



# **Journal of Internet Banking and Commerce**

An open access Internet journal (http://www.arraydev.com/commerce/jibc/)

Journal of Internet Banking and Commerce, August 2009, vol. 14, no.2 (<a href="http://www.arraydev.com/commerce/jibc/">http://www.arraydev.com/commerce/jibc/</a>)

## The Mess That is the European Software Patent

### **Arnoud Engelfriet**

European patent attorney, associate at ICTRecht legal services Borneostraat 59, 1944 WM Beverwijk, the Netherlands

Author's Personal/Organizational Website: http://ictrecht.nl/

Email: a.engelfriet@ictrecht.nl

Arnoud Engelfriet (1974) is an IT lawyer and European patent attorney. He works as associate at ICTRecht legal services in the Netherlands. In 2005, while working for Royal Philips, he was involved in the software patent debate surrounding the Directive and has the mental scars to prove it. He has published dozens of articles on legal protection of software, open source and patents. Read more about patents in IT at his website: www.iusmentis.com/patents/

#### Abstract

Apart from the question which source code editor is better, few issues get a more heated reception among software engineers than the one whether software should be patentable. This is particularly true in Europe, where the 1978 European Patent Convention (EPC) explicitly forbids patents on "computer programs as such". Yet, judicial decisions from the European Patent Office (EPO) and a failed attempt at European legislation have turned this seemingly clear phrase into a quagmire.

Keywords: patents, software patents, European patent, European Patent Office, law, intellectual property

© Arnoud Engelfriet 2009, Creative Commons-Attribution-ShareAlike 2.5.

#### THE MESS THAT IS THE EUROPEAN SOFTWARE PATENT

How the European Patent Office turned European patent law on its head, and European lawmakers did even worse.

Apart from the question which source code editor is better, few issues get a more heated reception among software engineers than the one whether software should be patentable. This is particularly true in Europe, where the 1978 European Patent Convention (EPC) explicitly forbids patents on "computer programs as such". Yet, judicial decisions from the European Patent Office (EPO) and a failed attempt at European legislation have turned this seemingly clear phrase into a quagmire.

#### **SOFTWARE AS SUCH**

In the 1970s, when the EPC was being drafted, a major concern was whether the novelty and inventiveness of software inventions could be assessed properly. Without prior art archives on software techniques, the chances of invalid software patents being issued was substantial. Thus, the exclusion on "software as such" was born.

The EPO's interpretation of the phrase has changed substantially over the years. In the early 1980s, patent applications were routinely rejected for relying too much on software features. However, after 1985 the approach changed: software innovations could be patented, as long as they were part of a concrete apparatus – say, a mobile phone – that benefited from the innovation. This helped stimulate innovation on the GSM standard for mobile telephony and MPEG standards for digital audio and video. Still, software claims were routinely rejected as being obviously "software as such". This in striking contrast to the US, where "anything under the sun that is made by men" was patentable as of the mid-1980s, provided the patent attorney could write it down in sufficiently dense and technical-sounding language.

In 1998 the EPO came up with a groundbreaking interpretation. Reasoning that the exclusion on "software as such" was aimed at preventing patents on non-technical items (as it was listed among non-technical items in the EPC), the Office decided that patents on software were possible, provided the software somehow realized a specific technical result. Just in time for the e-commerce hype, the decision caused a massive boom in the number of software-related European patents – most of which turned out afterwards to be hardly novel, proving that the original intent behind the exception wasn't a bad one after all.

With this interpretation, many argued that the EPO had slavishly adopted the "anything under the sun" US view. This wasn't intended as a compliment: in the USA anything under the sun was being patented: the USPTO granted no less than 145,000 patents on software inventions in the late nineties and early naughts. The quality of these patents was notoriously low, thanks to nonexistent prior art databases and a self-imposed limit of about eight hours for examiners to search and judge a patent application. Still, many of these patents were upheld in courts and actively enforced, thus proving to many that software patents were a significant threat to innovation in the field of software.

#### THE DIRECTIVE

European software engineers, who had regular laughs about the silly software patent of the week coming out of the USA, felt safe from this threat because the EPC quite clearly forbade software patents. The European Commission thus caused quite some consternation with its 2002 proposal for a Directive to define when "computer-implemented inventions" would be patentable. The initial text codified the EPO's 1998 interpretation and caught little attention until several software freedom groups got wind of it. Intensive lobbying by these groups, the *Foundation for a Free Information Infrastructure* (FFII) in particular, and tens of thousands of Internet sympathizers convinced the European Parliament to turn the directive on its head: any invention involving data processing would now be *excluded from patentability* regardless of its technological nature. This caused an outcry from many European patent holders, who feared that some 2/3<sup>rd</sup> of their patent portfolio would suddenly become invalid under this approach.

Further lobbying from both sides culminated in various ineffective proposals, e-mail bombardments to EP members, mutual accusations of shady back room deals, national parliaments publicly fighting with their ministers and over 60,000 Google hits on "software patent", most of them quite negative. On 6 July 2005, the European Parliament decided it had had enough and scrapped the whole thing.

#### **CURRENT TRENDS**

Meanwhile, back at the European Patent Office more and more patent examiners were unhappy with the case law its appeal boards had generated. A series of cases by the Board of Appeals provided the much-desired blunt instrument to get rid of the influx of US-style software patents. The criterion of "inventive step" was strengthened significantly, allowing for easy refusals of most software or e-commerce patent applications. While no doubt bad patents are still issued, the number is significantly lower than in the early 2000s.

Where do we stand now? While software patents are still being granted by the EPO, no one knows if they will hold up in court. The EPO's Board of Appeals will revisit the issue this year, but it is unlikely to come up with a fundamental change in policy.

The US is slowly moving in a similar directions. Recent court decisions have significantly limited the "anything under the sun" criteria and raised the notoriously low standard for patentability. Eyes are now on the Supreme Court which is to rule on the *Bilski* case in the second half of 2009.

In the meantime, no politician is going to touch the issue with a bargepole for the foreseeable future. If you want to find out why, just go to your software engineers and ask them, "We're going to support software patents, what do you think?"