can be patented in the USA?

Software that can be protected in Europe is generally also possible to protect in the USA. It may be easier to protect certain types of computer-related invention in the USA than in Europe, but in some cases it may now be easier to protect computer-related inventions in Europe than in the USA.

## Can I obtain patent protection in Europe for a new method of doing business?

The EPO does grant patents relating to business methods, but only if the invention meets the “technical” criteria mentioned above. This means that the business method must be implemented using technical means, such as a computer system, and the implementation of the invention must provide a technical solution to a technical problem. The EPO does not grant patent protection for new business methods in isolation, where no technical means are involved in implementing the method.

## Where should I file my first patent application?

A patent application filed in the UK establishes a priority date, which is effective in other countries, such as the USA, provided that a patent application is filed in the foreign country within one year of the UK filing date. It is also possible to file an application in another country without first having filed an application in the UK, provided that the subject matter of the application does not fall within certain sensitive categories. (For basic information on the procedure for obtaining patent protection internationally, see our short guide to patents).

## If I patent my software, when will my ideas be published?

In most countries, including the UK, patent specifications are published 18 months after the priority date (being the first date on which a patent application is filed). However, if you decide not to continue with patent protection, it is possible to withdraw a patent application to prevent its publication.

## If I patent my software do I have to publish my source code?

No, there is no requirement for the patent specification to include the source code. In some cases, however, we will recommend that some be included in the patent specification in order to ensure that the specification contains sufficient information to allow the invention to be performed.

### **Marks & Clerk advises on all aspects of intellectual property.**

For more information and to find out how we can help you protect and exploit your designs, contact your usual Marks & Clerk attorney or solicitor, or a member of our designs team at your nearest Marks & Clerk office.

Short guides on other areas of IP are also available.