

The Protection of Software and the Crisis of the Patent System

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1. Introduction.

1.1 Patenting software-related inventions: Unresolved issues.

When the European Patent Convention (EPC) was concluded in Munich on October 05, 1973, some may have thought that the debate on patent protection for software-related inventions was over. Article 52 (2) lit c EPC in conjunction with Art. 52 (3) EPC made perfectly clear that programs for computers »as such« shall not be regarded as patentable inventions. The interpretation of national laws was aligned, and with regard to some relevant German case law GERT KOLLE concluded in 1977:

"Any attempts to obtain patent protection for software creation are now futile".²

But in fact the debate was not over; it had just started. How should programs for computers »as such« properly be discriminated against other entities in the context of computer systems made up of hardware and software? Up to now there seems to be no clear answer to this question, and the debate is still raging. It is fuelled by countless patent applicants eagerly desiring to obtain patent protection for software-related inventions, if possible directly from the Patent Offices, but if necessary also by appealing to the highest Courts with competence for final decisions. Despite huge piles of available court decisions there is still discomfort amongst applicants and legal experts in view of the ever diverging and fuzzy gist of such case law.

1.2 The EU harmonisation attempt.

Concerning the territories of the EU Member States, the Commission of the European Communities eventually concluded to attempt to harmonise the patent law governing patents on software-related inventions throughout the EU. On February 20, 2002 a »Proposal for a Directive of the European Parliament and of the Council on the patentability of computer-implemented inventions«³ was presented in Brussels. One of the innovative approaches of this proposal is its way of defining the scope of the directive by referring to the concept of a »computer-implemented invention« meaning

»any invention the performance of which involves the use of a computer, computer network or other programmable apparatus and having one or more prima facie novel

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² Gert KOLLE: "Technik, Datenverarbeitung und Patentrecht – Bemerkungen zur Dispositionsprogramm-Entscheidung des Bundesgerichtshofes", GRUR 1977, No. 2, pages 58 to 74.

³ Presented in Brussels on 20.02.2002 under COM(2002) 92 final 2002/0047 (COD) by the Commission; on-line available via http://europa.eu.int/comm/internal_market/en/indprop/comp/com02-92en.pdf [Visited on 2002-09-03].

*features which are realised wholly or partly by means of a computer program or computer programs».*⁴

This seems to be a highly workable definition because, contrary to rather vague terms like »software-related invention« or »computer program as such« it exactly reflects the technical as well as the economic reality wherein such patents can be enforced. The political goal behind the draft is clearly the desire to codify a snapshot of the status quo of the current case law of the Boards of Appeal of the European Patent Office which allows patents on certain kinds of computer-implemented inventions having a »*technical character*« but bars patents on non-technical »*business methods*« inventions even if they involve the use of a computer. The basic idea of this Draft Directive is to discriminate these non-technical business methods inventions by requiring as a condition of involving an »*inventive step*« that a computer-implemented invention must make a »*technical contribution*.« The technical contribution is to be assessed by consideration of the difference between the scope of the patent claim considered as a whole, elements of which may comprise both technical and non-technical features, and the state of the art.⁵ With other words, non-technical features are deemed to be made available to the public by virtue of a novel statutory legal fiction.

2 The Perception of a Crisis of the Patent System.

2.1 Symptoms and scope of the crisis.

2.1.1 Insider and Academia criticism.

The debate on the patentability of computer-implemented inventions would be flawed *in nuce* by any attempt to detach the same from a more general controversy questioning the shape of the current patent system in its entirety. During the final quarter of the 20th century, the patent debate had been centred on some more or less insulated questions like the legitimacy of so-called »software patents« and on how to treat algorithms used within physical processes, but nowadays the scope of the debate has widened: According to BRIAN KAHIN,⁶ who shall be cited here as a representative of the academic scene, the big issue is the expanded role of patents, especially broad conceptual patents, in an extremely competitive and fast-moving economic environment in which business cycles are moving much faster than the administrative and legal processes of the patent system.⁷ KAHIN goes as far as to say that the patent system has expanded with little public scrutiny and pushed by the natural self-interest of those who labour within it. With justification, it wraps itself in the mantle of intellectual capital for the knowledge economy. Again according to KAHIN, the patent system does not know its limits, and, still worse, its stewards have engineered the removal of its traditional limits to spread it seamlessly across the entire economy without analysis and without public debate.⁸

4 See Article 2 (a) of the Draft Directive loc. cit.

5 See Article 4 paras. 2 and 3 of the Draft Directive loc. cit.

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see on-line under the URL http://home.att.net/~juliaroyall/Brian_Kahin_Bio.html [Visited on 2002-10-14]

7 BRIAN KAHIN: "The Expansion of the Patent System: Politics and Political Economy", on-line via URL http://www.firstmonday.org/issues/issue6_1/kahin/index.html [Visited on 2002-09-24]

8 BRIAN KAHIN, loc. cit.

A striking phenomenon might be seen in the mounting critics of some high-ranked insiders of the patent business. ROBERT BARR, Vice President, World-wide Patent Counsel, Cisco Systems, Inc., took a rather radical view on the patent system and argued:

"[...] The time and money we spend on patent filings, prosecution, and maintenance, litigation and licensing could be better spent on product development and research leading to more innovation. But we are filing hundreds of patents each year for reasons unrelated to promoting or protecting innovation. [...]"⁹

STEPHEN P. FOX, Associate General Counsel, Director of the Intellectual Property Dept. of HEWLETT-PACKARD Company, argued:

"[...] The current state of the patent law system is problematic from HP's standpoint. We have witnessed in recent years a vast proliferation of patent grants by a seriously understaffed PTO and an equally vast proliferation of complex litigation over patent validity and scope. Notwithstanding the centralisation of patent law development in the Federal Circuit over the past two decades, the governing standards for patentability and patent law jurisprudence generally remain plagued by unpredictability in their application, particularly with respect to patents bearing on new or emerging technologies. The result is pervasive uncertainty about legal rights, both in terms of ability to enforce one's own patents and ability to avoid rapidly escalating exposures to infringement claims by others. And that uncertainty heightens risks surrounding innovation investment decisions. Those risks, moreover, are a growing menace to innovation efforts across the information technology landscape. Given how much they burden and impair a company as resourceful as HP, the loss to society from their cumulative impact on companies large and small including the most otherwise promising start-ups unable to raise capital for their projects in this environment must be considerable. It is without doubt a serious drag on the technological and scientific progress that the patent system was designed to promote. Competition policy is deeply implicated in this unsatisfactory situation. An unknown but undoubtedly significant number of invalid patents are issued; an unknown but undoubtedly significant [...]"¹⁰

On the same event, LES J. WEINSTEIN of Squire, Sanders & Dempsey L.L.P., argued:

"[...] We should take steps to avoid what is a rapidly growing zero sum game involving billions of dollars, annually being used not to reward worthy invention and inventors but to clog commerce by subsidising routine research and development and indeed more often mere investment. We can and should do better. Truly innovative companies and inventors and our overall economy will be enhanced by a robust and more selective patent system. I believe that most (but not all) of the problem areas needing improvement I here address do not involve illegality under current antitrust law standards but rather are imperfections and/or anticompetitive through lawful flaws in the system which most companies legally take advantage of. A set of patent rules which didn't work very well in the latter part of the last century certainly will not do us credit in this century. We are facing a 'tragedy of the commons' in patent law. Improvements can come from FTC/DOJ legislative advocacy function, court intervention, rule changes, law enforcement and constructive dialogue. [...]"¹¹

⁹ Federal Trade Commission / Department Of Justice Hearings to Highlight Business and Economic Perspectives on Competition and Intellectual Property Policy, Washington D.C., USA, 2002-02-28; on-line under the URL <http://www.ftc.gov/opp/intellect/barrrobert.doc> [Visited on 2002-09-17]

¹⁰ Opening Statement of Stephen P. Fox Associate General Counsel, Director of Intellectual Property Hewlett-Packard Company at FTC/DOJ Hearings on Competition and Intellectual Property Law and Policy in the Knowledge-Based Economy February 28, 2002, available on-line via the URL <http://www.ftc.gov/opp/intellect/020228stephenpfox.pdf> [Visited on 2002-09-17].

¹¹ See LES J. WEINSTEIN of Squire, Sanders & Dempsey L.L.P. at FTC/DOJ Hearings on Competition and Intellectual Property Law and Policy in the Knowledge-Based Economy February 27, 2002, available on-line via the URL <http://www.ftc.gov/opp/intellect/020227lesweinstein.pdf> [Visited on 2002-09-17].

Recently WERNER KOVAC, head of the patent department of MAGNA STEYR AG & Co. KG, recently wrote:

"[...] The issue of quality needs special attention. Comparing even EPO's proclaimed efforts to maintain high quality (and encouraging enhancement of the quality of filed applications) with one's own experience in day-to-day work, one cannot help seeing a discrepancy. If, then, NPOs in their subject papers stress the importance of quality, there is a tinge of lip service. They may be confident that a truly stringent quality control is too labour-intensive to be feasible. There is also a temptation to quench criticism by intervention. Therefore co-operative quality assurance will not do, quality would inevitably converge toward a lower level. Instead, a completely independent quality control body is an absolute necessity. This body must consist of very experienced patent professionals, with the power to enforce corrective action. Without such a body, a pessimist could see the European Patent system going down the drain very slowly, so slowly that it will not be remarked until it is too late. The members of the Council are implored not to sacrifice the best Patent system in the world (though far from perfect) to short-term and petty national interest."¹²

Within these few brief quotations we see a number of issues raised, ranging from very fundamental economic questions concerning the micro- and macro-economic aspects of the patent system up to some more pragmatic issues in the field of quality assurance. Although the different issues as raised with the excerpts quoted above are related to different jurisdictions and to different Patent Offices, the overall impression from many similar voices not cited here is that such concerns are relevant on a more global scale; the quotations are selected with »*pars pro toto*« in mind.

Recently,¹³ an ambitious and more systematic debate concerning the future of the patent system has come up in Academia. The overall question was to clarify the prospects of the present system of Intellectual Property law within the opposing concepts of protection of *innovations*, on the one hand, and the protection of *investment*, on the other hand.

RETO HILTY¹⁴ expressed some degree of appreciation with regard to critical voices as raised within the framework of the »*Open Source Movement*« and the animadversion on globalisation, thereby criticising e.g. the patenting of computer-implemented inventions. According to HILTY, any across-the-board assertion according to which the existing system of Intellectual Property rights has proved of value in fact is questionable. In particular, HILTY argued that also with regard to the patent system that the need for protection, the concept of protection as well as the effect of protection should be scrutinised more thoroughly. He then differentiated between

- a level of »*innovation*« (concerning markets for innovations),
- a level of »*application*« (concerning the utilisation of novelties), and
- a level of »*production*« (concerning bringing to market of novelties).

According to HILTY, only on the level of innovation exclusive rights like patents are deemed to be unreservedly of positive, at least non-harmful effect. On the level of application, HILTY recommends corrective instruments like a duty to use a patented invention, the provision of compul-

¹² See http://ac.european-patent-office.org/pct_consultation_process/received_contributions/pdf/kovac_werner.pdf [Visited on 2004-08-06]

¹³ KATHARINA VON BASSEWITZ, BIRGIT KRAMER, WOLFRAD PRINZ ZU WALDECK UND PYRMONT: "Zusammenfassung des Vortrages 'Innovationsschutz und Investitionsschutz für immaterielle Güter' von Prof. Dr. Reto Hilty", GRUR Int., No. 7-8, 2004, pages 607 to 611.

¹⁴ Prof. Dr. RETO HILTY, Max-Planck-Institut für Geistiges Eigentum, Wettbewerbs- und Steuerrecht, München.

sory licenses, and further appropriate regulations within the scope of the competition law. On the level of production, exclusive rights like patents might be harmful; the single possible justification of the collection of royalties on this level is, according to HILTY, to enable the amortisation of investments, not the protection of innovation.

HANNS ULLRICH¹⁵ argued more in favour of exclusive rights because of they can be appraised by markets but warned that the trivialisation of legal requirements for the grant of exclusive protective rights might one day unhinge the entire system. If every piece of knowledge can potentially become a subject-matter of a protective right, additional possibilities for access to that knowledge should be provided, according to ULLRICH. The system of exemptions within the law of the intangibles should be re-evaluated, and compulsory licenses should be granted more readily.

What comes up in such academic discussions is e.g. a question of whether or not concepts for the discrimination of trivial from non-trivial innovations can be implemented successfully, in particular in the field of patent law, and still more particular, with regard to computer-implemented inventions. A theoretical antithesis would be to abandon the protection of innovation altogether and, therefore, drop tests like the inventive step, turning to the protection of mere investments only. However, such radical moves seem not to be much supported even in Academia¹⁶ although WILLIAM R. CORNISH¹⁷ is reported to have said that in the United Kingdom such move would be deemed to be more acceptable.

The collection of various quotations presented above as well as the existence of more advanced academic discussions like that one as sketched above clearly demonstrate a substantial degree of discontent with the current state of the affairs in Intellectual Property law across wide circles of skilled academicians as well as of professional insiders.

2.1.2 *The Third World: More fundamental criticism.*

A »COMMISSION ON INTELLECTUAL PROPERTY RIGHTS«^{18,19} had been set up in 2001 by the British government to look at how intellectual property rights might work better for poor people and developing countries. The final report²⁰ summarising their work was published in 2002. The Commission concludes on patent policy as follows:

"We believe that in considering the design of their patent systems, developing countries should adopt a pro-competitive strategy that, as one observer suggests, is tilted towards second comers rather than distant patentees. This is especially important in those areas of technology such as pharmaceuticals and agriculture where, as we have already considered, the cost of providing strong protection is likely to be greatest.

15 Prof Dr. HANNS ULLRICH, Universität der Bundeswehr, Munich.

16 KATHARINA VON BASSEWITZ, BIRGIT KRAMER, WOLRAD PRINZ ZU WALDECK UND PYRMONT, loc. cit.

17 Prof. Dr. WILLIAM R. CORNISH, The IP Unit, University of Cambridge, Faculty of Law, Cambridge.

18 See <http://www.iprcommission.org/> [Visited on 2002-10-14].

19 The idea of the Commission on Intellectual Property Rights originated in the UK Government's White Paper on International Development "Eliminating World Poverty: Making Globalisation Work for the Poor" published in December 2000 (paragraphs 142-149). The aim was "...to look at the ways that intellectual property rules need to develop in the future in order to take greater account of the interests of developing countries and poor people."; cf. under the URL <http://www.iprcommission.org/graphic/about.htm> [Visited on 2002-10-14].

20 The report can be obtained via the URL http://www.iprcommission.org/papers/pdfs/final_report/reportpdf.pdf [visited on 2002-10-14].

*Such a pro-competitive strategy is best realised by seeking to restrict the scope of patent protection provided.*²¹

This general guideline is worked out in the report in greater detail, concluding in political statements to the effect that the above-quoted goal should be achieved, within the constraints of international and bilateral obligations, by limiting the scope of subject matter that can be patented, by applying standards such that only patents which meet strict requirements for patentability are granted and that the breadth of each patent is commensurate with the inventive contribution and the disclosure made, by facilitating competition by restricting the ability of the patentees to prohibit others from building on or designing around patented inventions, by providing extensive safeguards to ensure that patent rights are not exploited inappropriately, and by considering the suitability of other forms of protection to encourage local innovation.

2.1.3 Clash of »Intellectual Commons« vs. »Intellectual Property«.

The most ambitious attempts in order to reduce the role of the patent system are made by those critics who want to change the structures of the contemporary globalised capitalistic systems altogether. With regard to Intellectual Property, the concept of *Intellectual Commons* plays a central role:

*"Commons are a particular type of institutional arrangement for governing the use and disposition of resources. Their salient characteristic, which defines them in contradistinction to property, is that no single person has exclusive control over the use and disposition of any particular resource. Instead, resources governed by commons may be used or disposed of by anyone among some (more or less well defined) number of persons, under rules that may range from 'anything goes' to quite crisply articulated formal rules that are effectively enforced. Commons are institutional spaces, in which we can practice a particular type of freedom – freedom from the constraints we normally accept as necessary preconditions to functional markets."*²²

According to DAVID BOLLIER the upcoming of the Internet seems to have fostered a somewhat modified attitude of many activists towards free co-operation not governed by market rules:

*"The prevailing discourse for talking about the Internet is that of the market. But economic categories are too parochial for understanding our broader needs as citizens and human beings in the emerging cyber-polity. They also fail to understand how many websites, listservs, open source software programs and peer-to-peer file sharing systems function as commons – open, community-based systems for sharing and managing resources. It turns out that peer production is often a more efficient, creative mode of value-creation than a market as well as more humanistic. The commons paradigm helps us understand this fact because it recognises that value-creation is not just an episodic economic transaction, as market theory holds, but an ongoing process of social life and political culture. When will we recognise that the commons plays a vital role in the economic and cultural production of our time?"*²³

Or, from a slightly different perspective, taken the words of YOCHAI BENKLER:

"[...] The core point across these different domains of resources for information production and communication is that there is some aspect of a resource – like wireless

²¹ See the Final Report loc.cit. on page 114.

²² This definition has been taken from YOCHAI BENKLER: The Political Economy of Commons, UPGRADE Vol. IV, No. 3, June 2003, pages 6 to 9, on-line available via the URL <http://www.upgrade-cepis.org/issues/2003/3/up4-3Benkler.pdf> [Visited on 2003-08-30].

²³ DAVID BOLLIER: The Rediscovery of the Commons, UPGRADE Vol. IV, No. 3, June 2003, pages 10 to 12, on-line available via the URL <http://www.upgrade-cepis.org/issues/2003/3/up4-3Bollier.pdf> [Visited on 2003-08-30].

*communications capacity, human creativity, distributed processing capacity, distributed storage – that make its clearance through a market particularly clunky, expensive, and inefficient. In those cases, low cost communications and cheap processors that form an integral part of information production and exchange make the conditions ripe for sustainable large-scale collaborations and a sharing of resources based on commons, rather than property-oriented, institutional arrangements.[...]*²⁴

If realised, all such anti-market utopias would render Intellectual Property regulations, in particular in the field of patent law, rather dispensable. Those utopias in their relationship with the Internet should, however, be seen in the context of the fact that in some segments of the software market any real competition has effectively collapsed, and a quasi-monopolistic market leader regularly obtains market shares in excess of 90 %. Where there is no real competition within a market, alternative concepts to replace the market by different structures might have an easy stand.

2.1.4 Populistic agitation against »software patents« and the political fallout thereof.

The most striking event so far has happened, however, on September 25, 2003, when the European Parliament met in Brussels for a plenary session. On the agenda was the vote of the plenary of the Parliament in the context of the first reading of the Draft Directive on the patentability of computer-implemented inventions. Such vote was to be cast within the so-called »co-decision procedure« where the EU Council as well as the European Parliament can create secondary EU law only if both manage to agree upon a common approach. An unprecedented effort of lobbying undertaken by various NGOs caused varying majorities of MEPs to pass dozens of amendments to the original proposal turning the latter from an instrument to codify the status quo of the case law of the Boards of Appeal of the European Patent Office to a legal text which, if finally adopted by the EU Council, would effectively have skeletonised the European patent system in the field of electronics and IT. The European Parliament has suggested,²⁵ *inter alia*, amendments like those listed below:

- "[...] Member States shall ensure that data processing is not considered to be a field of technology within the meaning of patent law, and that innovations in the field of data processing are not considered to be inventions within the meaning of patent law."²⁶
- "[...] The processing, handling, and presentation of information do not belong to a technical field, even where technical devices are employed for such purposes."²⁷
- "[...] 'industry' within the meaning of patent law means the automated production of material goods; [...]"²⁸
- "[...] Member States shall ensure that computer-implemented solutions to technical problems are not considered to be patentable inventions merely because they improve efficiency in the use of resources within the data processing system."²⁹
- "[...] Member States shall ensure that whenever a patent claim names features that imply the use of a computer program, a well-functioning and well documented refer-

²⁴ BENKLER loc. cit.

²⁵ See Document 11503/03 under the URL <http://register.consilium.eu.int/pdf/en/03/st11/st11503.en03.pdf> [Visited on 2004-08-03]

²⁶ Amendment 45 Article 3a of Document 11503/03, loc. cit.

²⁷ Amendments 107 and 69 Article 2, point (b) of Document 11503/03, loc. cit.

²⁸ Amendments 38, 44 and 118 Article 2, point (bb) of Document 11503/03, loc. cit.

²⁹ Amendment 60 Article 4b of Document 11503/03, loc. cit.

*ence implementation of such a program shall be published as a part of description without any restricting licensing terms.*¹³⁰

- "[...] Member States shall ensure that, wherever the use of a patented technique is needed for a significant purpose such as ensuring conversion of the conventions used in two different computer systems or networks so as to allow communication and exchange of data content between them, such use is not considered to be a patent infringement."¹³¹

If such clauses were eventually signed into law, hardly any patenting would be possible in Europe for any invention which is somehow related to signal processing, even in the field of embedded systems and the like. The gist of such amendments as proposed by the Parliament might perhaps be paraphrased like *»you shall not be awarded a patent on any invention related to signal processing, and if you nevertheless should have gotten such a patent you shall not be entitled to make any significant commercial use of it.«* It would throw Europe's patent landscape back to the world of the 19th century with its steaming coke-fuelled and oil-contaminated work machinery. Those proposals of the European Parliament are a living documentary of a complete failure of any meaningful communication between representatives of the patent system including Patent Offices, the industry, and the free professions, on the one hand, and the European Parliament, on the other hand. However, the EU Council has not accepted such amendments, and on May 18, 2004 a political agreement on the Council's common position³² which is close to the Commission's original proposal was finalised by a thin majority. A final and formally binding vote of the EU Council has not yet happened; it is to be expected later this year. And the various NGOs currently continue with hard lobbying in order to overturn this political agreement.

2.1.5 Facets of the current crisis of the patent system.

If all the different views as presented above in an exemplary fashion are combined with each other, a picture of a *crisis of the patent system* emerges. Unlike during the past hundred years, the patent system is no longer merely a somewhat obscure border region between law and technology rarely perceived by the general public. Patent law matters now suddenly appear in the headlines at least of the broadsheet papers. And politicians who rarely even have understood the basic concepts of Intellectual Property law are called to take long-reaching decisions on the further shape of the entire system. What makes the current debate on the future of the patent system so difficult is its character as a mixture of very divergent motivations.

- There is a lot of critic bound within the traditional limits of the patent system, e.g. complaining high costs of the patenting process, exorbitant complexity of the law or malpractice of certain patent offices. The motivation of such critics is not to overthrow or to limit the patent system but to improve its particulars. Although many issues of this category are of high importance, the issues of this category can be dealt with using well-established instruments.
- There is another category of critics based on the platform of a market economy but arguing that the patent system should undergo a major overhaul in order to improve its function

³⁰ Amendments 104 and 120 Article 5, paragraph 1 d of Document 11503/03, loc. cit.

³¹ Amendment 76 Article 6a of Document 11503/03, loc. cit.

³² Document 9713/04, see <http://register.consilium.eu.int/pdf/en/04/st09/st09713.en04.pdf> [Visited on 2004-08-03]

within such kind of economy. The motivation of this kind of critics is not to overthrow a market-based knowledge economy but to strengthen free markets.

- There are critics questioning the legitimacy of the patent system in view of its micro- and macro-economic effects.
- And, finally, there is a growing sector of critics putting forward the dichotomy of »market« versus »commons«, arguing that any existing free market knowledge economy should be replaced or at least complemented by some kind of commons.

It would surely not be a wise idea to ignore any of the above category of critics. Each of these aspects deserves a thorough investigation in order to clarify the benefits provided by the patent system despite the various difficulties with some aspects of its present shape. Up to now there seems to be no systematical work to overcome these difficulties in a coherent manner for re-strengthening the patent system. Perhaps also for patent professionals it might be high time to contribute seriously to this debate.

2.2 Acting people in the crisis.

2.2.1 Introduction.

There are roughly four groups of acting people to be distinguished in the current controversy about the patent system:

- Patent system insiders (patent counsels etc.),
- Experts from Academia,
- Non-Governmental Organisations (NGOs), and
- Politicians.

In the following section some comments will be provided with regard to each of these groups.

2.2.2 Insiders of the patent system.

Where there are insiders expressing differentiated and supportive criticism, this is in general done in order to improve the patent system, not to wreck it. Despite the fact that those insiders of the patent system who are acting as its defenders represent a vital centre of competence with regard to intellectual property law in general and patent law in particular, they appear to be somewhat overwhelmed and outmanoeuvred in view of the excellent performance of various communities of patent critics, in particular NGOs, with regard to the utilisation of high-tech communication means for propagandistic purposes, in particular the Internet.³³ The various associations and professional bodies of patent professionals are used to publish carefully drafted statements concerning all aspects of patent law but they are probably not at eye level with many anti-patent NGOs which effectively disseminate their political spin amongst the general public and journalists via the Internet. When surfing through the web, an overall impression might come up according to which web sites of patent professionals and their respective Institutes and associations tend to be somewhat meagre with regard to timely and substantial information contents. Traditionally, those insiders of the patent system are very experienced in delivering their issues utilising personal connections with decision makers but it

³³ See e.g. AXEL H HORNS : "Some Observations on the Controversy on "Software Patents". epi Information 01/2001, April 2001, pp. 31–35

might well be legitimate to scrutinise whether or not this is adequate vis-a-vis a political adversary constituted as something like an »on-line community«. It looks as if it would be impossible at the time being to determine whether or not such traditional means of lobbying are actually stronger in effect than the activities of vast armies of activist volunteers harnessed by anti-patent NGOs and well co-ordinated by Internet-based technologies (e-mail distribution lists, general purpose web sites, blogs,³⁴ wikis,³⁵ etc.).

2.2.3 *Academia.*

Although more traditional juridical faculties at the Universities tend to support the patent system in its present shape, more and more voices criticising the present status of the patent system are raised. Moreover, in some other branches of Academia the patent system is occasionally seen as an instrument to restrict free competition on the market by a system of monopolies. Hence, some critics argue that patents should be allowed only to the extent that the overall economical benefits outweigh its costs. This is the neo-liberal critics of the patent system.^{36,37,38,39,40} There are also very interesting high-profile reform proposals from this side, e.g. from PAMELA SAMUELSON.⁴¹

2.2.4 *Eurolinux: A bunch of anti-patent Non-Governmental Organisations (NGOs).*

While the first two of the groups as mentioned above usually tend to contribute conservatively to the debate, the role of the NGOs involved should be assessed separately. In 1998/99, when the preparatory work for the Diplomatic Conference to revise the European Patent Convention was underway, a number of activists mainly organised via the Internet under the umbrella of the EURO LINUX ALLIANCE⁴² started activities against patentability of software-related inventions. Members of the EURO LINUX ALLIANCE are:

- FFII e.V.; "Förderverein für eine Freie Informationelle Infrastruktur", Germany,⁴³

34 A weblog, or simply a blog, is a website which contains periodic, reverse chronologically ordered posts on a common webpage. See e.g. <http://en.wikipedia.org/wiki/Blog> [Visited on 2004-08-04]

35 A wiki (pronounced "wicky" or "weekey") or Wiki is a website (or other hypertext document collection) that gives users the ability to add content, as on an Internet forum, but also allows that content to be edited by other users. See <http://en.wikipedia.org/wiki/Wiki> [Visited on 2004-08-04]

36 See e.g. CHRISTOPHER G. PIKE, "Virtual Monopoly", London: Nicholas Brealey Publishing, 2001, pages 105 to 117

37 Also PIERRE DESROCHERS: "Le Marché Libre: The Case against the Patent System"; on-line via <http://www.quebecoislibre.org/000902-3.htm>

38 Also MARKUS KRUMMENACKER: "Are 'Intellectual Property Rights' Justified?"; on-line via <http://www.n-a-n-o.com/ipr/extro2/extro2mk.html>

39 Also a report in the daily newspaper FRANKFURTER ALLGEMEINE ZEITUNG on 2000-11-20, page 19: "Mehr Markt soll die Politik in ihre Schranken verweisen". This article says that on the annual general meeting of the Mont Pèlerin Society, a global organisation of liberal movement, the patent system in general was heavily under attack, in particular by Mr. JÉSUS HUERTA DE SOTO of the Universidad Complutense, Madrid.

40 Also JAMES BESSEN, ERIC MASKIN: "Sequential Innovation, Patents, and Imitation." Working Paper. On-line available via <http://www.researchoninnovation.org/patent.pdf> [Visited on 2004-08-09]

41 PAMELA SAMUELSON: Legally Speaking: Why Reform the U.S. Patent System? Available on-line under the URL <http://www.sims.berkeley.edu/~pam/papers/cacm%20patent%20reform.pdf> [Visited 2004-08-16]

42 EURO LINUX Alliance self-defining as "The EuroLinux Alliance for a Free Information Infrastructure is an open coalition of commercial companies and non-profit associations united to promote and protect a vigorous European Software Culture based on Open Standards, Open Competition and Open Source Software such as Linux. Corporate members or sponsors of EuroLinux develop or sell software under free, semi-free and non-free licenses for operating systems such as GNU/Linux, MacOS or Windows."; available on-line under <http://www.eurolinux.org/> since June 17, 1999.

43 FFII e.V. self-defining as "Ein gemeinnütziger Verein, in dem Projektgruppen für GNU/Linux, FreeBSD, Java, Schnittstellenspezifikationen, Normen, Lexika, Enzyklopädien, Fonts und sonstige gemeinnützige Informationswerke arbeiten können. Gemeinnützigkeit macht unsere Satzung an Merkmalen wie Schnittstellenoffenheit, Quellenoffenheit und freie Verfügbarkeit fest." See on-line under <http://www.ffii.org/>

- AFUL; "French Speaking Association of Users of Linux and Free Software", France,⁴⁴
- APRIL; "Association Pour la Recherche en Informatique Libre", France,⁴⁵
- Associazione Software Libero, Italy,⁴⁶
- Europe Shareware, France,⁴⁷
- German Unix User Group, Germany,⁴⁸
- HISPALinux: Asociación de Usuarios Españoles de GNU/LiNux, Spain,⁴⁹
- HEL.L.U.G., Greece,⁵⁰
- ANSOL "Associação Nacional para o Software Livre", Portugal,⁵¹
- Electronic Frontier Finland – EFFI ry, Finland,⁵²
- Association pour les Libertés Electronique, Belgium,⁵³

44 AFUL self-defining as "L'AFUL est l'Association Francophone des Utilisateurs de Linux et des logiciels libres. C'est une association loi de 1901 dont l'objectif principal est de promouvoir, directement ou indirectement, les logiciels libres et en particulier les systèmes d'exploitation libres, principalement ceux basés sur les normes POSIX ou dérivées, dont le plus connu est le système Linux muni de l'environnement GNU (article 2 des statuts)." See on-line under <http://www.aful.org>

45 APRIL self-defining as "L'Association pour la Promotion et la Recherche en Informatique Libre (APRIL) est une association à but non lucratif [...]. L'association a pour objet d'engager toute action susceptible d'assurer la promotion, le développement, la recherche et la démocratisation de l'informatique libre. [...]" See on-line under <http://www.april.org>

46 "Associazione Software Libero – L'Associazione Software Libero è un'entità legale senza scopo di lucro che ha come obiettivi principali la diffusione del software libero in Italia ed una corretta informazione sull'argomento. L'associazione è nata nel novembre dell'anno 2000 dall'iniziativa comune di un gruppo di persone da tempo attive in Italia e all'estero nell'ambito del software libero. Nel tempo ai soci fondatori se ne sono aggiunti altri, e nel maggio 2002 l'associazione è diventata l'affiliata italiana della Free Software Foundation Europe. [...]" see on-line via <http://www.softwarelibero.it/associazione.shtml> [Visited on 2003-08-30].

47 "Europe Shareware is an organization translating, distributing and promoting shareware." See <http://www.europeshareware.free.fr/index.us.html> [Visited on 2003-08-30].

48 "The German Unix User Group is a non-profit organization for professional computer users using any kind of Unix system. Unix, in this case, includes the free Unix variants like Linux and the BSDs as well as commercial Unix systems. The important factors for us are openness of the systems, adherence to standards, and the chance to take a look behind the scenes." See <http://www.guug.de/> [Visited on 2003-08-30].

49 "HispaLiNux es la asociación de usuarios españoles de Linux, inscrita en el registro de asociaciones con el número 163.270. Fue fundada el 20 de Junio de 1.997. [...] Según el artículo número 2 de nuestros estatutos, los objetivos de la asociación son: Con el fin de divulgar y facilitar el acceso al sistema Linux a los usuarios; y de coordinar, apoyar y dar organización a los distintos grupos no organizados que ya existen en España, surge la iniciativa de crear una Asociación, sin ánimo de lucro y de ámbito nacional, al amparo de las disposiciones legales vigentes, mencionadas en el Artículo 1. Los fines de esta Asociación, por lo tanto, serán: Divulgación y Promoción de la plataforma de software de libre distribución "Linux", en Español, apoyo y organización a los grupos de usuarios y desarrolladores de Linux que funcionan actualmente en España sin una base organizativa, se promocionarán también otros sistemas software de libre uso y distribución, para con ello dar a conocer al gran público esta particular manera de entender el software. Para la consecución de estos fines, la Asociación podrá organizar conferencias, cursos de formación y divulgación, sesiones de trabajo, realización de proyectos de desarrollo de documentación de Linux en Español, celebración de encuentros periódicos entre usuarios, y cualquier otra actividad lícita que sirva a los fines de esta Asociación." See <http://www.hispalinux.es/modules.php?op=modload&name=Sections&file=index&req=viewarticle&artid=4> [Visited on 2003-08-30].

50 Ansol describes its aims as follows: "ANSOL é a "Associação Nacional para o Software Livre". É uma associação portuguesa sem fins lucrativos que tem como fim a divulgação, promoção, desenvolvimento, investigação e estudo da Informática Livre e das suas repercussões sociais, políticas, filosóficas, culturais, técnicas e científicas." See <http://www.hellug.gr/index.php> [Visited on 2003-08-30].

51 See <http://www.ansol.org/> [Visited on 2004-08-03]

52 "Electronic Frontier Finland ry (EFFI) was founded in 2001 to defend active users and citizens of the Finnish society in the electronic frontier. EFFI influences legislative proposals concerning e.g. personal privacy, freedom of speech and user rights in copyright law. We make statements, press releases and participate actively in actual public policy and legal discussion. EFFI also works in close cooperation with organizations sharing same goals and values in the Europe, United States and elsewhere." See <http://www.ffi.org/index.en.html> [Visited on 2003-08-30].

53 See <http://www.ael.be/index.php> [Visited on 2003-08-30].

- LIVE Linux–Verband e. V., Germany,⁵⁴
- SSLUG "Skåne Sjælland Linux User Group" Denmark⁵⁵
- Verein zur Förderung Freier Software e.V., Austria,⁵⁶
- Vereniging Open Source Nederland, Netherlands.⁵⁷ and
- LiLux – GNU/Linux User Group Luxembourg.⁵⁸

There are now 16 EUROLINUX ALLIANCE member organisations compared to 4 organisations in 2001.⁵⁹ Moreover, the FFII e.V. now seems to have dependences^{60,61,62} in other EU countries. Despite the diversity of those organisations throughout Europe it seems to be quite clear to the informed observer that the German FFII e.V. plays a somewhat exposed role. As far as it is known to the author, FFII was founded by its President HARTMUT PILCH in 1998 well before similar organisations were created abroad, possibly induced by FFII e.V. in Germany.

It seems to be that the most prominent action undertaken by this coalition was the so–called »Eurolinux Petition for a Software Patent Free Europe«. ⁶³ The petition is open for endorsement by everybody. EUROLINUX ALLIANCE claims to have gathered more than 345.000 endorsement entries including more than 400 of them from companies in the field of the IT business until summer 2004, and the petition list has not been closed up to now. Endorsers confess to be concerned by

"current plans to legalise software patents in Europe, considering their damaging effect on innovation and competition"

and by

54 "Zweck des Vereins ist die Förderung des professionellen Einsatzes von Linux und der Erhaltung der freien Verfügbarkeit des Betriebssystems Linux. Der Satzungszweck wird insbesondere durch aktive Koordination der Kommunikation der Mitglieder untereinander und die Vertretung der Interessen aller Mitglieder gegenüber Dritten verwirklicht." See

<http://www.linux-verband.de/verband/satzung/subindex.html> [Visited on 2003–08–30].

55 SSLUG writes: "Skåne Sjælland Linux User Group is a Linux User Group in Southeastern region of Scandinavia – We cover the isle of Sjælland (Eastern part of Denmark) and Skåne (Southern part of Sweden). We meet four times a year in Skåne and on Sjælland for big meetings including install fests and several technical lectures, and our strategy is discussed. We also have several minor meetings – on the second Tuesday in each month and often also the last Tuesday in the month we go to hear invited speakers. The meetings are always in the Øresundsregion." See <http://www.sslug.dk/> [Visited on 2004–08–03]

56 "Der Verein zur Förderung Freier Software [...] wurde im Jahre 2001 als gemeinnützige Organisation gegründet, um als Ergänzung zu den international agierenden Organisationen die Interessen der Anwender und Entwickler von Freier Software in Österreich zu vertreten. Neben der Mitwirkung in verschiedensten Projekten zur Unterstützung des Einsatzes Freier Software im privaten, geschäftlichen und öffentlichen Bereich sieht sich die ständig wachsende Anzahl von Mitgliedern auch zunehmend dazu berufen, die rechtlichen Grundlagen für die Erstellung, Verwendung und Weiterentwicklung Freier Software in Österreich zu sichern und auszubauen." See <http://ffs.or.at/> [Visited on 2003–08–30].

57 "De Vereniging Open Source Nederland (VOSN) is opgericht ter stimulering van het professioneel gebruik van Open Source. Het bestuur van de VOSN bestaat uit een vertegenwoordiging van de nederlandse open source markt. Bestuursleden zijn dagelijks werkzaam binnen open source dienstverleners, zijn actief betrokken binnen open source ontwikkeltrajecten of hebben een uitgebreid netwerk en zijn actief binnen overheidinstanties." See <http://www.vosn.nl/index.php?sectie=default&groep=vosn> [Visited on 2003–08–30].

58 "Lilux ASBL is an non–for–profit organisation promoting the usage of the GNU/Linux system as well as other free and open–source software. However, our aim is not only to give technical advice and support, but also on a political level are we trying to help the free software movement to build a better future." See <http://www.linux.lu/> [Visited 2004–08–03]

59 cf. AXEL H HORNS loc. cit.

60 See e.g. <http://www.ffii.se/> [Visited on 2004–09–01].

61 See e.g. <http://www.ffii.org.uk/> [Visited on 2004–09–01].

62 See e.g. <http://www.ffii.org.pl/> [Visited on 2004–09–01].

63 http://petition.eurolinux.org/index_html?LANG=en

"the possible use of software patents to patent business methods, education methods, health methods, etc.".

The most remarkable success of the EURO LINUX ALLIANCE in general and FFIL e.V. in particular was to turn the table in the first reading of the EU Draft Directive on the patentability of computer–implemented inventions in September 2003. Before that date, most of the EURO LINUX activists were in a hostile mood against the Directive. After the plenary vote,⁶⁴ HARTMUT PILCH issued a different parole:

*"[...] The Directive is now our project [...] the roles have swapped."*⁶⁵

As an integral part of their strategy, EURO LINUX spreads an interpretation according to which Article 52 (2) EPC would be directed to limit the *scope of protection* of any granted claim such that each and every claim which might be infringed by a piece of software running on a computer can be decried as being illegal, in which line of arguing the »as such«–clause of Article 52 (3) EPC is deemed to be meaningless. Hence, EURO LINUX alleges that there is a

"current track record of abuses from the European Patent Office, especially by their tendency to abuse their judicial power to extend the scope of patentability".

The EURO LINUX petition urges

"decision–makers at all levels in Europe to enforce the Law, which clearly prohibits patenting pure computer programs, instead of changing it"

as well as

*"decision–makers at all levels in Europe to reconsider their current plans and to make sure patents are not abused to prohibit or restrict the dissemination of computer programs and intellectual methods."*⁶⁶

FLORIAN MÜLLER of FFIL e.V., a recently very active and influential activist, further argues⁶⁷ in this direction on SLASHDOT:⁶⁸

"[...] For some background information: The European Patent Convention of 1974 does not allow software patents. It excludes program logic from patentability. The European Patent Office has been granting software patents anyway (in fact, about 30,000 already), and now the European Union wants to take a decision on the patentability of program logic. That decision could go in any of three directions:

- *legalise software patents all the way (that's what some of the EU institutions want, and it's the will of the governments of Germany, UK, France, Sweden and other countries)*
- *abolish software patents entirely (that's what the European Parliament voted for in September of 2003, and that would be best)*

continue with status quo (which means that the situation remains unclarified for now... that would not be ideal but still infinitely better than legalising software patents in the EU) [...]"

⁶⁴ See section 2.1.4 above.

⁶⁵ See on–line via URL <http://yro.slashdot.org/comments.pl?sid=79769&threshold=-1&mode=thread&comment-sort=0&op=Change>

⁶⁶ See on–line via URL http://petition.eurolinux.org/index_html?LANG=en [Visited 2002–09–17]

⁶⁷ Seen on the Internet under the URL <http://slashdot.org/article.pl?sid=04/07/31/2351212> [Visited on 2004–08–01]

⁶⁸ SLASHDOT is a very influential blog–like website where IT related matters are discussed; see under the URL <http://www.slashdot.org/> [Visited on 2004–08–16]

EUROLINUX activists surely know that suspicious recipients of their propaganda might wish to get an expert opinion from a qualified patent professional on the validity of their imputations concerning such basic concepts of the patent law. Therefore, they are quite aware of the need to fight hard in denouncing the patent professionals for keeping them out whenever the general public starts discussing the patent policy issue. So, the appalling efficiency of the EUROLINUX propaganda can be seen as the result of their slyly strategy consisting, on the one hand, of an approach to re-define some of the basic concepts of patent law *in violation of the codified law as well as of the case law* and, on the other hand, of another approach to popularise the idea of a big conspiracy of all patent professionals in the governments, in the patent offices, in the courts, in law firms as well as in the industry, where all these individuals are involved in a common perversion of justice to their own benefit.

The emanating general impression is that the current practise of the EPO concerning patenting of software-related inventions is blatantly illegal and, hence, immediate political action to stop such doing is urgently needed. In relation with the second part of their double track strategy, patent professionals are usually portrayed by EUROLINUX activists as a segregated network not serving the interests of the economy but selfishly concreting their own power:

"[...] It is all the same circle [...] Patent law experts employed with the government visit the same conferences and will apply in a few years for a job with the same employers as the patent experts in the 'industry' do. All of these guys have more in common than e.g. people from the patent department and the R&D department of a single company like Siemens or SAP."⁶⁹

The current political debate is generally seen by them as the result of a somewhat manichaeic dichotomy of the selfish patent professionals on the one side and of the altruistic activists of FFII e.V. on the other side.⁷⁰ As a consequence of the EUROLINUX propaganda, the relationship between patent professionals and the press seem to have deteriorated perceptibly.⁷¹

The basic policy with regard to software protection is the doctrine of »Copyright only«. HARTMUT PILCH, President of FFII, writes:⁷²

"[...] Our constituents' basic interest is to keep the software free from patents, regulated by copyright only. I.e. even if there are patents on the much cited 'anti-blocking system', 'washing machine', 'intelligent vacuum cleaner' etc., they must apply only to the makers and users of the devices, not to people who create or provide software (= control logic, similar to user manuals) for these devices. [...] We have a good law already, but some patent courts are not respecting it. [...] We can accept almost any directive, as long as it consists only of clear and simple exclusions from patentability. Art 52(2) EPC consists of such exclusions. It says in clear and simple terms what is not an invention in the sense of patent law. [...] Our first and most basic demand is 'no program claims, no direct or indirect infringement by software distribution'. [...] We can not accept restrictions on the use of equipment that consists of general-purpose computers only. Patent claims of whatever form (process, device, system and method, ...) are unacceptable when the contribution to the prior art consists of pure data proc –

69 See on-line [in German] under the URL <http://www.fitug.de/debate/0309/msg00585.html> [Visited 2004-08-09]

70 See e.g. the statement of HARTMUT PILCH of 2002-07-19 on the FFII mailing list: "[...] Nur die Patenanwalte suchen ihre Rechtfertigung im Status Quo (30000 Rechenregelpatente, 4 Millionen Arbeitslose etc). Wir suchen sie im Gemeinwohl (Innovation, Wettbewerb, Software-Qualitat, Freiheit etc)."; see on-line via the URL <http://lists.ffii.org/archive/emails/swpat/2002/Jul/0077.html> [Visited on 2002-10-14].

71 The mainstream press now frequently runs articles widely relying on the views of Eurolinux; e.g. DER SPIEGEL No. 33/2004, pages 116, 177, or Suddeutsche Zeitung No. 179/2004, page 37.

72 See <http://swpat.ffii.org/analysis/needs/> [Visited on 2004-08-04]

*essing (i.e. instructions for operation of general purpose data processing equipment).
[...]"*

It seems not to be a fault to assume that their main political goal – within the context of their doctrine of »*Copyright only*« – is to bring about a state of the affairs in which neither commercial creating of, using of or dealing with computer software can be judged as a form of patent infringement, be it immediate or contributory.⁷³

There are other related tales than the »*software patents are illegal*« language told by anti-patent activists. One of them is the myth obviously intended to support the »*Copyright only*« –doctrine that there is some illicit »double protection« which should be prevented or removed. FLORIAN MÜLLER therefore further argues⁷⁴:

"I very much agree on your logic as to why program logic should not be patented, and why double protection (copyright plus patentability) is an insanity."

Of course, the protection of software by means of copyright does not preclude the patentability of any invention(s) embedded in the ideas, procedures, methods of operation or mathematical concepts behind the expression of the code.⁷⁵ For example, a car can at the same time be seen as an embodiment of a creative aesthetic impression protected by a registered design as well as an embodiment of one or more technical inventions, each of them potentially protected by a patent. But nevertheless the EURO-LINUX ALLIANCE in general and FFII e.V. in particular seem to be quite rigidly bound to some political approach demanding that immunity of programmers from patent infringement liability has to be accomplished by modifying the material criteria of patentability, i.e. by excluding any software-related inventions from patentability.

Such attempt is, however, necessarily utmost inselective in terms of patent law as it requires not only that a ban would have to be imposed on patenting any computer-implemented invention. Even an invention not actually said to be implemented on a computer which, however, might *potentially* also be implemented by means of a computer, i.e. a »computer-implementable invention«,⁷⁶ would have to be exempted from being patented. The consequences of such policy would be extremely grave as each and every signal processing device can be seen as potentially computer-implementable. In fact, the consequences of the various EURO-LINUX proposals would be to reduce the scope of the patent system to chemistry, mechanical engineering and certain branches of electrical engineering.

73 See e.g. the assertions given by FFII e.V. issued as a set of proposals for the coalition negotiations held after the 2002 general election: "[...] Die Bundesregierung wird dafür sorgen, dass die Veröffentlichung oder Verbreitung eines Computerprogramms ebenso wie seine Ausführung auf einer reinen Datenverarbeitungsanlage[1] niemals eine Patentverletzung darstellen kann.[...]"; see <http://swpat.ffii.org/letters/bund028/index.de.html> [Visited on 2002-10-14].

74 Seen on the Internet under URL <http://slashdot.org/comments.pl?sid=116441&threshold=1&commentsort=0&tid=163&tid=155&tid=218&mode=tbread&pid=9856319#9859109> [Visited on 2004-08-01]

75 TRIPS requires that software is covered by Copyright law as a minimum standard. From Article 1 of TRIPS: "[...] Members may, but shall not be obliged to, implement in their law more extensive protection than is required by this Agreement, provided that such protection does not contravene the provisions of this Agreement. [...]"

76 The difference between computer-implemented inventions and computer-implementable inventions is explained more in detail in:

BERND LUTTERBECK, ROBERT GEHRING und AXEL H HORNS: Sicherheit in der Informationstechnologie und Patentschutz für Software-Produkte – ein Widerspruch? [In German] Brief Expert Opinion written for the German Ministry of Economic Affairs, December 2000. On-line available via <http://www.ipjur.com/data/LuGeHo.pdf> [Visited 2004-08-17]

Although EUROLINUX claims that they are also representing the interests of closed-source programmers seeing themselves threatened by patent claims, there is a strong bias towards F/OSS expressed in a manichaeic view of an unbridgeable division of the IT world in F/OSS supporters and users of the patent system. For example, FLORIAN MÜLLER articulates:⁷⁷

"If everyone in the industry and in politics understood that you can only be either for open source or for software patents, it would all be a lot easier. Some say that software patents have not hurt open source so far but today we have the first incident that shows how software patents can put a hallmark Linux project in jeopardy.

What people need to understand is that the competitors and enemies of open source may very well accept today's stack of open source software, but they lay huge patent minefields in new areas of technology so they can arbitrary restrict the functionality of open source and keep its market share limited in the future. However, the best that can happen to all of us is an unfettered proliferation of open source."

The fight of the EUROLINUX ALLIANCE is to be seen in the context of some »geopolitical« ambitions. FLORIAN MÜLLER continues:

"In my opinion, the EU is now the decisive battleground. In such countries as China and India, software is not patentable yet. If the EU adopts swpats, then it means that all of the industrialised First World has them (it seems almost certain that Australia will get swpats as part of a free trade agreement with the US, and Japan is already under a US-style swpat regime). So if the EU decision is pro-swpat as well, then China and India will probably just do what the wealthy part of the world has done.

If, however, we put an end to the expansion of the swpat system by democratic means in Europe, then some of the emerging markets will be more comfortable without swpats, and the US would be put at a competitive disadvantage and may at some point in time revisit the issue. If patent inflation continues, then even some of the large corporations will call for a swpat reform."

Here we see something like a link to more fundamental anti-capitalistic, anti-globalisation and pro-protectionism positions of NGOs like ATTAC⁷⁸ or GREENPEACE⁷⁹.

There are several other groups which are active side by side with EUROLINUX in the ongoing fight against the so-called »software patents«. One of them should be mentioned here; it is the »FREE SOFTWARE FOUNDATION« (FSF).⁸⁰ The FSF represents the »orthodoxy« of F/OSS advocacy, maintaining the GNU GPL⁸¹ defining the ultimate concept of »Free« software. The founder and anchor-man of the FSF, RICHARD STALLMAN,⁸² is one of the most charismatic persons acting in the dispute. He is very active in the anti-patent movement.

On the foreground of their presentations the motivation of EUROLINUX activists may appear to be a desire to enhance the system of Intellectual Property⁸³ but when looking into the details it

77 See <http://slashdot.org/article.pl?sid=04/08/04/1233241> [Visited on 2004-08-04]

78 See e.g. special interest group »Wissensallmende und Freier Informationsfluss« of Attac Germany; see <http://www.attac.de/wissensallmende/software/swpat.php> [Visited 2004-08-04]

79 See e.g. "Auf dem falschen TRIP: Patente in der WTO" http://www.greenpeace.org/deutschland/fakten/umwelt_und_wirtschaft/wto/auf-dem-falschen-trip--patente-in-der-wto

80 See e.g. <http://www.fsf.org/gnu/gnu-history.html> [Visited 2004-08-04]

81 See e.g. <http://www.gnu.org/licenses/licenses.html#GPL> [Visited on 2004-08-17]

82 See e.g. <http://www.stallman.org/> [Visited on 2004-08-05]

83 See, for example, the FFIL paper "Entwürfe von BSA/EUK und EPÜ-basierter Gegenentwurf" on page 8: "[...] Patente sind zeitweilige Monopole, welche der Staat Erfindern gewährt, um den technischen Fortschritt zu fördern. Um sicher zu stellen, dass das System wie vorgesehen funktioniert, müssen die Bedingungen der Erteilung und Durchsetzung von Patenten umsichtig festgelegt werden. Insbesondere müssen unvermeidbare Begleiterscheinungen

becomes perfectly clear that the core of their attempts is to cripple the entire patent system as it stands now, thereby utilising the incapacity of wide parts of the general public to provide realistic assertions of certain matters of patent law.⁸⁴ There is a clear perceivable kind of readiness to wreck the current patent system and degrade it down to a state in which all activities of creating program code and running this code on a matching processor cannot be reached by any conceivable patent claim.⁸⁵ This tactical approach becomes clear whenever constructive approaches are published by someone in order to improve the patent system, e.g. by PAMELA SAMUELSON.⁸⁶ Below is the spontaneous reaction of HARTMUT PILCH to PAMELA SAMUELSON's proposals:

"[...] Discussions about 'patent quality' are fruitless [...] but there is a reason why we are asked to shift the discussion: it can be used to imply an endorsement or recognition of software patentability. If you can not get people to explicitly endorse something, the best way is to get them to implicitly endorse it by shifting focusses of discussion. Unfortunately a lot of people in the US who have traditionally been critical to software patentability, including EFF, Pubpat and Samuelson, are now helping to bring about implicit endorsement of swpat by shifting the discussion. [...]"⁸⁷

At the time being the EUROLINUX ALLIANCE concentrates on fighting the patentability of computer-implemented inventions. However, it is visible that later on EUROLINUX ALLIANCE might well be prepared to join an all-out anti-patent campaign together with FSF, ATTAC, GREENPEACE and potentially further co-operating organisations. As early as in 2001, HARTMUT PILCH wrote:

"[...]. At the moment we have mainly anti-software-patent people. People are trying to take the doctrines of patent law seriously and help repair it so that it can function. But the more people like you refuse co-operating, the more you force the critics to become more fundamental in their approach. Once public anger has reached a certain critical point, nobody can control it anymore, and respect for 'sophisticated and long-developed legal institutions' will no longer be available. People will become disinterest in the doctrines of a system which they perceive to be abusive as a whole. [...]"⁸⁸

Recently, PILCH confirmed:

"[...] The patent system in its entirety seems to be ripe for being scrapped [...]"⁸⁹

nungen des Patentwesens wie die Beschränkung der Schadensfreiheit, Rechtsunsicherheit und kartellfördernde Wirkungen in vernünftigen Grenzen gehalten werden. [...]". On-line available via the URL <http://swpat.ffii.org/papiere/eubsa-swpat0202/prop/prop.de.pdf> [Visited on 2002-10-14].

84 One of the false arguments repeatedly presented by FFII e.v. says that what they call »software patents« or »logic patents« is blatantly illegal; see e.g. their statement "[...] 1. Das Europäische Patentamt (EPA) hat im Widerspruch zum Buchstaben und Geist des geltenden Gesetzes zehntausende von Patenten auf Programm- und Geschäftslogik erteilt, die wir im folgenden "Logikpatente" oder "Softwarepatente" nennen. 2. Die Europäische Kommission (EUK) drängt darauf, diese Patente zu legalisieren und in ganz Europa durchsetzbar zu machen. [...]" under the URL

<http://swpat.ffii.org/papiere/eubsa-swpat0202/appell/index.de.html> [Visited on 2002-10-14].

85 See the remark of 2002-08-13 by HARTMUT PILCH on the FFII mailing list: "[...] Man kommt wieder zurück zu den Kritikern des 19. Jahrhunderts, die das Patentwesen für eine faule Frucht der Zivilisation hielten, die endlich fallen solle. [...] Eigentlich ist es traurig, dass wir uns jetzt Gedanken über die Reparatur des Erfindungsbegriffs machen müssen, während die Patenteleute sich damit begnügen, bei uns Fehler zu suchen. Wenn kein Erfindungsbegriff gefunden werden kann, der für hinreichend enge und nicht-triviale Patete sorgt, muss das Patentwesen abgeschafft werden. Wir müssen wieder zurück zum Ausgangspunkt des 19. Jahrhunderts kommen. Wer für ein Patentwesen plädiert, ist in der Bringschuld.". Available on-line under <http://lists.ffii.org/archive/emails/swpat/2002/Aug/0017.html> [Visited on 2002-10-14].

86 PAMELA SAMUELSON loc. cit.

87 See <http://www.aful.org/www/arc/patents/2004-08/msg00048.html> [Visited 2004]

88 See this quotation under the URL <http://www.aful.org/www/arc/patents/2001-05/msg00238.html> [Visited on 2004-08-09]

89 See under URL <http://lists.ffii.org/archive/emails/swpat/2004/Jul/0103.html> [Visited 2004-08-09]

At this point it becomes clear that there exists a threat in that the broader lines of criticism as depicted hereinbefore in sections 2.1.1, 2.1.2, and 2.1.3 might, under some circumstances not known so far, be adopted by the grassroots currently organised under the roof of the EUROLINUX ALLIANCE. In particular, the anti–property line of arguing against Intellectual Property as listed in section 2.1.4 could one day well merge with anti–globalisation criticism as already expressed by organisations like ATTAC or GREENPEACE. It might, for example, happen that anti–capitalistic NGOs choose to hit the patent system *in lieu* of the globalised capitalistic markets in order to cause damage at a highly vulnerable point. By no means it can be taken for granted that under such circumstances the activists of the EUROLINUX ALLIANCE would passively stay aside if the dispute over the so–called »*software patents*« should widen substantially. Anyway, quality assurance problems of the Patent Offices are seen by them as indicators of an intrinsic fault of the patent system, not as management problems.⁹⁰

2.2.5 *Politicians.*

Politicians, in particular Members of Parliament (MPs) but not judges or patent experts, are the ultimate decision–makers with regard to patent policy. Nobody should lose sight of this simple truth. And, politicians are not born as experts in patent law. Patent law plays on a very high level of abstraction, and it is a bit difficult to understand. In the past, a few politicians had more or less voluntarily been selected to go deeper into that field of legal expertise. However, today each MP faces the lobbying efforts of the EUROLINUX ALLIANCE. The effects can be grave. When winding up the debate in the European Parliament on the Draft Directive, ARLENE McCARTHY MEP had concluded:

"Mr President, I did not want to make this point during my speech, but it is necessary that it should be made. In the ten years that I have been an MEP I have never encountered such a personal, aggressive and abusive campaign as I have with this particular directive. I have been bullied and harassed by lobbyists. My staff have been bullied to the extent that one of them had to take days off with a stress–related illness."

Politicians cannot avoid to perform *reductions of complexity* of the tasks they have to solve. To some extent, such undertaking is healthy. However, when dealing under great political pressure with utmost complex issues, a huge risk of misinformed and wrong decisions comes up. In the effect, many politicians might see themselves tempted not to ask for the conceptual coherence and the real effects of the particular Bill on which a decision is due but to seek affirmation of supporters. The peril of the present situation in the field of patent law is that numerous politicians start believing all false statements wilfully made by activists of the EUROLINUX ALLIANCE, including the myth that all of the patents granted by the EPO on computer–implemented inventions are »*illegal*« as well as that one according to which the alleged double–protection by Copyright plus patent laws is evil. For example, even the parliamentary group of the German F.D.P. (Liberal Democrats) in the German Bundestag recently has jumped⁹¹ on that bandwagon steered by the EUROLINUX ALLIANCE. A very special tactics of EUROLINUX activists is to rouse politicians and other officials who do not have any legal and/or political competence and, hence, also no

⁹⁰ See e.g. "[...] Low examination quality has right from the start been an inevitable part of this system.[...]" under the URL

<http://swpat.ffii.org/players/epo/index.en.html>

⁹¹ German Printed Matter of the Bundestag no. 15/3240 dated May 27, 2004; see <http://www.ipjur.com/data/040527BT1503240.pdf> [Visited 2004–08–05]

experience, with regard to Intellectual Property law. For example, FFII e.V. activists recently have interfered⁹² in Munich on a municipal level with a project to migrate the IT infrastructure of the city administration to Linux-based solutions by scaring local politicians with allegations that this migration project might be bound to fail if patents on computer-implemented inventions are not completely banned.

3. Ways out of a perilous situation.

3.1 How to avoid some blind alleys.

Here and there press releases and other statements from individual patent professionals or of their associations and Institutes appear which might be read as if they would suggest a view according to which an »Open Source Community« is to be blamed for causing all of that current brouhaha in patent politics. Disgusted by the outspoken preference of some groups within that Open Source Community for the intellectual commons, perhaps some patent professionals might covertly or openly think that the world might be a better place to live and work if Free / Open Source Software (F/OSS) does not exist. However, such conclusions would be misleading.

Independently of any pros and cons of F/OSS it surely would be wise if every serious discussion of patent policy is based on the assumption that F/OSS is here to stay. F/OSS is simply a success story,^{93,94,95,96} and any attempt to turn it down in order to save some aspects of the present patent system would surely be hubris. Some observers even think of F/OSS as an embodiment of a new paradigm⁹⁷ of allocation and distribution of intellectual resources. The stakeholders in this field of software creation and distribution are not only those secularistic redeemers like RICHARD STALLMAN⁹⁸ from FSF and his followers from the EUROLINUX ALLIANCE fiercely fighting pro intellectual commons and against the present patent system but also more business-minded people, some of them even wearing a conventional business suit and actively utilising the patent system. IBM for example hugely profits from bringing Linux-related hardware and support services to market, at the same time being one of the most active companies with regard to patent filings. The Linux distributor SuSE AG now belongs to NOVELL, INC., which had been active in patenting at least in the past. And, vice versa, there are a lot of SMEs making their profit in conjunction with closed-source software and nevertheless supporting EUROLINUX ALLIANCE in their anti-patent fight. There is simply no one-to-one mapping of closed-source software and F/OSS, on the one hand, to pro-patent and anti-patent moods, respectively, on

92 See e.g. <http://slashdot.org/article.pl?sid=04/08/04/1233241> [Visited on 2004-08-05]

93 STEVEN WEBER: *The Success of Open Source*, Cambridge, Massachusetts, and London: Harvard University Press, 2004.

94 See e.g. "LinuxWorld NY 2004: From back office to desktop, Linux is spreading" in *Computerworld* 2004-01-16, on-line via URL <http://www.computerworld.com/softwaretopics/os/linux/story/0,10801,89156,00.html> [Visited on 2004-08-10]

95 See also Victoria Murphy: "Microsoft sings a new tune on Linux – Once dismissed, open source now seen as formidable opponent" in *MSNBC* under the URL <http://www.msnbc.msn.com/id/5614334/> [Visited on 2004-08-10]

96 See also David Adams: *Free Can Mean Big Money: The Open Source Economy*. Available on-line via http://www.osnews.com/story.php?news_id=8054 [Visited on 2004-08-17]

97 For example, Tim O'Reilly in "The Open Source Paradigm Shift", available on-line via <http://tim.oreilly.com/lpt/a/4868> [Visited on 2004-08-10]

98 See e.g. http://www.theregister.co.uk/2004/05/25/stallman_lecture/ [Visited 2004-08-04]

the other hand. The reality is more complex, despite the fact that some anti-patent NGOs loudly claim to be the only and true stakeholders of the F/OSS scene.

In 1994, the European Patent Office had published the results of a representative survey⁹⁹ concerning the acceptance of the patent system in Europe. This study clearly pointed out that SMEs significantly underused the patent system. Now, it seems as if in those days SMEs have passively ignored the patent system whereas nowadays some of them are no longer staying aside but, inflamed by EUROLINUX, actively attempting to undermine the patent system.

Therefore, one of the key insights for curing the present crisis of the patent system might be that one of the more important causes thereof is a scarcity of acceptance of the present patent system by SMEs in the field of IT. This deficiency might be considered partially home grown as it looks as if in the 80es and 90es of the past century little efforts have been made by patent professionals to remove in the general public the widespread urban myth that software-related inventions cannot be patented at all in view of Article 52 EPC. Perhaps the current difficulties can be seen as something like a late *nemesis* in return for the lapses that occurred during those years.

3.2 Some preliminary analysis.

3.2.1 *The power of conservative software developers.*

In fact stepping up the political pressure as undertaken by the EUROLINUX ALLIANCE as well as by their corona of numerous individuals by urging policymakers to restrict the scope of patent law seems to aim *to prevent certain anticipated changes of the conditions of software production*. It is, in essence, a *conservative* movement desperately attempting to preserve certain existing business models against emerging others to come. A traditional way of manufacturing software is characterised by some kind of unity of abstract functional problem-solving knowledge on the one hand and software code text on the other hand: The programmer attempts to understand the problem as posed, finds an abstract solution, and then goes ahead to implement the abstract solution by coding a computer program. There seem to be strong forces out there desiring to implement different business models characterised by a *separation* of the abstract functional problem-solving knowledge on the one hand from the production of the software code text on the other hand. Such alternative business models, however, can work only on the basis of a sound patent protection of computer-implemented inventions. By its ability to enable a separation of knowledge, the patent system is one of the cornerstones of any »*knowledge economy*« wherein knowledge is transformed into some kind of commodity which can be exchanged in trade.

Such separation of abstract functional problem-solving knowledge on the one hand from implementation-oriented craftsman knowledge on the other hand is quite common in other industries except the software business. For example, no responsible person in the automotive industry would allow a re-design of a car model to go into mass production without having scrutinised the origin and licensing conditions of any external abstract problem-solving knowledge used therein. The essential difference of the software business against other

⁹⁹ European Patent Office [Editor]: Nutzung des Patentschutzes in Europa. Repräsentative Erhebung erstellt im Auftrag des Europäischen Patentamtes München. EPOscript Vol 3. München, 1994.

branches of the economy might emerge from the fact that general purpose computers are extremely cheap today so numerous individuals and firms on the lower end of the SME scale are enabled to unfold their business in this branch without having huge capital stocks. Establishing a factory for real »hardware« like cycle tyres, cars, or the like needs by far more capital investment than founding a software firm. In consequence, such »hardware« factories are much less numerous than small software firms and have more money for setting up legal and patent departments for participation with the patent system. This might be a reason why there have been virtually no complaints about the patent system from the various »hardware« industries. Moreover, even every individual doing his or her business in any other branch can become a patent infringer by simply combining a software code text with a general purpose PC. Hence, the spectrum of potential patent infringements caused by creating and/or using software is immense. It is much broader than that of any other branch of business.

3.2.2 *Patent-experienced software industries.*

Despite such impressions not the entire software based industry is participating in complaining about the patent system. In particular, the industries manufacturing products comprising embedded systems, e.g. electronic printers or mobile phones,¹⁰⁰ seem to behave more like real »hardware« industries despite the fact that the position of their products on the market is largely determined by the functionality of the software running within their products in said embedded systems.

The fact that, on the one hand, e.g. the various industries manufacturing products comprising embedded systems obviously do not complain about the patent system, and, on the other hand, the fact that even any office worker installing a piece of software on a PC is in a more difficult position when attempting to assess the sources and the legal status of the abstract problem-solving knowledge implemented with the software code, again reinforce serious doubts that any adjustment of the material prerequisites of patentability of computer-related inventions may really solve any of the problems.

Hence, it is much more likely that any sustainable solution of the controversy on the so-called »software patents« will affect the *effects* of any patent granted on computer-implemented or computer-implementable inventions, e.g. by properly re-adjusting the system of *exemptions*.

3.2.3 *The question of the macro-economical efficiency of the patent system.*

Currently there are numerous attempts to challenge the legitimacy of the patent system by questioning its macro-economical efficiency. However, assessing this macro-economical efficiency must not be done in a static way by simply asking whether or not the total number of inventions made and brought to market is raised or lowered. In fact, the mere existence of a patent system changes the entire framework of the economy to the effect that simple comparisons are unfeasible. In particular, as pointed out above, the patent system is a cornerstone of any »*knowledge economy*«. But what will the actual effects of such »*knowledge economy*« be? Will they be favourable or disastrous? For purposes of illustration, reference is made to an example of macro-economical effects of a new technology, namely »*Computer Aided Design*«

100 See e.g. "CEOs of big telcos sign letter against Europarl Amendments" <http://swpat.ffii.org/log/03/telcos1107/> [Visited on 2004-09-02].

(CAD). When CAD was widely deployed in the industry more than twenty years ago, questions were raised whether or not doing so makes sense on a macro-economic scale: Creating a certain design from scratch e.g. in the machinery industry using CAD seemed to be much more expensive than with conventional means. The CAD workstations cost a lot of money, and the CAD-savvy engineers all want to see more money than those working conventionally. Despite such doubts, CAD has transformed entire industries by changing the structure of markets. For example, even small variations of designs were very expensive to create in the pre-CAD era because virtually all drawings had to be re-drafted manually. In consequence, customers did not demand variations if they were ever avoidable. In the CAD era, derivation of variants became comparatively simple and inexpensive, and, hence, the customers learnt that they can get each variant they need at little extra cost. But would the world look better in terms of macro-economical theory if CAD had not been invented, resulting in a saving of CAD expenses, thereby sacrificing the freedom to use variant designs better fitted to the problems posed by the market? We don't know. In a similar manner, patents granted on computer-implemented inventions are transforming the way of dealing with knowledge. New markets and enterprises come up experimenting with business models structured somehow around the separation of abstract problem-solution, on the one hand, and coding, on the other hand.

3.3 Some modest suggestions.

3.3.1 There might be an urgent exigency to act.

NGOs effectively untrained in matters of patent law but, on a populist level, agitating successfully are posing a threat to imperil the economic well-being of the entire EU. They effectively rock the very foundations of any successful capitalistic market economy by fuelling and exploiting the current crisis of the patent system. If those NGOs are not stopped it might well happen that in future at least patent protection for any kind of computer-implemented inventions will be rigorously denied. This would in particular hurt the European automotive industries as well as the entire telecommunication branch. And, also each and every branch of industry dealing with embedded systems would be deprived of any patent protection for their computer-implemented inventions. But perhaps things might become even worse. Maybe that reckless attempts to crush the patent system in its entirety are utilised by anti-globalisation activists merging into the current EUROLINUX campaign for letting off their steam. If those activists should manage to create a common perception throughout the general public that the patent system is superfluous, as unfounded as such campaign might be, the pressure on politicians to act accordingly would be enormous. Although any radical cutback of the patent system clearly would constitute a violation of TRIPS, if confronted with some populist anti-patent upheaval it might look opportunistic for some politicians to prefer the rising of a major crisis of TRIPS and of the World Trade Organisation (WTO)¹⁰¹ to any well-substantiated but unpopular defence of the patent system.

It might well happen that those NGOs will ultimately fail in reaching their destructive goals even if the patent professionals continue to stay aside mostly in a passive mood as it can be seen in these days. However, there are serious doubts so as to whether such passivism would be an

¹⁰¹ See <http://www.wto.int/>

optimum strategy. The concept of a »crisis« means that decisions have to be taken, be it for the better or for the worse. It might seem for patent professionals to be highly advisable to explain the function and the merits of the patent system to the general public by means of some major offensive action.

3.3.2 *Fighting back the »semantic warfare« of the Eurolinux Alliance.*

The EUROLINUX ALLIANCE and their supporters must not be allowed to get away with the fruits of their propagandistic attempts to re-define the concepts of Intellectual Property law contrary to the written law as interpreted by the competent courts or Boards of Appeal, respectively. They do not have any legitimate power to re-define the interpretation of the law. They must not be allowed to »occupy« any of the long-standing concepts of patent law. It is just of utmost importance that the power to interpret the law is not allowed to creep from the judicature bodies entrusted with this task by constitution to some biased NGOs. In particular, EUROLINUX in general and FFII e.V. in particular are not merely innocent contributors to a public debate. They are highly aware of any tactical advance they can gain from their fight on concepts. In particular, by injecting their bogus theory about alleged »illegal software patents granted by the EPO contra legem« deeply into the civil society they are in a much better position to disseminate further alarming calls to fight against the EU Commission's proposal because of this Directive would »legalise already illegally granted software patents«. Meanwhile it seems in fact to be common consensus in the press as well as among many citizens interested in the patentability of computer-implemented inventions that the Directive as drafted by the EU Commission would »introduce« software patents. Another example for EUROLINUX' successful war on concepts is the spreading of their carefully plotted myth according to which it would constitute an illicit mode of »double protection« if an invention behind the code of a computer program is allowed to be patented.

Within the sphere of the Internet, the definitions of patent-related terms given by disinformation activities of EUROLINUX anti-patent activists are absolutely predominant in quantity. It is currently already like an uphill struggle to explain young professionals in technical branches (e.g. engineers) legal facts like that patents on computer-implementations are frequently granted on a perfectly legal basis even if there is no EU Directive. Many of them solemnly believe that the legal landscape would dramatically change if a Directive along the lines of the original proposal of the EU Commission would be adopted.

In this context it is also worth to be noted as a bad omen that the most respected on-line encyclopaedia in the Internet seems – at least with regard to its German branch¹⁰² – already perceivably be influenced by activists agitating against the so-called »software patents«. ¹⁰³ Even an article¹⁰⁴ for dignifying the person of HARTMUT PILCH is already provided therein.

Patent professionals should consider to come forward to testify publicly against the disinformation campaign of the EUROLINUX ALLIANCE wherever and whenever appropriate.

¹⁰² See <http://www.wikipedia.de/> [Visited 2004-08-06]

¹⁰³ See e.g. the article for the keyword "Softwarepatent" under <http://de.wikipedia.org/wiki/Softwarepatent> [Visited 2004-08-06]

¹⁰⁴ See under http://de.wikipedia.org/wiki/Hartmut_Pilch [Visited on 2004-08-06]

3.3.3 *Adapting to Internet communications.*

The Internet has dramatically changed the rules of public communications. The various anti-patent NGOs are widely enjoying the benefits of their extended Internet skills. They are in fact forming geographically distributed »on-line communities«¹⁰⁵ with flat hierarchies. This establishes a fast flow of information amongst the acting persons, enabling quick political actions on short-term notice if so needed. In contrast, patent professionals as well as their Institutes and associations are in fact insofar effectively handicapped because of their respective communication structures are different. They do not have in common anything like such *on-line community*. Their groups tend to be structured more hierarchically, and the dissemination of relevant information amongst all of the patent professionals is accomplished in a slow top-down manner, preferably by traditional paper-based media. However, it would not be surprising if in future the political processes of formation of opinion in the general public will turn more and more to the Internet, thereby causing that such groups organised as *on-line communities* will eventually set the pace. If this should be true, groups in a more traditional way might be earmarked as losers of the future. Hence, the patent professionals and their associations and Institutes might perhaps wish to adapt soon or risk that their voices will be heard less than ever.

3.3.4 *Fighting F/OSS is neither desirable nor a real option at all.*

There is no sound reason why patent professionals, their Institutes and associations should not embrace F/OSS whenever doing so makes sense based on the circumstances of each case. Although the various anti-patent NGOs purposefully might wish to create an appearance that they are the *only* legitimate and representative voice of F/OSS, such language is nothing but pretension. In fact, IBM and SUN are just as much a part of the F/OSS culture as FSF and EUROLINUX are.

3.3.5 *Do not spare the Patent Offices.*

Performance flaws within the current status of the patent system can be openly discussed in honesty. In particular, if Patent Offices should have quality assurance problems there would be no reason to sweep this under the carpet. The so-called »trivial patents« are a question of the management of Patent Offices and of the methods of quality assurance utilised therein. They are not a question of the substantive criteria of patentable inventions. If improvements are advisable they should be implemented.

3.3.6 *Informing existing patent applicants.*

The vast number of clients of patent attorneys regularly filing for patents on computer-implemented inventions and/or computer-implementable inventions seems to be rather silent in the ongoing public debate. Perhaps they should be informed more proactively about the consequences of any political victory of the anti-patent NGOs.

¹⁰⁵ For the German readers it should be annotated that the connotations of the concept of an *on-line community* are rather distant of the German romantic tradition of *Gemeinschaft*. An on-line community is more shallow and pragmatic than any German literal translation like *Online-Gemeinschaft* or *Online-Gemeinde* would suggest. Although members thereof might share common values, it is clearly not meant as a *common destiny* or the like.

3.3.7 *There should be room for the development of open standards.*

In economics, vendor lock-in, also known as proprietary lock-in, or more simply, lock-in, is a situation in which a customer is dependent on a vendor for products and services and cannot move to another vendor without substantial costs, real and/or perceived. By the creation of these costs to the customer, lock-in favours the company (vendor) at the expense of the consumer. Lock in costs create a barrier to entry in a market.¹⁰⁶ The concept of vendor lock-in is often used in the computer industry to describe the effects of a lack of compatibility between different systems. Lock-in effects may harm competition in huge market segments. RF¹⁰⁷ or at least RAND¹⁰⁸ licensed open standards may be seen as a solution to limit vendor lock-in effects. In some sense, popular F/OSS solutions like the Linux operating system may represent some kind of open standard by themselves.

In a time where most computers are interconnected by some kind of network, interoperability is a key issue. Hence, *open standards* are most important. However, it is difficult to create RF or RAND licensed open standards if it is not known whether or not there is any third party holding at least one patent, the protected technology of which being necessary to implement the standard. Perhaps it will be necessary to think on other tracks than traditionally done. One might, for example, imagine the patent law to be amended by introducing a rule allowing major standardising institutions like DIN, ISO or W3C¹⁰⁹ to publish a full technical disclosure for a proposed interoperability standard in some kind of an Official Gazette issued by some competent Authority on EU level. Then, each and every patent holder has an opportunity to oppose against this proposal within a certain term of, say, nine months or so. If a patent holder opposes, the standardising organisation as well as the public will be notified accordingly. An opposition can be absolute (i.e. the patent holder refuses to license the patent at all) or relative (i.e. the patent holder is willing to provide a RAND license only). If a patent holder does not oppose in due time the grant of a RF license will be stipulated by law. Such procedure would not unduly harm the interests of patent holders (they merely have to closely watch the Official Gazette and make up their mind) because of they will not be forced to grant any license. On the other side, if no opposition has been filed, the standards bodies can be sure that the proposed standard is in fact patent free. If oppositions are raised, they can re-think on whether or not drop that proposal. However, as in many other cases, the problems are in the gory details. For example, it will not be easy to deal with unexamined or even unpublished patent applications. Furthermore, the proposed procedure might not scale very well. If thousands or even tens of thousands of proposals would be published per year, the burden for the patent owners would be clearly unacceptable. On the other hand, patent owners must be hindered to simply block any standard without even looking at the details by simply filing objections on the basis of each and every patent available in their patent portfolio. If the total number of published proposals per year is

¹⁰⁶ This definition is taken from http://www.wordiq.com/definition/Vendor_lock-in [Visited on 2004-08-04]

¹⁰⁷ "RF" = "Royalty free"

¹⁰⁸ "RAND" = "Reasonable and non-discriminatory"

¹⁰⁹ The WORLD WIDE WEB CONSORTIUM (W3C) was created in October 1994 to lead the World Wide Web to its full potential by developing common protocols that promote its evolution and ensure its interoperability. W3C has around 350 Member organizations from all over the world and has earned international recognition for its contributions to the growth of the Web; see <http://www.w3.org/Consortium/>

sufficiently low this might be achieved by requiring a modest Official fee or by imposing a duty to substantiate the Opposition.

3.3.8 *The relationship between patent law, source code and free speech.*

The patent law might be amended in order to make clear that any communication of computer software code in source code form is exempt from the scope of protection of any patent claims.¹¹⁰ This is to make sure that CVS repositories with computer software source code and the like connected on–line on the Internet cannot be closed on demand of patent bearers. The justification of such a measure can be seen in the dual nature of the source code as means for communication of solutions between humans, on the one hand, and as technical means for controlling a computer, on the other hand. Due to the first aspect the source code deserves to be privileged as ‘free speech’.¹¹¹ This does, of course, not mean that executing source code by interpreters or by running it after compilation and linking is also exempted.

* * * * *

110 see e.g. AXEL H HORNS: Der Patentschutz für softwarebezogene Erfindungen im Verhältnis zur "Open Source"–Software JurPC Web–Dok. 223/2000, paragraphs 75–76. Available on–line under the URL <http://www.jurpc.de/aufsatz/20000223.htm> [Visited 2004–08–16]

111 See U.S. Court of Appeals – 6th Circuit – Peter D. Junger ./ William Daley, United States Secretary of Commerce, et al., Appeal from the United States District Court for the Northern District of Ohio at Akron. No. 96–01723—James S. Gwin, District Judge. Argued: December 17, 1999 Decided and Filed: April 4, 2000 Before: MARTIN, Chief Judge; CLAY, Circuit Judge; WEBER, District Judge: "[...] Likewise, computer source code, though unintelligible to many, is the preferred method of communication among computer programmers. Because computer source code is an expressive means for the exchange of information and ideas about computer programming, we hold that it is protected by the First Amendment. [...]". Available on–line via the URL <http://pacer.ca6.uscourts.gov/cgi–bin/getopn.pl?OPINION=00a0117p.06> [Visited 2004–09–02].