

Patent Briefing

Open Software and IP Issues:

Patenting Business Methods and Computer Programs at the EPO

We are often asked by clients and overseas associates whether it is possible to patent business methods and computer programs in Europe, particularly at the European Patent Office (EPO). This briefing paper attempts to give some guidance on this difficult subject.

THE EPO'S VIEW

To start with, it may be helpful to quote from the EPO's own guidance:

"According to Article 52(1) EPC, a European patent shall be granted for any **inventions** which are susceptible of industrial application, which are new and which involve an inventive step. Further, in accordance with Rules 27 and 29 EPC, in order to be patentable, an invention must be of a **technical character** to the extent that it must relate to a **technical field**, must be concerned with a **technical problem** and must have **technical features** in terms of which the matter for which protection is sought can be defined in the patent claim. The EPC does not give a definition of the term "invention".

It does, however, include a list of subject-matter and activities which are deemed **not** to be inventions. According to Article 52(2) EPC, methods for doing business, mathematical methods, presentations of information and programs for computers shall **not** be regarded as inventions. However, Article 52(3) EPC stipulates that this provision shall exclude patentability of the subject-matter or activities referred to **only to the extent** to which a European patent application relates to such subject-matter or activities **as such**."

Links:

- Article 52(1) EPC <http://www.european-patent-office.org/legal/epc/e/ar52.html>
- Rule 27 EPC <http://www.european-patent-office.org/legal/epc/e/r27.html>
- Rule 29 EPC <http://www.european-patent-office.org/legal/epc/e/r29.html>
- Article 52(2) EPC <http://www.european-patent-office.org/legal/epc/e/ar52.html>
- Article 52(3) EPC <http://www.european-patent-office.org/legal/epc/e/ar52.html>
- EPO http://www.european-patent-office.org/news/pressrel/2000_08_18_e.htm

THE SHORT ANSWER

Thus, if an invention (using the term in the everyday sense) can be shown to have technical character then it should be possible to claim it in such a way as to satisfy the patentability provisions of the EPC (European Patent Convention), regardless of whether it is at heart a business method or computer program.

A LONGER ANSWER

The problem with the above, of course, is in defining terms.

As noted above, the EPC does not define "invention". This difficulty can be dealt with to some extent by considering what is and is not an "invention" for the purposes of European patent law, as determined by the body of case law built up by the Boards of Appeal of the EPO.

Unfortunately a number of other terms occurring in the above extract are similarly undefined. These include: "technical", "methods for doing business", and "as such". Only by considering the scope of these terms can a realistic view be gained of the prospects for patenting an innovation relating to a business method or computer program.

WHAT IS TECHNICAL?

The meaning of "technical" is crucial because it impacts on "technical character", "technical features" and so on. European case law provides some guidance albeit in the form of circular definitions, such as: an invention has technical character if it involves "technical considerations". Examination at the EPO presupposes the existence of a problem to be solved, so that possible "technical considerations" include the identification of the problem to be solved by an invention, the means used to solve the problem, or the effect obtained by the solution of the problem (i.e., a technical effect). If we cannot define "technical" in absolute terms, at least we should be able to recognise it when we see it. According to case law of the EPO Boards of Appeal, examples of "technical activities" include:

- *Automating a known process, if this brings surprising speed or other benefits.*
- *Altering the internal operation of a computer to increase processing speed, save memory or the like.*
- *Processing data having some physical meaning (including graphic data), but not text or financial data.*

Further examples of inventions regarded as technical or non-technical by the EPO are given in "Evolving Practice" below.

METHODS OF DOING BUSINESS

The expression "method of doing business" as employed in Article 52 EPC may or may not have the same meaning as "business method" in popular usage. Arguably, "business method" is more of a catch-all term covering any kind of activity not traditionally covered by patent. However, since patentability objections at the EPO are based on the specific provisions of Article 52, it is worth considering what "method of doing business" covers.

The EPO has suggested the following definition, namely subject matter which is "concerned more with interpersonal, societal and financial relationships, than with the stuff of engineering - thus for example, valuation of assets, advertising, teaching, choosing among candidates for a job, etc....".

Such matters are often capable of being handled by a computer program, and indeed this is often the reason for wanting a patent in the first place. This in itself does not change the situation. Whether an invention is viewed as a business method or computer program is less important than whether it has technical character.

THE "AS SUCH" PROVISIO: PATENTABILITY VS. INVENTIVE STEP

Since the kinds of subject matter referred to in Article 52(2) EPC are only excluded "as such", another problem is what is meant by a business method or computer program "as such". Various Board of Appeal decisions have held that this expression is to be interpreted narrowly; in other words, claims explicitly directed to the excluded

subject matter are excluded, but not necessarily other claims including a mix of excluded and non-excluded features.

In Decision T931/95, this principle was extended to state that an apparatus claim defining a physical entity or concrete product is an invention within the meaning of Article 52 EPC, even if its purpose is for performing or supporting an economic activity (e.g. business method). A more recent decision (T258/03) has extended a similar principle to method claims. Although it may be too early to state with certainty that this is now established law, the trend is for business method and computer program cases to be objected to on inventive step grounds rather than patentability per se.

At first sight this seems like a major liberalisation of practice by the EPO; in fact, however, little has really changed. The catch is that an inventive step can only lie in the technical features of an invention, or in other words its technical character. An invention having no technical character cannot have inventive step and therefore will still be refused by the EPO.

The good news is that any technical features of a claim are unaffected by the presence of other (e.g. business-related) features. Sometimes it is helpful to separate out the technical and business aspects of an invention within a claim, to emphasise the former.

CLAIMS FOR COMPUTER PROGRAMS

Inventions in the business method area are frequently implemented on a computer. Thus, it may be desired to protect them by claims to software, and in principle, this is no problem at the EPO. Since Decision T935/97, if an invention has technical character then it can be claimed as software (either by itself or on a carrier) as well as in the form of an apparatus (which could include a computer network) or a method. On the other hand, an invention lacking technical character does not acquire it merely by being claimed as a computer program. There has to be some "further technical effect" over and above the normal interaction between software and computer (T1173/97).

EVOLVING PRACTICE

To get a feel for what is and what is not patentable in Europe it is useful to look at past cases. Some notable past examples are listed below. Of course, practice in this area continues to evolve as both attorneys and Examiners become more sophisticated in dealing with business method cases; thus, not all of these cases would necessarily be decided in the same way today.

Allowed:

- *A materials distribution method (EP 0 067 064, see also T636/88).*
- *A queuing system (EP 0 086 199, see also T1002/92).*
- *Increasing the execution speed of software (EP 0 154 529).*
- *A measuring tape with markings used for drug dosage (EP 0 220 860, see also T77/92).*
- *Editing a computer program (EP 0 435 139).*
- *A telecoms billing system (EP 0 541 535).*
- *An electronic money system (EP 0 542 298).*
- *System for trading stocks and shares (EP 0 762 304).*

- *A gift delivery system (EP 0 927 945) (note: this Amazon patent is currently being opposed).*

Refused:

- *Document abstracting and retrieving (T22/85).*
- *Spell checking (T121/85).*
- *Assessing the understandability of documents (T38/86).*
- *Correcting homophone errors in a text document (T65/86).*
- *Improved pension benefits system (T931/95) (refused for lack of inventive step).*
- *Automatic auction method (T258/03) (refused for lack of inventive step).*

THE NATIONAL ROUTE

The above discussion has concerned practice at the EPO, which is the only pan-European granting authority for patents. However, it is still possible to obtain national patents in individual European countries, and it may be worth considering this route instead of, or in addition to, a European patent application.

Unfortunately, in general it is no easier to obtain national patents in Europe for business methods or computer programs, at least in the countries which examine patent applications rigorously such as Germany, UK and The Netherlands. The practice in Germany takes a very similar approach to the EPO.

Meanwhile, the UK Patent Office has, if anything, been more strongly opposed to business method patents than has the EPO. In theory, the UKPO is guided by EPO practice but in fact, greater weight is given to domestic case law which has evolved differently from EPO case law. However, the UKPO announced, at the end of July 2005, a change in examination practice in view of two High Court decisions (CFPH's Application, and Halliburton v. Smith International). The UKPO claims that, on the one hand, the new practice is closer to that used by the EPO, but that the change in approach "does not change the boundary of what is patentable". That remains to be seen.

THE EUROPEAN SOFTWARE DIRECTIVE

Most member states of the EPC are also members of the European Union (EU). The European Commission attempted to obtain approval of the European Parliament for a "Directive on the patentability of software-implemented inventions", with the intention of harmonising the approach taken in the various member states.

The intention of the original draft was to permit patenting of computer programs across the EU; amendments proposed later in the bureaucratic process would have had the opposite effect, prohibiting the patenting of computer programs in most circumstances. However, at its second reading in July 2005, following fierce lobbying from both pro-patent and anti-patent lobbies, the directive was overwhelmingly rejected by the European Parliament. The European Commission currently has no plans to revisit the subject, so no EU-wide legislation will exist for some years at least.

Therefore, for the foreseeable future the EPO continues to set the practice for patenting business methods and computer programs in Europe. No doubt, the Boards of Appeal will continue to develop their thinking on this matter and we hope that, in time, this will provide greater clarity to applicants and practitioners worldwide.

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