

There is *agreement* between Council and Parliament on:

1. *The desirability of harmonization* in order to achieve:
 - a) transparency, i.e. insight into and equal access to software patents for large and small industries
 - b) legal certainty
 - c) the removal of potential trade barriers resulting from non-uniform patent law in individual Member-States; and
 - d) the uniformization of case law via the CoJ (at present the BoA of the EPO is the highest granting body and the national courts and courts of appeal in the individual Member-States).

The best example is the different way in which the German and English patent bodies dealt with the *Merrill Lynch* case, which concerned a patent application for a share dealing system:

the British Court of Appeal held that the “*technicity*¹” test was not complied with, while the corresponding patent *was* granted in Germany.

2. *The exclusion of methods of doing business* or the presentation of information as such. Many of the difficulties with regard to the texts of Council and Parliament seem to be induced by the requirement of keeping the patents for “business methods”, as these are granted in the US, out of the EU.
3. *The exclusion of computer software*² *or software as such*. Algorithms or purely mathematical calculations are not provisions which constitute a “patentable invention”, even though it is quite conceivable that something could in itself be “invented” in this area; the legislator has decided to exclude this from patentability (in the Netherlands: National Patent Act 1995, section 2) and also in the European Patent Convention (article 52(2) of the EPC). This is taken over in both the Council's version (article 4a) and the EP's version . This is referred to as “*statutory subject matter*” in the

¹ The British Court of Appeal emphasised that there had to be a contribution to the prior art, which the Court, however, did not find. No technical contribution was seen in the software as such, while the system as a whole was aimed a method of doing business and was therefore not patentable.

² Better: programs for computers

United States. The Directive tries to achieve this through the requirement of a “*technical contribution*”, which has also been the standard case law of the EPO up to the present. The reason for this exclusion in the EPC – the result of the Strasbourg Convention in the middle of the sixties - is not a *theoretical* one (e.g. social undesirability), but an *administrative-technical* reason, i.e. under the PCT³ (which preceded the EPC), the “International Search Authorities” were not obliged to look for “program inventions”⁴.

4. The starting-point that the mere addition of *equipment* such as a computer in the patent claims, *in addition to* software which is non-patentable as such, does not make the invention patentable. This, incidentally, is existing EPO practice, see for example the *Koch & Sterzel* judgment of the Opposition Division of the EPO⁵ and its more recent judgement in the *Sohei case in 1992*⁶.

There is *no agreement* between Council and Parliament on:

1. *The description of one of the key terms in the EPO case law*: what should a “*technical contribution*” be taken to mean? This lies at the heart of the EPO case law which the Directive tries to confirm and harmonise and thus affects the acceptance or non-acceptance of the EPO case law achieved so far. In an (altered) article 2(b), the European Parliament has added words taken over from a very dated, and now abandoned, German doctrine: “*The use of natural forces to control physical effects beyond the digital representation of information (...)*”, which addition sets the clock back to a time where many of the current technologies were unknown. This in turn directly affects one of the exceptions to patentability, i.e. programs as such (“computer programs as such”). This amendment is clearly at variance with the judgements of the EPO's Opposition Division, e.g. in (the two identical cases) *Computer program product/IBM*⁷ in 1998, in which the EPO held:

“*The Board holds that not all programs are intrinsically unpatentable. The key is technical character: programs for computers must be considered as patentable inventions when they have a technical character (...)*.” A patent can therefore be

³ Patent Cooperation Treaty, a treaty which made it possible to apply for a patent in one country or from one body and to subsequently expand the patent via a harmonized procedure.

⁴ Rule 39.1 (vi) PCT

⁵ T 26/86

⁶ T 769/92

⁷ T 935/97 and T1173/97

granted “in every case where a program for a computer is the only means, or one of the necessary means, of obtaining a technical effect (...) for instance ...)achieved by the interbal functioning of a computer itself under the influence of said program”.

This technical effect should in itself be new.⁸

2. The *much too broad formulation of “technical contribution”*. In amendments 107 and 69 (“Article 2 point (b)”), as proposed by the European Parliament, the following sentence is added to “technical contribution”: “The processing, handling, and presentation of information do not belong to a technical field, even where technical devices are employed for such purposes”. The result of this *exception* – which, incidentally, is also introduced in other Amendment texts, see below - to the definition of “technical contribution” is that virtually all the digital technologies which are now used by many European industries (and the applications of which have already been patented on a large scale by the EPO) come under this exception and are therefore excluded from patentability. This would result not only in an unprecedented *expropriation* of industrial property rights, unprecedented in the civilised world, but would also undermine the foundation and starting-point of the CII Directive which is aimed at confirming and harmonising the existing *EPO patent grant practice* or at increasing its “transparency”, and not at making the grant of software patents useless and impossible by definition.

The consequences:

- a. Many technological innovations which are widely used in many sectors of European industry (telecom, semiconductor and automotive industries, the production of electronic home appliances, medical instruments, *etc.*) and make use of a computer or processors, DSP, ASIC or other types of digital processing will be excluded from protection (after all, all these industries are “handling”, “processing” or presenting information in a manner that is now being excluded)
- b. Patents already granted in this area will become worthless in one blow, causing European industry to lag behind the rest of the industrial world dramatically as far as innovation is concerned.

⁸ See Alexander Clelland, member of the EPO Opposition Division in an article in the Management Forum of 13 February 2004: “Patent Protection for Software-related and Business-related Inventions in Europe: A Review of the case Law”.

- c. Investments made in order to obtain patents in this area will have to be written off at once.
 - d. Licence revenues will stop, while European industry has to pay Japan and the US for patents granted there for the same products and services, as a result of which European industry will price itself out of the market.
 - e. The aims of the Lisbon Agenda and the work of the *Wim Kok Group* ("*High Level Group*"), intended to have Europe rival with the US in the area of competition, are undermined.
3. ***The use of new terminology in patent law.*** Terms such as "invention", "technical character", "technical field" and the "technical character of the contribution" are mixed up and used in the wrong way. Moreover, the definitions do not run parallel with the EPO case law, one of the aims of the Directive. It does not seem to be open to doubt that the many proposed amendments, especially those in articles 2, 3 (a), 4 (b), 5 and 7, will introduce *new patent law criteria*, which are at variance with those now recorded in the EPC and - a fact that is sometimes overlooked - which will *continue* to apply to non-software patents, such as pharmaceutical patents, mechanical patents, etc., also if the Parliament's version were to be enacted. This would cause chaos in the case law: part of it will be explained by the CoJ as the highest court, but another part, i.e. to the extent that it concerns non-software patents, will not be (after all, in this area the EPO and the national courts are the highest interpretation bodies). Leaving to one side the fact that all this would create legal chaos within the Community, the acceptance of the amendments proposed by Parliament would undermine one of the pillars of the Directive: achieving *harmonization*.
4. ***Infringement criteria.*** As a result of the proposed amendments (Amendment 9, "*Recital 13d (new)*", Amendments 103 and 119, "*Article 5, paragraph 1 b (new)*", Amendment 76, "*Article 6a (new)*") there will be an infringement of the patent only when the software is *loaded* and installed on a computer. This means that action can be taken only against the *end- users*, while the party that *supplies* the infringing products is left alone. Apart from the fact that this seriously undermines the usefulness and implementation of an *exclusive right* on the part of the patentee, it would seem that particularly the small users - and so, by definition, the small and medium-sized businesses in Europe - will become the victims of these amendments, if they were to be enacted.

5. **“Interoperability”** and **“decompilation”** (the use of a CII invention for the development of new software and applications, having two programs communicate: the one application patented, the other not patented, *etc* (article 9). This is also referred to as the *“significant purpose”* exception. If the infringing product or the method would be used for such a purpose, this would not constitute an infringement. What infringing use of software does not serve a *significant purpose*? The use in conversion of applicable computer conventions in two computer systems, or the use made thereof for the communication between computers: will this not almost always be done for a *“significant purpose”*?

The source of **disagreement** between the two positions rests in large part on:

1. The question whether patentability either stimulates or stifles **innovation**. This question does not have to be answered by the Commission (or the Council), as the aim of the Directive is to harmonise *existing legislation*, not to *discontinue* it. Under the pressure of the Open Source movement, objections against too liberal a grant of software patents and of “business methods” as granted in the United States⁹ result in a general debate about the desirability of patenting *as such*. Although many studies have been conducted that purport to show that software patents harm innovation, they are largely unsupported by credible or relevant data, but rather rest on conclusory statements. Indeed, the data that bears most closely on this issue supports the notion that IP protection of software inventions, including patent protection, spurs innovation. Taking the US as an example, which the anti-software patent lobby curiously cites most frequently to make its point, many more new entrants have entered and succeeded in the software and IT industries¹⁰ and we have undoubtedly seen a far greater rate of innovation and productivity within this and other knowledge-based industries, than in Europe. Protection of IP and the R&D investments necessary to drive such innovation are uniformly credited as playing a major role in driving these results.

⁹ And, to a lesser extent, with regard to “business methods”, in Japan

¹⁰ There are more than 40,000 such firms in the US, with well distributed sales, given that the top 10 firms account for less than 30% of industry revenues. Further, the rate of annual employment growth since the early 1990's has exceeded 10%, with an average wage of over \$85,000.). Indeed, recent OECD studies confirms that the gap in productivity and innovation between the US and the EU continues to widen. Astonishingly, since 1980, the US has created over 20% of the world's top 1000 companies from the start-up phase. Europe, meanwhile, has managed only about 5%

2. **The effects of software patenting for small and medium-sized businesses.** The experience in the US, as evidenced by the *Mann* report (which is based on a large number of interviews and surveys held among large and small software industries), shows that the existence of patents does not prevent the growth of a very large number of small and medium-sized software companies. The same can be seen within the EU in, for example, Ireland, which has a large software industry.

September 23, 2004

Severin de Wit