

Re-Compute - Patentability of Software in New Zealand Clarified, Again

26/07/2011 by [Chris Way](#)

Following widespread criticism of the draft guidelines put forward earlier in the year, the Ministry of Economic Development (MED) has released an [Explanatory Note](#) to clarify how the proposed exclusion from patentability of software inventions should be implemented when the New Zealand Patents Bill is finally enacted. Revised examination guidelines will be released in due course, most likely based on the Explanatory Note, provided this is more favourably received than the earlier guidelines.

The MED has maintained that the UK's Aerotel test will be used to assess the patentability of computer-related inventions, but in modified form. The first three steps of (i) properly construing the claim, (ii) identifying the actual contribution and (iii) asking whether the actual contribution falls solely within the excluded subject-matter field remain unchanged. However, step (iv) of whether the actual or alleged contribution is technical in nature is not to be used because there is considered to be no "technical requirement" under New Zealand law.

The reasoning behind the removal of step (iv) appears flawed, based on there being no explicit requirement for an invention to be technical under UK law and in the New Zealand Patents Bill but not considering in any detail why the step is there. The MED leaps to the conclusion that there is no basis for the fourth step under New Zealand law, skipping over the fact that by its definition, one would assume an "invention" to be somewhat technical in nature. Further, the UK Patents Act requires an invention to be capable of industrial application and New Zealand law requires an invention to be a manner of new manufacture, again pointing to a technical requirement although

admittedly not explicitly using the word "technical".

Why remove the fourth step? Surely the requirement that the contribution is technical would seem appropriate

The proposed exclusion in New Zealand is different to that in force in the UK. Under UK law, only inventions that relate to a computer program as such are excluded whereas the exclusion in the New Zealand Patents Bill extends to all programs for computers. The "as such" wording means that programs for computers can be patentable in the UK if the invention does not relate solely to a computer program, but not in New Zealand. The exclusion in New Zealand was intended to be broader and the re-hashing of the Aerotel test attempts to remedy this.

Step (iv) of the Aerotel test was seen by the MED as a means for applicants to obtain patents for inventions which are intended to be excluded under New Zealand law. Essentially, step (iv) can be used to save an invention from the exclusion, even if it fails step (iii), by identifying whether the actual contribution is technical.

Consider the following example provided by the MED at the end of the Note relating to a program that improves the operation of a computer:

- A method of improving the operation of a computer by providing a way of indexing Dynamic Link Library (DLL) functions so as to ensure that the computer will continue to operate reliably after changes are made to the library.

The invention is a computer program with no interaction with anything outside of the computer. It is therefore excluded according to step (iii) but could potentially be saved under UK law (provided the invention was new and non-obvious) since while the invention is a computer program, the contribution is technical in nature - the operation of the computer is more reliable. This would not be possible under the proposed New Zealand legislation, no patent protection would be available and an innovator would have to rely on copyright. But at what cost? Copyright is a much narrower form of protection, it does not protect the underlying functionality of a computer program. For

some software innovations, it may be the concept that is important, not how the program is coded, particularly where the innovation is relatively simple in hindsight easy to encode after the concept is publicly available. Copyright protection can therefore be meaningless.

It is accepted that the analysis in the test is somewhat contrived but it is difficult to see a way around it. Consider for the previous example if we had arrived at the invention being an improved machine at the end of step (iii) of Aerotel - would the invention be patentable? Bear in mind that the MED makes it clear in the Note that when assessing patentability, it is the substance of an invention which is important and not the precise claim wording and so is this a fair conclusion? The answer is a resounding no according to the MED, the consideration of the substance of an invention is seemingly purely for excluding inventions that may be saved by clever wording, rather than providing a more pragmatic basis for assessment of patentability.

Does this really help third parties assessing whether they infringe a patent or those making innovations that do qualify for patent protection as "embedded software"?

Consider the further example in the Explanatory Note, software that improves the operation of an electric motor:

- An electronically commutated electric motor where protection against fault currents is provided by using the width of the motor flyback pulses to control the current flowing in the motor windings. In the preferred embodiment, the pulse width data from the motor is fed to a program running on a microprocessor, the program's output being used to control the motor current.

The motor itself is not new, it simply acts differently when controlled using the software. According to the proposed legislation, the software itself would not be directly protectable, only claims to the motor in combination with a microprocessor adapted to execute the coding and the steps of the method would be protectable.

Does the required claim wording not muddy what the contribution is and what is protectable? Many third parties will no doubt see a claim to a motor and assume that they cannot sell or make motors. Would it not be clearer if patents were more specifically directed to the actual new development (i.e., the software), rather than a piece of equipment that may run the software?

Further, consider who infringes such claims. Does a party that copies the software? Not directly. Should the copier be directly accountable or should it be the manufacturer of the motor or a device including the motor? A method claim may seem to remedy this but then the only direct infringers may be the end users, generally not a viable target for enforcing a patent. Consequently, enforcement of patents may prove to be more difficult and costly.

Where to from here?

Those involved in ICT will understand the difficulty in categorising software innovations into two boxes - patentable and non-patentable developments - but the somewhat simplistic approach taken by the Select Committee that proposed the exclusion has added to the problem. Excluding all programs for computers from patentability with the proviso that "embedded software" should remain patentable is difficult to implement and practitioners around the world will no doubt have balked at the prospect of a re-running of the debate that a software invention may be patentable merely because it is hard-encoded. The breadth of what constitutes software and how it contributes to our everyday lives appears to have been missed but this is not surprising in view of the limited debate surrounding the exclusion and the absence of any economic evidence to support it.

The Explanatory Note does provide improved clarity over the earlier draft guidelines but to be fair, the guidelines set a low target. It is clear that, if the proposals in the Explanatory Note are adopted, a hard line will be taken with the exclusion from patentability applying where there is uncertainty. This will be a stark change from the existing position which provides one of the most favourable regimes for those seeking

patent protection for software developments, surprising as New Zealand tries to push towards more of a knowledge-based economy. We remind software innovators that under the existing transitional provisions, patent applications filed before the new legislation is enacted will be assessed under the existing criteria and it would be worthwhile filing patent applications into New Zealand, including national phase applications, before the change is adopted. It is difficult to assess how quickly the legislation will be enacted, particularly in view of an election in November, but a 12 month timeframe seems reasonable.

While the Explanatory Note is clearer, there is still the underlying issue that since the proposed legislation excludes all software, any guidelines or explanatory notes will be discarded when patentability is assessed by the courts. Only time will tell.

There is no official mechanism for commenting on the Note and the deadline for submissions on the draft guidelines passed some time ago. However, as evidenced by the changes to the three strikes provisions for cutting off internet access for those illegally downloading copyright material, the government may yet be forced to reconsider their stance, particularly if pressure is exerted as part of the TPP negotiations. Was it pure coincidence that the guidelines were released while John Key was visiting the US?