Software and business method exclusions in the UK, at the EPO and in the United States

Background and summary

The European Patent Convention (EPC) is the statute that governs how the European Patent Office (EPO) operates and processes patent applications. The EPC contains a number of so-called exclusions (I.e., areas of subject matter for which the EPO will not grant a patent).

Article 52 EPC contains most of the exclusions and states that *'schemes, rules and methods for ... doing business, and programs for computers…as such'* do not count as inventions. These are the main exclusions that are relevant to this area but there are others. As such the EPO should not grant a patent if the subject matter falls into these exclusions. The UK patent act has the same exclusions as those of the EPO.

In both cases, the apparent blanket ban on software or business method patents is tempered by the caveat that such things are excluded from patentability *'only to the extent that a patent or application for a patent relates to that thing as such'*.

The US patent act does not explicitly refer to business methods or software, but states that abstract ideas, physical phenomena, and laws of nature are not patentable, amongst other exceptions. The 'abstract ideas' exclusion can present problems for some, although by no means all, software and business method patents.

What does and does not fall into these exclusions can be difficult to establish and it is necessary to look at the case law to determine this. However, the case law is complex, and the approaches taken have changed considerably over time.

Opinions of the EPO and UK on subject matter patentability are based on different tests but the outcome is often aligned. The US has varied more over recent years, but generally remains more likely to grant patents for innovations in these areas than the EPO or UKIPO.

Current EPO approach

The first step is to make sure that is a technical element in the claim. If there is at least one technical element present (for example a computer), the application is not excluded as relating to software *'as such'* etc., The first hurdle can therefore be avoided quite easily.

The next step in the EPO's approach to patentability is to assess the inventive step of an application. To assess inventive step, the claim is divided into non-technical and technical subject matter. The non-technical subject matter is then excluded from inventive step consideration. Worse than this, the skilled person is deemed to know all of the non-technical detail. Therefore, if a standard computer system implementing a new and inventive business method is claimed, the skilled person is deemed to know the business method. Whether or not the claim is inventive would then come down to whether or not the skilled person could readily implement the business method, or if technical challenges would need to be overcome to do so.

In the case of a computer programmed to perform a business method, this analysis often leaves a standard computer as the only technical matter in the claim. The claim is then held to be obvious as computers are now well known and consequently the application is refused as lacking inventive step. Thus, the EPO typically now no longer rejects applications as being a business method or a computer program (as long as there is at least one technical integer in the claim). However, applications in this arena are often refused as being obvious instead.

The EPO assesses obviousness by considering whether an application provides a technical solution to a technical problem. An allowable application will provide a technical solution to a technical problem.

An interesting case was an application to protect an auction method by Hitachi (decision reference: T 0258/03). The Hitachi application was refused as it provided a non-technical solution (it was a business solution) to a technical problem. The application related to a networked auction. The problem was that at the close of the auction there could well be a bandwidth problem due to the likely increased number of bids. This was held to be technical. However, rather than providing a technical solution to this (such as a mechanism to provide further bandwidth, compress the data, or similar) the solution taught by Hitachi was to change how the auction was provided. This was non-technical and thus the application was refused as being obvious since the non-technical aspect could not be used to contribute to the inventive step.

Current UK approach

As mentioned above, the approaches taken in the EPO and in the UK, despite the same over-riding law, differ significantly, but the results are usually the same. In the UK, the four-step test used was developed in the case Aerotel & Macrossan in 2006:

1. Properly construe the claim
2. Identify the actual contribution
3. Ask whether it falls solely within the excluded subject matter
4. Check whether the contribution is technical in nature

In addition, there are five signposts that can be used to identify a technical contribution; these were introduced in the case AT&T Knowledge Ventures and further developed in HTC v. Apple:

1. whether the claimed technical effect has a technical effect on a process which is carried on outside the computer

2. whether the claimed technical effect operates at the level of the architecture of the computer, that is to say whether the effect is produced irrespective of the data being processed or the applications being run

3. whether the claimed technical effect results in the computer being made to operate in a new way

4. whether the program makes the computer a better computer in the sense of running more efficiently and effectively as a computer

5. whether the perceived problem is overcome by the invention as opposed to merely being circumvented

In essence, the approaches of the EPO and the UK both come down to identifying 'technical' features of the claim and what they do. This is phrased as a *'technical effect'* in the UK and as a *'technical solution to a technical problem'* in Europe. The reason given for rejection differs (being 'obvious' in Europe, being excluded subject matter in the UK), but the likelihood of rejection is similar.

At either the EPO or UKIPO, an application lacking in technical detail will struggle. If the detail is present, the question is whether the information can convincingly be presented using the relevant test.

As technology continues to develop rapidly in this field, further discrepancies and clarifications of interpretation can be expected. Software is an essential tool in an ever-increasing number of areas, so it is understandable that there is a strong business incentive to obtain patents.

Current US approach

Historically, business methods and software have been readily patentable in the US as long as the claim explicitly included a device, such as a computer. The presence of a computer was enough for the patent application not to be excluded on the grounds that it was for an abstract idea.

In the Alice Corp. case referenced below, automating an abstract idea on a generic computer was not enough to make the idea eligible for a patent. However, little guidance was given on what constitutes an 'abstract idea', therefore leaving it open to further debate in court.

Alice Corp. Pty. Ltd. v. CLS Bank Int'l 573 S. Ct. (2014) [US]

Recent cases suggest subject matter that defies a concrete and specific application of an abstract idea is patentable in principle. It is necessary to demonstrate if a specific element performing a specific function in a specific way, may be providing a specific solution to a specific problem. It helps to identify the technical character perhaps along the lines of the EPO test).

In terms of what this means for applicants and patent proprietors, strategies based on the previously almost-guaranteed availability of US business method patents may no longer be appropriate. Applicants and patent practitioners must consider what the invention involves that makes it more than simply an abstract idea, and if there is anything special and unusual about the necessary computer implementation.

Granted patents may also now be more open to invalidity proceedings if they are seen as relating to the generic computer implementation of an abstract idea, making the value of a portfolio containing them questionable until further decisions are issued to demonstrate how the law will be applied in practice.

Conclusion

For software or business methods to be patentable, a novel and inventive *technical effect* is required in the UK and Europe. There is significant variability in what classes as 'technical' from one jurisdiction to another, so careful consideration of filing and drafting strategies is needed to effectively protect ideas relating to software and business methods. Until recently, implementing any business method or computer program on a computer or other hardware was sufficient to make these patentable in the US.

The US is still the most lenient of the three jurisdictions discussed, although the scope of patent eligible subject matter relating to software and business methods has been reduced by recent court decisions. The UK and Europe generally agree on which software and business method applications are patentable, although the approaches that must be followed in arguing the case differ significantly.

Elsewhere in the world, software and/or business methods are patentable, and an application filed in the UK (or Europe, or the US) can be used as the 'priority' application for later filing in more lenient countries, such as Japan, South Korea and Australia, even if the UK application is refused.

What next?

If you would like more information, then please get in touch. You can email us **info@barkerbrettell.co.uk** or call us on **+44 (0)121 456 0000.**