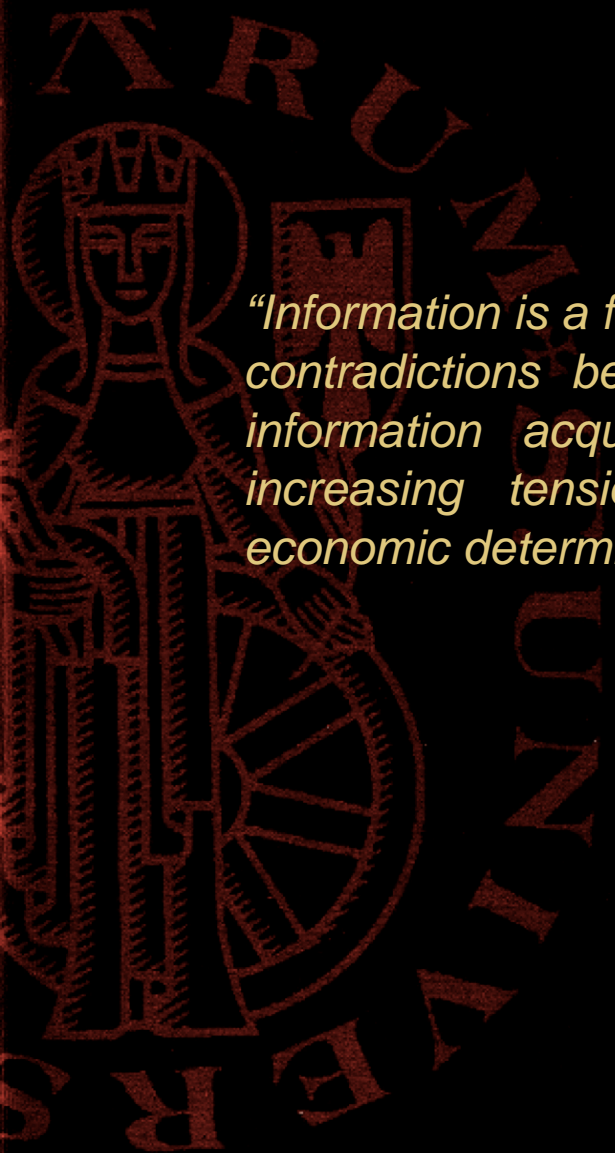




Software patents: a few comments on the current debate

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“Information is a fugitive resource...we are just beginning to face the contradictions between the systems of private property and of information acquisition and dissemination...[We may see] an increasing tension between legal relations and fundamental economic determinants” (Arrow, 1999)



What principles should guide the drafting of legislation?

1. The objective of patent law is to promote innovation
2. The issues at stake are fundamentally economic issues
3. No relevant policy change should be implemented without an accurate cost-benefit analysis
4. The burden of proof should be placed on those proposing the changes
5. Incentives should be tailored, to the extent it is possible, to the technology-specific characteristics of innovation



Cost-benefit analysis

- No consensus as unequivocal as that implicitly assumed by the Commission's Proposal exists on the balance between costs and benefits of software patentability
- Rushing toward the solution identified by the Commission will limit Europe's future ability to fine-tune the extent of protection accorded to computer-implemented inventions

“[...] patents shall be available for any *inventions* whether products or processes, *in any field of technology*, provided that they are new, involve an inventive step and are capable of industrial application” [art.27(1) TRIPs]



Technology-specific tailoring of incentives to innovate

- The TRIPs Agreement is premised on the “one-size-fits-all” assumption;
- Technological sectors differ greatly as to:
 - The efficiency properties of the patent system;
 - The way firms use the patent system;
 - The tensions affecting the functioning of the patent system;

There are no valid reasons to believe that IP incentives should not be adjusted on the basis of the available information so as to ensure that the social benefits stemming from the set of incentives adopted in a given technological environment outweigh the social costs the provision of such incentives imposes.

A large, semi-transparent watermark of the University of Siena seal is visible on the left side of the slide, featuring a figure and the text 'UNIVERSITAS SENENSIS' and '1013'.



Is the Proposed Directive likely to achieve its stated objectives?/1

- ⇒ Pursuing the objective of legal certainty through the issuance of a Directive is problematic *per se*
- If the Directive diverges from EPO practice, further inconsistencies may ensue
 - If the Directive adheres to EPO practice, neither legal certainty nor increased innovation are likely to follow

The direct modification of the EPC would be preferable if it were possible to implement the standard for patentability chosen as optimal through the intergovernmental decision process.

However:

- It is important to bring the issue of patentability within Community competence
- The issuance of a Directive is still valuable to the extent it reflects public discussion on the most sensitive issues.



Is the Proposed Directive likely to achieve its stated objectives?/2

⇒ Adoption of EPO standards as a basis for harmonization is not likely to result either in increased legal certainty nor in increased innovation

3. The various requirements of “technicality” are inherently undefined:

- Too much discretion left to Courts;
- Courts have no mandate to apply economic reasoning;
- Uncertainty for industry players

4. The only consistent way of interpreting the standards set by EPO implies an extension of patentability akin to the deletion of the “as such” provision of art.52 EPC.

- Inconsistency with the Commission’s stated purpose
- Ample room for discretion, uncertainties and clever drafting of claims



Is the Proposed Directive likely to achieve its stated objectives?/3

⇒ No attempt to tailor patent incentives to the specificities of software innovation

- Disclosure
- Interoperability
- Inventive step
- Overlaps with other forms of legal protection



Software and patents – an un-natural union?

Is the Proposed Directive likely to bring about increased innovation?

- Software and patents' incentive function
 - Sequentiality and complementarity of innovative efforts;
 - Ratio of labour to capital costs;
 - Availability of alternative incentives;
 - Rapid pace of innovation
- Software and patents' transactional function
 - “anticommons” problems;
 - Patent thickets problems;
 - Fine granularity of sw inventions;
 - Scarce informative role of patent databases



Software and patents – an un-natural union?/2

- Software and patents' disclosure function
 - No real incentive to disclose;
 - Disclosure occurs too late in the innovation life cycle;
 - Scarce use of sw patent databases
- Software and patents' signaling function
 - No strong patent/VC link at the seed financing stage
- Software and patents' strategic use
 - Trivial patents
 - High probability of inadvertent infringement