



29th January 2007

PATENTS ACT 1977

APPLICANT Kabushiki Kaisha Toshiba

ISSUE Whether patent application number GB0421741.0 complies with section 1(2)

HEARING OFFICER B Westerman

DECISION

- Application GB0421741.0 was filed on 30 September 2004, and subjected to a combined Search and Examination. It was published as GB2406676 A on 6 April 2005. The first examination report raised objection under section 1 that the invention defined by the claims then extant was not novel. Amendments were submitted which the examiner felt had removed the objection of lack of novelty, but in his re-examination he objected that the claims related to matter which was not patentable. After a further round of correspondence, the applicant requested that the matter be brought to a hearing to determine the patentability of the invention. The hearing took place on 25 October 2006, attended by Mr Vigars of the firm Haseltine, Lake. The examiner, Mr Yasseen was also in attendance.
- The correspondence between the examiner and the applicant's agents during prosecution of the application, and the submission at the hearing, was based on the law as it then stood in the light of case law. Shortly after the hearing, the Court of Appeal delivered its judgment in the matters of *Aerotel Ltd v Telco Holdings Ltd* and *Macrossan's Application* [2006] EWCA Civ 1371 (hereinafter "*Aerotel/Macrossan*"), in which it reviewed the case law on the interpretation of section 1(2) and proposed a new four-step test (explained below) for the assessment of patentability. In a notice¹ published on 2 November 2006, the Patent Office stated that this test would be applied by examiners with immediate effect. It did not expect that this would fundamentally change the boundary between what was and was not patentable in the UK, except possibly for the odd borderline case.
- In the light of this, I asked the examiner to re-examine the case and report his view of the application in the light of the new test to the applicant; and to invite

1 http://www.patent.gov.uk/patent/p-decisionmaking/p-law/p-law-notice/p-law-noticesubjectmatter.htm

further submissions or request for a further hearing. This he did in the Office letter dated 6 December 2006. The applicant responded in his agent's letter dated 8 January 2007, with submission on the examiner's analysis.

The application

- The application is a system for a computer-aided design tool, intended for use in designing architectural designs, for example in the design of nuclear or thermal power plant. The specification before me at the hearing included three independent claims which I quote below.
 - 1. An apparatus for processing parts information in a three dimensional CAD system, comprising:

a parts table having data of one or more parts in a spreadsheet format, wherein the data includes arrangement data and element data for the parts;

an arrangement adjusting unit, which refers to the arrangement data of the parts and adjusts a position of at least one of the parts; and

an element data editor, which refers to at least one of the element data for at least one of the parts and changes detailed configuration of the parts, wherein the parts table includes sets of a parts data block, each parts data block being a set of data for a part, and the parts data block includes common data for the part as the arrangement data, and parts element data, which is a data of sub-parts for the part, as the element data.

5. A method of processing parts information in a three dimensional CAD system, comprising the steps of:

storing data for each of parts in a parts data block in a parts table, which has a spreadsheet format, wherein the data is separately stored as arrangement data, which are common data for the part, and element data, which are data of the sub-parts for the part;

retrieving the arrangement data to locate the parts in a project area in the three dimensional CAD system; and

retrieving the element data to create a detailed configuration of each of the parts in the three dimensional CAD system.

17. A computer-readable medium having a computer program recorded thereon, that when executed on a computer, processes parts information in a three dimensional CAD system, the computer program comprising:

code for storing for each of parts in a parts data block in a parts table, which has spreadsheet format, wherein the data is separately stored as arrangement data, which are common data for the part, and element data, which are data of sub-parts for the part;

code for retrieving the arrangement data to locate the parts in a project area in the three dimensional CAD system; and

code for retrieving the element data to create a detailed configuration of each of the parts in the three dimensional CAD system.

The Law

- The examiner has raised objection under section 1(2)(c) of the Patents Act 1977 that the invention is not patentable because it relates to a program for a computer and/or a method for performing a mental act and/or a mathematical method as such. The relevant parts of section 1(2)read:
 - 1(2) It is hereby declared that the following (among other things) are not inventions for the purposes of this Act, that is to say, anything which consists of:
 - (a) ...
 - (b) ...
 - (c) a scheme, rule or method for performing a mental act, playing a game or doing business, or a program for a computer;

(d) ...

but the foregoing provision shall prevent anything from being treated as an invention for the purpose of this Act only to the extent that a patent or application for a patent relates to that thing as such.

- These provisions are designated in section 130(7) as being so framed as to have, as nearly as practicable, the same effect as the corresponding provisions of the European Patent Convention (EPC), i.e. Article 52.
- As I explained earlier, the starting point for determining whether an invention falls within the exclusions of section 1(2) is now the judgment of the Court of Appeal in *Aerotel/Macrossan*, where the court reviewed the case law on the interpretation of section 1(2) and approved a new four-step test for the assessment of patentability, namely:
 - 1) Properly construe the claim
 - 2) Identify the actual contribution
 - 3) Ask whether it falls solely within the excluded matter
 - 4) Check whether the contribution is actually technical in nature.
- As stated at paragraphs 45 47 of the judgment, reconciling the new test with the earlier judgments of the Court of Appeal in *Merrill Lynch* [1989] RPC 561 and *Fujitsu* [1997] RPC 608, the fourth step of checking whether the contribution is technical may not be necessary because the third step asking whether the contribution is solely of excluded matter should have covered the point.
- As I said earlier, after the hearing, the issue of the application of the new test was raised in correspondence, and I must apply the new test in the light of this

exchange. Nevertheless, submission at the hearing paints a helpful background and in coming to this decision I have taken into account what was said there insofar as it is relevant to the new test.

Argument and Assessment

- Both the examiner's letter of 6 December 2006, and the Agent's letter in response dated 8 January, addresses the four-step test. Whilst there are slight differences in their analyses of the first two steps, I detect little dispute. Having considered both, I consider that the claims can be construed as a method and apparatus for processing parts information in a three-dimensional computer-aided design system which includes those parts as specified in the three independent claims, and the skilled man would have no difficulty in discerning this. Equally, I am satisfied that the actual contribution, as acknowledged by the agent, lies in the provision and incorporation of a spreadsheet storage technique for parts information, together with editing and manipulation tools.
- 11 Where the examiner and Mr Vigars parted company in the correspondence, is in the answer to what is now the third test.
- The examiner asserts that the contribution lies in information handling, providing a useful computer tool, but one that does not provide a contribution in a non-excluded field. He specifically says that he considers the contribution of claims 1 to 17 to lie in software and to be excluded as a program for a computer. In this respect, at this last stage he makes no comment on the previous objection that the contribution could lie in a method for performing a mental act and/or a mathematical method. He goes on to assert that the fourth test is unnecessary since the third test has not been passed.
- The agent, however, denies that the contribution is excluded because it is concerned with "providing the user with a significantly enhanced ability to manipulate parts data for use in a CAD system, by providing an arrangement adjusting unit, and an element data editor for that purpose". He then submits that the invention is clearly technical in nature because it "improves data and information handling above and beyond that to be expected by the use of a computer." At the hearing, during discussion of the contribution in the context of the previous CFPH² test, Mr Vigars also submitted that there were technical benefits because the invention is memory efficient and processor efficient compared to what was previously known.
- I am not convinced by the applicant's arguments. The contribution clearly lies in a new way of processing and storing data and I can find nothing in the application that suggests that this processing, storage and presentation of data is done in any other way than by standard computer instructions adapted for the specific purposes disclosed. I can not conceive that the choice of how and where to store and manipulate information can, in the context of the invention, be anything other than, or anything more than, a series of computer

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² CFPH LLC's Application [2005] EWHC 1589 (Pat); [2006] RPC 5

instructions. This is put into stark relief by claim 17, where it is clear to me that the only difference from a standard computer-readable medium is the presence of program instructions. This clearly indicates, in my view, that the contribution of all claims is a computer program as such as set out in section 1(2).

- Some debate took place at the hearing as to whether the contribution was to a mathematical method or a mental act. Since this was not pressed by the examiner in discussion of the *Aerotel/Macrossan* test, and I have found that the contribution is excluded as a program for a computer, I need not come to a conclusion on this.
- I agree with the examiner that, having found as I have that the contribution lies in an excluded area, and following the decision of the court, the fourth test is not necessary in this case. However, as the applicant raised the issue of improved processor use, memory use and improved information handling at the hearing and subsequently as evidence of a technical nature, I feel that I should say that, if I were required to decide this, I would say that the selection of where to store information and how to use usual computing techniques to manipulate this as a result is in my view at best an avoidance of a technical problem, but not a technical solution to the problem.

Summary

- 17 I have found that the claimed invention is a program for a computer as such and is excluded from patentability under section 1(2)(c).
- I asked at the hearing whether, should I find that the independent claims were not allowable, there was anything else that Mr Vigars could point me to which would result in a different conclusion. He could not. I can therefore find nothing in the application that can form the basis of a patentable invention. I therefore refuse the application in accordance with section 18(3).

Appeal

19 Under the Practice Direction to Part 52 of the Civil Procedure Rules, any appeal must be lodged within 28 days.

B WESTERMAN

Deputy Director acting for the Comptroller