

Revising the Policy of the European Union on Intellectual Property Rights: The Case of Software Patents

Prof. Dr. iur. Bernd Lutterbeck*
`narwal@cs.tu-berlin.de`

Technical University of Berlin,
Computers and Society Research Group
Department of Business Informatics

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1 Starting Position

The bipolar structure of the international intellectual/industrial property system, a system developed in the the last part of the 19th century, is under pressure. Software is a prominent example for growing disorder:

- We buy and sell software because of its behavior. It behaves like a machine. That's the main difference to literally texts. But treaties (Art. 4 WIPO-WCT) and various provisions (e.g., German copyright law, § 2 UrhG) treat the works of Shakespeare and software equally – as *literary* works.
- Programs are built from programs, they are «inherent compilations». Therefore, innovation in software development is typically «incremental». Software contains of a mixture of new and old elements. A tension between the novelty requirement of the patent paradigm for an invention and the «cumulative and incremental nature of software development» is inevitable.

Thus the arguments of the 1994 Manifesto of American copyright scholars seems convincing: Software does not fit in either the patent system nor the copyright system.¹ The existing legal regimes are structurally unsuited.

*The author holds the chair for Computers and Society at the Technical University of Berlin, and is Jean Monnet Professor.

¹Cf. Samuelson et al. (1994), Reichman (1992).

2 Policy Questions

Software lies certainly at the very core of the «knowledge society». The ability to develop, distribute and sell software is the crucial moment of the competitiveness of whole economies and regions.

However, this ability gives power to enterprises and states to structure all the societies innovation. It gives them —hard and soft— power to decide on content, too.

To foster innovation is the main challenge for policy makers. The question is whether and how far software patents and Copyrights on software contribute to innovations.

The answer on this question will decide what kind of research is needed and what kind of research should be done.

3 Answers of the First Generation

- The current patent system does not meet the interests of SME's and even larger firms like SAP.
- The current patent system does not meet the interests of the open source movement.
- There is no scientific evidence that software patents will improve innovations.. However, firms who want to play a major role on the American market must look for patents to stand the competition on the relevant market.

I propose a pragmatic solution for this kind of problems: We live in a world of software patents, although I am convinced that these patents impede innovation in software development. Thus we have to balance the interests inside the current system.

In an expertise for the German Ministry of Economics (finished December 2000) we made some ten proposals for policy options.² Our main proposal is what we call the «source code privilege»:

«The use of the source codes of computer programs must be granted privileged status under patent law. The creation, offering, marketing, possession, or introduction of the source code of a computer program in its various forms must be exempt from patent protection (source code privilege).»

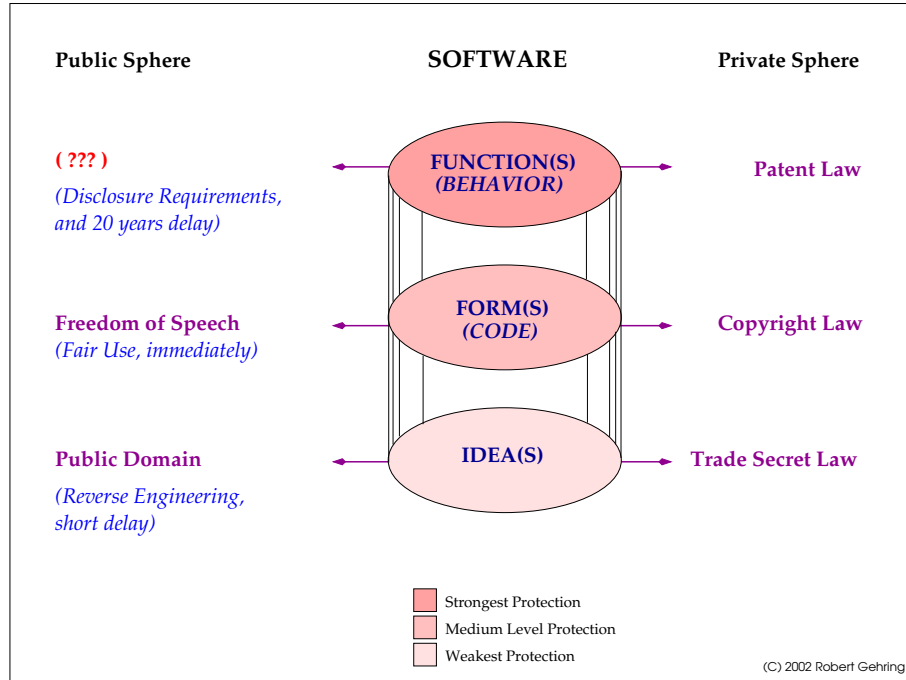
4 Answers of the Next Generation

In our expertise we came to the following conclusion:

«Future patent policy must strike an appropriate balance between patent law, copyright law, and above all constitutional law. Overlooking this relationship brings the danger of improper economic management of the core of the future information society.»

²See Lutterbeck et al. (2001).

Thus, all research in this field has to develop a appropriate frame of reference. Just for pragmatic reasons we suggest to start with the following, heuristic frame:



The figure suggests that one of the outstanding problems of the emerging knowledge society systematically can not be solved from within the patent system — so far as we know today: the problem of IT-Security.³ This is the more true if one follows the assumption that IT-Security is an economical rather than a mere technical problem.⁴ There is some clue that software patents may create an «anticommons» (Heller 1998) in the field of software development which will deter information security per se.

5 Four Questions for Future Research

1. Under what conditions do SME's really need patent protection for software?
 - Experiences of Open Source enterprises like «Red Hat»⁵ and firms like SAP with their patent portfolio.
2. Empirical research: Who is developing «Libre Software», and why?
 - As first research results tell us, Europeans, in particular German developers, are leading in the development process.⁶ The reasons for that are far from clear.

³From a technical point of view, security of software has to be dealt with at the functional level shown in the figure. Patent protection may hinder necessary efforts. Cf. Gehring (2001)

⁴See, e.g., Anderson (2001), Schneier (2000), Gehring (2001).

⁵Cf. Red Hat, Inc. (2002)

⁶Cf. Robles et al. (2001).

3. If it comes true that the current patent system excludes IT-Security: What would be the legal alternative?
4. The last question is more of a philosophical nature: Can we imagine a world with an intellectual property system beyond the conventions of Paris and Berne? Will there once be a good *sui generis* approach?

6 Conclusion

Pragmatic solutions are needed ... at first.

But I have the strong impression that the «patent–copyright–paradigm» of the late 19th century has already come to its end.

Thus, the field for future policy research is twofold.

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