

### Patentability of Business Method & Software Inventions

In principle, patent protection is available in all fields of technology. Patents are therefore available for new ideas in established technical fields, such as engineering, pharmaceuticals, electronics, etc. However, there is a debate about the extent to which patents should be available for other commercially important concepts, such as ways of operating businesses and software.

This sheet gives general guidance about the current approach of the United States Patent and Trademark Office (USPTO), the European Patent Office (EPO) and the UK Intellectual Property Office (UK-IPO) in this area.

#### Liberal approach of the USPTO

Much of the current debate is fuelled by a difference in what can be patented in the US compared with what can be patented in Europe. In recent times the US courts have adopted a liberal approach to what can be patented: since a landmark decision (*State Street Bank & Trust Company v Signature Financial Group, Inc.*) in 1998, the USPTO have issued patents for so-called 'pure' business and financial methods.

Furthermore, the USPTO's attitude to software-based ideas is also permissive. In general, the USPTO will grant patents for numerical methods (e.g. encoded in software) where a 'useful, concrete and tangible result' is obtained.

#### Excluded subject matter in Europe

In contrast, European patent law explicitly excludes certain ideas from patent protection. These exclusions include methods of doing business, methods of playing games and computer programs. Understanding how these exclusions are interpreted is complicated, and is illustrated in examples given later.

#### Restrictive approach of the EPO & UK-IPO

The difference between the European and US approaches and the evolving nature of the interpretation of the European exclusions have led to many companies choosing to file patent applications for business methods and software inventions in Europe, perhaps in the hope that the European approach will move closer to the US approach in the future. As a result, the European approach is being tested regularly both in national courts and before the EPO. In recent years, both the EPO and the UK-IPO (via the UK Court of Appeal) have adopted new approaches to assessing whether ideas relating to software or business methods are patentable.

Both the EPO and UK-IPO are restrictive compared with the USPTO. Both offices believe strongly that 'pure' business methods should not be patentable. This area of law is unlikely to change soon. Software-related ideas are more complicated: both the EPO and UK-IPO believe that a piece of software code or an algorithm in isolation is not patentable, but they acknowledge that

the functioning of computers (and therefore computer programs) are important elements in many inventions for which patents are allowed. The question is therefore what else does a software-based idea need to make it patentable?

Put simply, the answer is that to be patentable the invention must be an advance (e.g. a new feature, component or method step that provides a solution to a technical problem) which resides in the **technology** underpinning the idea in a way that is not dependent on the context in which that technology is used.

#### Different assessment techniques at the EPO & UK-IPO

The approaches taken by the EPO and UK-IPO in assessing whether or not an invention is excluded from patentability because it relates to a business method or a computer program are different.

The UK-IPO assesses whether an invention relates to non-patentable subject matter as an independent step from other patentability requirements (e.g. novelty and inventive step). In contrast, the EPO combines their non-patentable subject matter test with their assessment of whether or not an invention is obvious. These different assessment techniques can mean that the reasoning behind rejections and therefore the arguments required to overcome such rejections differ for the same invention, depending on whether it is being prosecuted at the UK-IPO or the EPO.

#### Examples

The ideas described above can be more easily understood with reference to examples. Three examples of inventions where these assessments are common are given below.

#### Business methods

In general it has always been the case that inventions which have a business context are patentable as long as some sort of technical feature can be identified and claimed. For example, a method of stock control involving automatic monitoring of sales and corresponding automatic ordering would in principle be patentable if the technical implementation (e.g. the infrastructure

or data manipulations required for the idea) was new and inventive in itself. As a second example, a method of selling music via the Internet might be patentable if the technical arrangement (e.g. the means for interaction between a music database and customer) was new and inventive in itself.

However, in the absence of new and inventive features in the technology which implements the 'business method', i.e. if the only new features are dependent on the business context of the idea, neither the EPO nor the UK-IPO will allow a patent. So, in the above examples it would not be possible to protect the mere idea of monitoring sales to enable automatic ordering, neither would it be possible to protect the mere idea of selling music over the Internet. In contrast, such ideas (if new and non-obvious) could in principle be patented at the USPTO.

Furthermore, the automation of existing business methods using conventional technology (e.g. to make use of the Internet) is unlikely to yield a patentable invention at the EPO and UK-IPO unless there is something new about **how** the technology is made to operate that is independent of the business context.

#### Financial methods

New types of financial product, or schemes for selling products or services, or methods of accounting (e.g. tax optimisation methods) are not patentable at the EPO or UK-IPO. Such ideas are viewed as methods of doing business, and so the same considerations as those outlined above apply. In other words, it should only be possible to patent aspects of such products or schemes if they require some new technical infrastructure or perhaps some new technical way of gathering and processing information (i.e. data manipulation). To succeed, the new technical aspect must not be dependent on the financial context for its novelty.

#### Software

The practice of the EPO and UK-IPO is (and has always been) that a piece of software code or algorithm on its own is not patentable - it is a program for a computer as such. In contrast, the USPTO may grant a patent for such a concept as long as a 'useful, concrete and tangible result' is obtained.

However, the practice of the EPO and UK-IPO only has a limited effect because the operation of software or the use of an algorithm in a technical process is in principle patentable at the EPO and UK-IPO.

For example, a new algorithm used to control the operation of a steel mill in order to produce better quality steel might be patentable in that context. Similarly, certain features of the operation of a new piece of software would be patentable if e.g. they enabled the computer processor to process data more efficiently. However, unless the computer hardware itself is new and inventive, or the software code operates the computer in some new, better fashion, then it will not be the computer nor the software which is potentially patentable. Such cases succeed because there is usually some underlying idea or method which is patentable in its own right (e.g. new steps in the steel mill operation method in the example given above).

For example, in the biotechnology industry it is common to utilise software to screen vast numbers of chemical compounds in order to determine according to preset criteria the most likely compounds for further study. Often the software will be a standard commercially available package utilising various known statistical techniques. In such a case, it is generally not the software itself nor the method of using the software which may be patentable. Rather it is the design criteria of the selection process (i.e. the method of screening) which may be patentable if the design criteria produce a useful result e.g. a more limited number of compounds which are more worthy of further research.

As a second example, complex financial systems may use computers and software to monitor the movements of large numbers of stocks and shares in order perhaps to recommend buying or selling activity according to predetermined criteria, or perhaps to calculate types of transactions to be carried out according to whatever criteria have been set for a particular fund. Often the computers or the software will not be patentable because they are not in themselves new. In contrast to the biotechnology example given above, in this case even if the underlying design criteria of the fund management method are new no patent will be allowed. The difference is that in the biotechnology example the screening steps are deemed to involve technical considerations i.e. the selection of compounds which may for example lead to new drugs or treatments, whereas in the financial example the steps are deemed to involve purely commercial considerations, and are therefore considered to be merely methods of doing business.

This information is simplified and must not be taken as a definitive statement of the law or practice. For more information on Mewburn Ellis LLP and other intellectual property matters, please contact us or visit our website at [www.mewburn.com](http://www.mewburn.com). Mewburn Ellis LLP is a Limited Liability Partnership registered in England (no. OC306749). Registered Office at 33 Gutter Lane, London EC2V 8AS

#### London

33 Gutter Lane  
London  
EC2V 8AS

Tel: 020 7776 5300

Fax: 020 7776 5399

#### Bristol

22-24 Queen Square  
Bristol  
BS1 4ND

Tel: 0117 945 1234

Fax: 0117 926 5692

#### Manchester

Bridgewater House  
Whitworth Street  
Manchester M1 6LT

Tel: 0161 247 7722

Fax: 0161 247 7766

#### Cambridge

Newnham House  
Cambridge Business Park  
Cambridge CB4 0WZ

Tel: 01223 420383

Fax: 01223 423792