

Software Patents in Europe

In 1999 an innovative German software company was taken over by a U.S. competitor after being threatened with a patent infringement trial. This was the second take-over of a German competitor on the basis of the same software patent.

Only six months before the take-over and after almost a decade of successful software development said software company thought of seeking advice from a patent specialist. The general misjudgement that software inventions were not patentable prevailed also in this company.

This is only one small example of the fatal impact of ambiguous European regulations on software patents. European software industry faces an almost crushing competition from the United States and Japan. The competitors have been familiar with software patents for several years and are able to use the means of patent protection to reach their business goals. As long as the European software industry does not comprehend the patent system as a tool for obtaining protection for new developments it will suffer a severe handicap with respect to the American and Japanese competitors.

There is a strong need for quick harmonization of the regulations on software patents in Europe. One good attempt was the proposed amendment to cancel the exclusion of software as such from patentability in Article 52 (2) c) of the European Patent Convention (EPC). All specialists and most of the economic groups (large business as well as associations of small enterprises) were in favour of adjusting the wording of the EPC to the legal practice of the European Patent Office.

It is outrageous how the national Governments were influenced by one single group of activists who seek to enlarge their personal profits by depriving innovative software engineers of their intellectual property rights. The massive e-mail attack on the national politicians by the members of the open source community (which might have been multiplied with

electronic aid) seemed to have left the impression that the majority of the interested circles are against software patents.

The open source community is not blocked by software patents at all. If somebody voluntarily renounces protection for his developments he simply has to publish these developments on the internet in order to eliminate the patentability of these developments. This is possible even in countries with strong software patents, as can be seen by the growing use of LINUX in the U.S.

However, the arguments of the open source community are as old as they are wrong. The argument that patent law reduces the innovation activities dates back to the beginning of this century when the patent system was introduced in major European countries. It is a fact that all economies without a strong patent system (e.g. most of the communist countries) have meanwhile vanished or been reformed. All successful economic system with innovative enterprises provide patent protection to their inventors.

The impact of patent protection on innovation in software technology can easily be judged by looking at the recent development in the U.S. Parallel to a broad extension of patent protection to all fields of software developments in the 1990's, the U.S. software industry rocketed toward ever new records in turnover and contributed the most innovative developments to the global state of the art in software and internet technology.

Patent protection is especially valuable small and medium sized business start-ups. Major companies already possess the marketing power to successfully introduce new products into the market – with or without patent protection. The single inventor or small business start-up, on the other hand, depends on intellectual property rights in order to defend his position against major companies.

In my opinion, the proposal in the document

"THE PATENTABILITY OF COMPUTER-IMPLEMENTED INVENTION

Consultation Paper by the Services of the Directorate General for the Internal Market"

falls short of an effective and unambiguous regulation of the problem in question.

It is not possible to judge the technical character only of the new features of a claim in order to identify patentable subject matter. The content of the claim **as a whole** must have a technical character, not only the contribution (i.e. new features). The interaction between technical aspects and non-technical features of the claims must not be neglected. Otherwise important contributions to the technical art are excluded from patent protection in violation of Art. 27 TRIPS.

To speak in hardware terms, the revelation of the fact that a known ceramic material has superconductive properties at ambient temperature is a discovery. Discoveries are excluded from patentability (Art. 52 (2) a EPC). A claim for a cable which is made of that ceramic and has superconductive properties at ambient temperatures is without any doubt patentable, even if the "contribution" to the art is the discovery of the properties of the ceramic and, therefore, non-patentable subject matter.

Analogously, a computer being operated in a novel way in order to automatically perform a novel function clearly belongs to the world of technology, no matter if this function is the automatic translation of a text, the automatic evaluation of an investment fund at the closing minute of the stock exchanges or the automatic performance of a business transaction (sale of a product including sending the product to the correct address, billing the correct credit card with the price of the product) at one mouse-click.

Any restriction of the patentability to certain functions performed by a computer will maintain the ambiguous situation in Europe. The strong software companies in countries where patent protection for computer programs is well installed will have an advantage over the domestic software companies as they will enter their international filings into the European system and stretch the limits for protection with the aid of experienced consultants.

If the Commission of the European Communities decides to stick to the technological tradition of the patent system and not to accept any patents for pure business methods and similar non-technical developments it should strongly state its opinion. Maybe this will be an impulse for the U.S. authorities to reverse some of the very questionable developments in the U.S. with respect to non-technical patents.

However, the question of software patents should not be mixed up with the new question of patents for business methods and other non-technical developments. Any method of operating a data processing machine which leads to the automatic performance of a new function clearly belongs to the world of technology, independently of the nature of the function itself.

Conclusion:

The positions i. and ii. of the proposal for the final position are acceptable.

The positions iii.-v. are too restrictive. Any function that is automatically achieved with a computer in a non-obvious fashion should be patentable. The requirement of non-obviousness prevents the grant of a patent for the mere implementation of a known business method on a known computer.

The position vi. should be extended to the following wording:

"A computer-implemented invention may be claimed as a product, namely as the programmed computer, as a process, namely as the process carried out by the programmed computer, or as the program product - stored on a data carrier or not - containing code-segments for performing the process to be carried out by the computer."

The decisions T1173/97 and T0935/97 of the EPO Board of Appeal introduced the program product claim. Even though it seems to be systematically inconsistent it is essential to obtain patent protection for the marketed product itself, i.e. for the program product, distributed by an infringer on disk or via internet. This ensures that the infringer can be sued for direct patent infringement. If protection is restricted to the computer of the user running the infringing product or to the method performed on the computer of the user the company producing the infringing software can only be held responsible for indirect patent infringement.

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