# Patenting Software v. Free Software

## What should the European Union do?

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# What are the real issues?

- The proposed Directive v. the U.S. praxis
  - ➔ the EU will adopt the American system with the possibility of broad and ambiguous patents
- Programming software is like writing music
  - ➔ software are based on thousands of ideas
- How to include SMEs better into the system
  - ➔ to only inform them about the patent system will not make the system more available and easier accessible for them
- To make a fair balance between promoting AND protecting innovations

# Removing some misconceptions

## Myths:

- **The distinction between copyrights and patents has been blurred.**
- **Criteria for patentability are perceived as diametrically opposed on both sides**
- **The biggest difference between the U.S. law and European law is "technical contribution"**
- **Business methods cannot be patented in Europe**

## Reality:

- ➔ **The law of copyrights and patents fulfil different functions and are complimentary rather than parallel branches of the law.**
- ➔ **The criteria for patentability are functionally equivalent. The only difference is that different labels are used but the predicates for patentability are similar**
- ➔ **not entirely true, very similar to the criterion "non-obvious" in the U.S. (35 U.S.C. 101 & 103)**
- ➔ **not true, according to EPO's praxis they can be patented as "processes" just as in the U.S.**

# The Directive

- Commission's proposed Directive on the patentability of computer-implemented inventions COM(2002)92 in 2002
- First reading of the European Parliament in Sept. 2003, adopted with several amendments in the co-decision proceedings
- The Council reached a political agreement in May 2004 disregarding most of the EP's amendments and following the Commissions proposal, but did not formally adopt it
- Poland withdraw their support in Nov. 2004
- 61 MEP request the Commission to send back the proposal for a first reading in the Parliament in Jan. 2005
- Feb. 1 2005 JURI decided to use Rule 55, to ask the Commission to refer the proposal back to the Parliament

# Copyright

The right to make copies of the **original expressions** made by the author. Protected from the **fixation** of the expression into a tangible medium.

- not extended to ideas, procedures, methods of operation or mathematical concepts *as such* (TRIPS Art. 9 (2))
- Time limit: lifetime of the author + 70 years

**Specially For Computer Programs:**

- Only protects the source codes for software, easy to make similar programs
- Infringement almost only occurs for direct copying of the content, notably the source code

# Patent

Protects inventions and give the inventor

the **right to exclude** others from making, using, offering for sale, sell or import their invention.

- Give exclusivity/monopoly during 20 years
- Are granted by the European Patent Office (EPO) or national patent offices in Europe, and by the Federal Patent and Trademark office in the U.S. (USPTO)

\+ Secure loans and negotiate licensing agreements

\+ Incentive to invest in R&D and disclosure of inventions

– expensive and time consuming

– broad and ambiguous patents; monopolise ideas

– cross-licensing and "patent terrorists"

# European and American patent law

**INDUSTRIAL APPLICATION**: "can be made or used in any kind of industry" **Art. 57 EPC**

**NOVELTY**: "does not form part of the state of the art" **Art. 54EPC**

**INVENTIVE STEP**: "if, having regard the state of the art, it is not obvious to a person skilled in the art" and "involve a technical contribution, to distinguish from pure software" **Art. 56 EPC**

**NON-PATENTABLE**: discoveries, mathematical methods, schemes, rules and methods. Against ordre public, plant or animal variation **Art.52(2)&53EPC**

↔ **USEFUL**: has a useful purpose, including operativness **35 U.S.C. 101-102**

↔ **NOVELTY**: "can not have been know, used or published in the U.S. or elsewhere more than 1 year prior to the application," **Grace Period** **35 U.S.C. 102 (a-b)**

↔ **NON-OBVIOUS**: "is not obvious to a person having ordinary skill in the area of technology related to the invention" **35 U.S.C. 103**

↔ **SUBJECT MATTER**: has to be a "process, machine, manufacture, or composition of matters", **not** laws of nature, physical phenomena or abstract ideas **35 U.S.C. 101**

# Software patents

## Possible to patent software in the U.S. ever since the 80s

- Main case in America: ***Diamond v. Diehr,*** 450 U.S. 175 (1981)

➔ Holding that using computer software to calculate and control the heating time for rubber is not seen as merely an algorithm but as an **process**, and have to look at the invention **as a whole.**

- The same reasoning followed by the EPO's Technical Board of Appeal

***In re Vicom Sys., Inc.,*** 1987 O.J.E.P.O. 14

➔ Holding that even if the idea underlying an invention may be considered to reside in a mathematical method, a claim directed to a **technical process** in which the method is used does not seek protection for the mathematical method *as such*.

***Siemens A.G. et al. V. Koch & Sterzel Gmbh & Co.,*** 1988 O.J.E.P.O. 19

➔ Holding that it is unnecessary to weigh up the technical and non-technical features, because if the invention uses technical means then the possibility to patent is not excluded and one should look at the invention **as a whole.**

# Business method patents

## Utility patents - the U.S. precedence followed by the EPO

- The U.S. opened up the door to patent business methods

***State Street Bank v. Signature Finance,*** 149 F.3d 1389 (Fed.Cir.1998)

➔ Holding that the *processing* system of taking data and predict the final share price through mathematical calculations is patentable because it is useful, concrete and has a tangible result.

- Also followed by the EPO

***In re Sohei***, 1995 O.J.E.P.O. 525 and ***In re Pension Benefit Sys., P'ship***, 2001 O.J.E.P.O. 441

➔ Holding that business methods *as such* are not patentable and that the mere addition of a technical feature to an otherwise non-technical method do not change that, but a technical invention do not lose its patentable status if non-technical features are added.

- Today the U.S.PTO has restricted and clarified its examination guidelines about patenting software and business methods, first in 1995/96, and further clarifications in 2003/04

# Resistance to software patents

Already sufficient protection through copyright

Work against free trade and allows multi-national companies to block the market

Too expensive for SMEs, while strengthen and benefit big companies even more

Will rise development expenses, increase legal risks and insurance premiums

- **Free Software,** wants to have software free from proprietary restrictions with the freedom to use, study, copy, modify and redistribute software. Restricts users from making the modifications proprietary through their user agreements, "Copyleft"
- **Open Source,** wants the source codes to be open for all
- Against software patents, and want to ban all software patents because since they cover ideas they hamper innovation of new software

# The amendments by the Parliament
## the main controversies

- Emphasis the need for an "inventive step" to make an "new technical contribution to the state of the art in a technical field"
- Strictly prohibit computer implemented business methods and mere algorithms to be patented
- Be in compliance with the European Patent Convention and the praxis of the European patent Office (under the Council of Europe)
- The need for a Grace Period
- The need for the Commission to benchmark the situation of the directive and create a network for SMEs to take part better of the patent system

# Conclusion

- If we adopt the current proposal - it will create the same broad and ambiguous system that is in place in America
- Europe needs a directive to harmonise the laws of the member states and the EPO, but also in order to be able to compete on the market
- Can obtain a real balance between promoting and protecting innovation if make a system that is **faster and smarter** than what the U.S. and Europe have today:
  - a directive in conjunction with **clear guidelines**
  - implement a **grace period** and a **network system for SMEs**