pected to have known the circuitry was unauthorised from the date on which the Act came into operation, being the 1 October, 1990.

Importance of this Case

Nintendo Co Ltd v *Centronics Systems Pty Ltd* is the first case to discuss the extent of copying under the *Circuit Layouts Act* and the requirement of 'originality' for the Act.

The court found that circuit layout protection is similar to copyright protection where originality can be evidenced by the work, skill and effort applied in developing the circuit layout. Furthermore, reverse engineering of a circuit layout will require the infringer to make quite substantial changes to the original circuit in order to avoid an exact reproduction of the circuit layout. A shrunk version will not be sufficient to be reverse engineered. This is a step towards allowing the advances in technology and knowledge to be used by all parties and does not provide the absolute monopoly which can prevent dissemination of further developments within industry.

This case highlights the effectiveness of the *Circuit Layouts Act* to protect the intellectual property developed in the circuit layout. It is essential to check the ownership of the EL rights and related intellectual property rights prior to importing.

This case has important ramifications for the Spica computer games as the decision may have international ramifications in other countries providing similar protection to circuit layouts. It will be necessary for Spica to design new chips that do not infringe the Nintendo PPU for distribution to its other international markets where similar legislation is in operation. This case will be used as a precedent in other countries where similar legislation exists and this will damage Spica's markets.

In conclusion, a computer chip has caused an importer and competing producer, to be removed from the market, due to the importer's failure to correctly ascertain the ownership of the intellectual property rights prior to importation into Australia. The ramifications of this case will continue to fuel the debate between intellectual property protection versus free competition.

Whilst the arguments continue, the warning is search before you import.

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Patentability of Computer Programs

by Caterina Cosentino and Rachael Falk

Wang Laboratories Inc's Application
Patents Court
Aldous J
Heard on 21 March 1990
[1991] RPC 463

Facts

This case was an appeal to the Patents Court from a decision of the British Patent Office that two computer related inventions were not patentable. The basis of the decision of the Patent Office was s1(2) of the *Patents Act* 1977 (UK) (the 'Act') which provides that a scheme, rule or method of performing a mental act, playing a game or doing business or a program for a computer is not an invention for the purpose of the Act. The decision of the Patent Office was made prior to substantive examination of the claims.

The claims in question were for patents in respect of 'an expert system' and 'computer system shell'. In summary, an 'expert system' was a computer programmed to operate to apply information in a particular area in the same way as a human would apply such information. The system operated by storing information in its memory and using the information to ask questions which were then answered by the user with the system asking further questions until enough information has been supplied to enable conclusions to be drawn. Wang argued that the claim was novel in several ways. In particular, Wang asserted that claim was novel because the logical process used was definition-based instead of rule-based, that is, it contained a hierarchically arranged knowledge base rather than a set of rules.

The claim for the 'computer system shell' was for a conventional computer programmed with the expert system. Wang submitted that this system was unique because it allowed expert information to be retrieved and used for a specific unique purpose. Wang argued that the 'shell' was combined with the program and

produced a new machine. The technical effect of its machine was a new machine that could be used in a novel way and therefore not excluded by s1(2) of the Act.

Wang also submitted that the phrase 'scheme, rule or method of performing a mental act' in s1(2) was intended to exclude schemes, rules or methods which were intended to be performed and capable of being performed in the human mind.

Decision

Aldous J upheld the decision of the Patent Office that neither claim was patentable.

In his judgment, Aldous J considered both recent British and European Patent Office decisions on the issue of patentability of computer programs and the construction of s1(2) of the Act and article 52(2) of the European Patent Convention.

Aldous J noted that the reasoning of Patent Office's examiner could not be supported as he relied on a wrong construction of s1(2) of the Act. The examiner relied on the judgment of Falconer J in *Merrill Lynch Inc's Application* [1988] RPC 1 where it was held that the novel aspect of the claim in that case was merely a computer program. The reasoning of Falconer J was that an invention was not patentable if the inventive step was contributed only by a matter excluded under s1(2) and that, in assessing whether or not an application related to an excluded matter, it was necessary to take into account the non-excluded features. Aldous J noted that the reasoning of Falconer J could not be supported in light of subsequent decisions. Examples included even Aldous J's own judgment in *Gale's Application* [1991] RPC 305 where he stated that a court should decide as a matter of fact whether a claim relates to matter excluded by s1(2). In *Gales Application,* it was held that instructions to be used in a computer program were not patentable.

Aldous J also considered several decisions of the Technical Board of Appeal of the European Patent Office ("EPO") concerning applications under Article 52(2) and (3) of the European Patent Convention. Article 52(2) provides, in part, that computer programs cannot be patented. These decisions place special emphasis upon whether the particular invention has made a 'technical contribution' or is useful in solving a technical problem or has a technical result. The cases considered by Aldous J were not consistent: the EPO appeared to draw different conclusions in respect of claims relating to similar types of computer systems. Aldous J indicated that in spite of the emphasis on the 'technical contribution' of the invention, the emphasis of the EPO was similar to that of the English courts. The EPO decided as a matter of fact whether the invention was patentable.

In relation to the submission regarding the correct construction of the phrase 'scheme, rule or method of performing a mental act' in s1(2), Aldous J noted that:

1. what is excluded from being patented is a scheme, rule or method of performing a mental act irrespective of the mental steps and process involved;

2. a claim for steps leading to an answer can be a claim for a method of performing a mental act; and

3. a method for performing a mental act, such as giving advice on a particular issue, will remain such irrespective of whether a computer is used.

Aldous J rejected Wang's submission that the 'shell' was being combined with the program produced a new machine and that the technical effect of its machine was a new machine that could be used in a novel way. In Aldous J's view, the computer and program did not combine together to produce a new computer and any contribution was made by the program alone.

Comment

The Commonwealth *Patents Act* 1990 does not contain a provision which corresponds to s1(2) of the UK Act. Section 18(1) of the Commonwealth *Patents Act* 1990 specifies the types of inventions which are patentable and s18(2) states that human beings and the biological processes for their generation are not patentable. Nevertheless, the Australian Patent Office has refused to grant patents for computer programs for similar reasons to those stated in English and EEC cases, that is, that computer programs are generally no more than methods of calculating mathematical problems or instructions on how to use a computer in a particular way.[1]

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Footnotes

[1] See David Webber's article in this issue of Computers & Law.