## COMPUTER-IMPLEMENTED INVENTIONS: RECENT CHANGES IN CASE LAW

Treating the protection of computer-related inventions differently from those in other engineering fields is illogical and needs to change, says Thomas Lederer.

hange is the essential process of all existence," Commander Spock said in one of the last episodes of the original *Star Trek* series. Since the US Supreme Court published its long-awaited opinion on *Alice v CLS Bank*, many commentators have tried to use *Alice in Wonderland* references to describe the situation, but Commander Spock hit the mark.

The current situation of computer-implemented inventions in the US is far from clear. While David Kappos, former director of the US Patent and Trademark Office (USPTO), considers protection for software innovation to be intact, several others are of the opinion that gaining protection for computer-implemented inventions has now become harder, if not impossible. However applicants for a US patent in that field might at least hope to be spared different interpretations of the issue by the examiners, as the USPTO reacted quickly to *Alice* and issued Preliminary Examining Instructions.

Accordingly, examiners will look at all claims using a two-part analysis familiar from the *Mayo v Prometheus* case, ie, by determining:

- Whether the claims are directed to an abstract idea (part I); and
- In case an abstract idea is present in the claims, whether there is significant additional subject matter than the abstract idea itself (part II).

These Preliminary Examining Instructions were open for public comments until July 31, and might be changed depending on the submitted comments.

Meanwhile, all parties interested will make use of the court's decision to modify current proceedings or even to reopen closed cases. For example, Samsung is using *Alice* to challenge two Apple patents, which were used to attack Samsung in the past.

So, with all the heavily cited court opinions out there—*Bilski, Mayo,* and now *Alice* among them—the way patent applications and, in particular, their claims are examined and thus the way in which they should be drafted, has changed tremendously over recent years. This change requires constant attention by all practitioners, but following case law is an important obligation in every jurisdiction.



## Patent eligibility

In Europe, before the European Patent Office (EPO), there are two requirements for the claimed subject matter: it needs to be technical and inventive. While this may sound trivial, the technical criterion is the one that is usually discussed at length. For the EPO, it is not



sufficient to execute a computer program on technical apparatus such as a computer.

In particular, subject matter that is excluded by law from being an invention in Article 52(2): "discoveries, scientific theories and mathematical methods; aesthetic creations; schemes, rules and methods for performing mental acts, playing "G3/08 HOLDS, ON ITS 55 PAGES, MANY INTERESTING POINTS OF VIEW BY THE EBA, WHICH CAN BE USED TO ARGUE IN FUTURE PROCEEDINGS."

games or doing business, and programs for computers; presentations of information" might be made technical by using a computer. However, since such subject matter cannot be regarded as invention in the first place due to the exclusion by law, it will not be held as inventive. The implementation of a non-invention on a computer is seen as obvious by the EPO.

Still, the treatment of computer-implemented inventions before the EPO is subject to change as well, as case law is developed. The foundations of the relevant case law are *Comvik* (T 641/00), *Hitachi* (T 258/03) and *Infineon Technologies* (T 1227/05). Many other decisions are subject to divergent interpretations. This ambiguity might have been one of the reasons why Alison Brimelow, president of the EPO in 2008, referred the issue to the Enlarged Board of Appeal (EBA) for clarification.

The EBA held her referral to be inadmissible with its decision G3/08, as the board did not agree with the president about the necessary amount of divergence regarding the criticised decisions. Nonetheless, G3/08 holds, on its 55 pages, many interesting points of view by the EBA, which can be used to argue in future proceedings.

Even with the unitary patent coming in the near future, there is still a considerable amount of interest in filing national applications, so the view of the national courts could be interesting as well. The Chartered Institute of Patent Attorneys in the UK held a seminar in April 2013 during which the issues of computer-implemented inventions were discussed. According to the published report of the seminar, assessing patentability before the UK IP Office is much more complicated than at the EPO. Many German court decisions are worth mentioning as the *Bundesgerichtshof*, the Federal Court of Justice, has been very active in the shaping of German patent law. The span here is from *Rote Taube* in 1969 via *Logikverifikation* in 1999 to the more recent decisions in *Wiedergabe topografischer Informationen* and *Dynamische Dokumentengenerierung* in 2010, with many in between.

In summary, the topic of computer-implemented inventions is subject to constant change, at least for the time being, more than in other technical fields. This might be due to the relative youth of the discipline—universities started to teach computerrelated subjects as recently as the 1950s and 1960s.

Perhaps more decades are necessary for computerimplemented inventions to be protected by patents in the same way as other fields have access to patent protection. In the end, this should be the result, since any separation of a computer discipline from any other engineering discipline dealing with manmade technology, for example vehicle engineering, seems to be totally arbitrary.

Only by developing case law will this important issue be solved, or as Commander Spock put it, "Change is the essential process of all existence".

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