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Intellectual Property

PATENTS

Software and business method exclusions in the UK, at the European Patent Office 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 applications. The EPC contains a number of so-called exclusions; i.e. areas of subject matter to which the EPO will not grant a patent.

Article 52 EPC is the Article that 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.

Since 2007, the opinions of the EPO and UK on subject matter patentability have been quite stable and aligned, although the tests that have developed in the case law differ. The US is seen as much more likely to grant software and business method patents, although some recent court decisions in the US have narrowed the scope of eligible subject matter. Patentability in the US is therefore becoming more similar to that in the UK and Europe.

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 left 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.

A helpful way of considering this is to consider that an application must provide **a technical solution to a technical problem**. Both of these must be provided; if they are, the claim should pass the obviousness test.

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; and
4) Check whether the contribution is technical in nature.

In addition, there are five "signposts" which 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 :

i) whether the claimed technical effect has a technical effect on a process which is carried on outside the computer;
ii) 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;
iii) whether the claimed technical effect results in the computer being made to operate in a new way;
iv) whether the program makes the computer a better computer in the sense of running more efficiently and effectively as a computer;
v) 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 present, the perception that it is easier to obtain "software patents" at the EPO than at the UK-IPO remains. The gap, if existent, is certainly much reduced from the late 1990s.

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

Current US approach

Until quite recently, business methods and software were seen as 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. This was due to the so-called "machine-or-transformation test", under which no process is patentable unless it is tied to a particular machine or transforms an article to another state or thing.

In Bilski v. Kappos , the "machine-or-transformation test" was rejected as the sole test of subject matter eligibility, but the test was described as a "useful and important clue". In Bilski, and in the subsequent Alice Corp. case , it has been stated that automating an abstract idea on a generic computer is not enough to make the idea eligible for a patent. Little guidance was given on what constitutes an "abstract idea", however, leaving this open to further debate in court.

Bilski v. Kappos, 130 S. Ct. 3218 (2010) [US]
Alice Corp. Pty. Ltd. v. CLS Bank Int'l 573 S. Ct. (2014) [US]

The court indicated that the claims would be more likely to be classed as patent-eligible if they claimed an improvement to, "*the functioning of the computer itself… [or] in any other technology or technical field*" (Alice Corp.). This again brings the US a little closer to Europe, as it seems that both jurisdictions will require a **technical "inventive concept" or improvement** if an invention is to be patentable.

In terms of what this means for applicants and patent proprietors, strategies based on the 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?

Get in touch with your usual Barker Brettell contact or John Lawrence, our senior partner. We would be delighted to hear from you.