

International Software Patent Filing: Statutory Subject Matter in View of Legal Standards at the EPO-USPTO and Economic Implications

Computer Implemented Inventions CII are a challenging subject for comparative legal studies. Besides legal issues, also problems of linguistic and technological definition arise. *Technicality*, as a statutory requirement, plays a major role for European CII patents. Only under certain circumstances technicality can also be a requirement for *US CII method* applications. Industry therefore is faced with different restrictions and opportunities on both sides of the Atlantic, and harmonisation efforts should be undertaken in order to establish a symmetric balance of rights. Economy would surely benefit from conform rules leaving the free choice of business settlement to the enterprise without restrictions by dissenting regional legal rules. It is, however, disputed whether harmonisation should aim for stricter or more permissible rules regarding the patentability of CII. Basic ground for the respective PTOs practices is the national/regional case law. The US case law as well as the EPO case law both developed from fairly restrictive rules in the 1979's to current bodies of law, which require comparatively low entry-standards for statutory subject matter.

The examination practice at the EPO and USPTO is based on different statutory grounds. The European contribution approach, problem-solution approach and notion of technicality differ from the US understanding of obviousness and utility.

Despite these differences, the US- and the EPO examination schemes for statutory subject matter are *formally* very similar to each other. Empirical analysis proves, however, that EPO examination is practically stricter. This becomes directly evident when inspecting the respective EPO/USPTO granting-, refusal- and withdrawal numbers. During the granting stage claimed subject matter can be entirely deviating between the European- and the respective US patent family application. In many cases a CII family application fails before the EPO because of non-statutory subject matter; but the same time it will be granted before the USPTO. Virtual examination of these granted US family claims under EPO standards

would in 2/3 of the cases again result in an EP refusal! A possible reason for the differences in executive practice is the lack of a technicality requirement for US *system* claims. For *method* claims, there exists a formal US requirement for *physical/technological transformations*, which is of low practical value.

As a matter of fact, until recently, the EPO statutory-hurdles seemed to exclude particular industrial fields such as software programming and CII for administrative tasks, timesharing and logistics. The foreclosure of the above industries is often justified with policy arguments, holding that primary software industry only deserves copyright but no technical protection. These assertions, however, are difficult to prove and often politically motivated.

A preliminary econometric study based on forward citations and family size numbers could not verify that the EPO-refused non-statutory CII applications were of lower quality than comparable average CII/EPO patents. It is therefore further research necessary, investigating the objective value of the excluded-technology applications.