



2 February 2007

PATENTS ACT 1977

APPLICANT Canon Kabushiki Kaisha

ISSUE Whether patent application number GB 0215853.3 complies with section 1(2)

HEARING OFFICER Mrs S E Chalmers

DECISION

Introduction

- Patent application number GB 0215853.3 entitled "Summarisation representation apparatus" was filed on 9 July 2002 with no declaration of priority and published as GB 2390704 A on 14 January 2004. Despite amendment of the claims during substantive examination to meet novelty, inventive step and lack of unity objections, the applicant has been unable to persuade the examiner that the invention is patentable under section 1(2). The applicant accepted the offer of a hearing and the matter was referred to me for a decision on the papers.
- 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 case was referred to me, the Court of Appeal delivered its judgment in the matters of Aerotel Ltd v Telco Holdings Ltd and Macrossan's Application.¹ (hereinafter "Aerotel/Macrossan") in which it reviewed the case law on the interpretation of section 1(2) and proposed a new four step test for the assessment of patentability. In a notice.² 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 further submissions. The examiner accordingly re-assessed the patentability

-

¹ [2006] EWCA Civ 1371

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

objection in accordance with the new test, but maintained it, giving his reasons in a letter dated 20 November 2006. The applicant responded in his agent's letter dated 14 December 2006 asking that the decision should proceed on the basis of the papers on file but offered no further arguments.

The application

- The application relates to an apparatus for enabling a user to extract salient information from a text without having to read the whole document. In particular, the invention provides the user with a visual representation of a topic or topics within a text, eg by highlighting, so that it is not necessary to display a lot of text to the user. A user can therefore glean the gist of the text and see easily which part contains the information he or she wishes to extract. This is said to be especially advantageous when used with small portable or handheld devices such as personal digital assistants which have small display screens.
- There have been several rounds of amendments. The application, as it currently stands amended on 24 August 2006, has 6 independent claims: claims 1, 3 and 40 which broadly cover the same inventive concept ie apparatus for providing the user with the content of a text; claim 42 to suitable programming instructions to program a processor to provide such apparatus; claim 43 to a storage medium with suitable program instructions; and claim 44 to a signal comprising suitable programming instructions. Appendent claims 2, 4 to 39 and 41 relate to details of the apparatus. I shall not recite claims 3 and 40 as claim 1 is the broadest apparatus claim and covers the same inventive concept as claims 3 and 40.

6 Claim 1 reads:

Apparatus for providing a user with an indication of the content of a text, the apparatus comprising:

Receiving means for receiving text data;

Topic determining means for determining form the text data at least one topic;

Topic context data identifying means for identifying in the text data context data associated with the at least one topic determined by the topic determining means;

Topic context data position determining means for determining, for each item of context data identified by the topic context data identifying means, the actual position of that item of context data within the text on the basis of the number of words from the start of the text to the item of context data:

Topic representation data providing means operable to provide topic representation data defining a graphical representation of the at least one topic in which are distributed visual indicia representing at least some of the context data with the distribution of the visual indicia indicating visually to the user the relative positions within the text data of the corresponding items of context data on the basis of the actual positions of the items of context data within the text as determined by the topic context data

position determining means such that the spacing between the visual indicia varies in dependence upon the spacing of the corresponding context items; and

Supplying means for supplying the topic representation data for enabling display of the at least one topic representation to a user.

7 Claim 42 reads:

Program instructions for programming processor means to provide apparatus in accordance with any one of claims 1 to 41.

8 Claim 43 reads:

A storage medium comprising program instructions in accordance with claim 42.

9 Claim 44 reads:

A signal comprising program instructions in accordance with claim 42.

The law and its interpretation

10 The relevant parts of section 1(2) state:

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 –

. . .

- (c) a scheme, rule or method for performing a mental act, playing a game or doing business, or a program for a computer;
- (d) the presentation of information;

but the foregoing provision shall prevent anything from being treated as an invention for the purposes 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*. The Court of Appeal approved a new four step test for the assessment of patentability under section 1(2), namely:
 - (1) properly construe the claim
 - (2) identify the actual contribution
 - (3) ask whether if falls solely within the excluded matter
 - (4) check whether the actual or alleged contribution is actually technical in

nature.

13 As stated at paragraphs 45 – 47 of the judgment, reconciling the new test with the earlier judgments of the Court of Appeal in Merrill Lynch³ and Fujitsu⁴, 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.

Discussion and analysis

14 The examiner applied the above test in the letter of 20 November 2006, concluding under step (3) that (i) the contribution from claims 1 to 41 falls solely within the excluded subject matter being a computer program and the presentation of information and (ii) the contribution from claims 42 to 44 falls solely within the computer program exclusion. Since the claims failed at step (3), it was not necessary to apply step (4). The applicant has not responded to these arguments.

Claims 1 to 41

- 15 Applying step (1), I consider that claims 1 to 41 relate to apparatus for providing a user with an indication of the content of a text by determining topics and items of context data, associated with each topic, from received text data; and displaying a graphical representation of the topics in which are distributed visual indicia representing the items of context data. These indicia are distributed so as to indicate the relative positions and significance of the context date items within the text. In the described embodiments, the apparatus is a programmable device such as a personal computer.
- 16 Moving on to step (2), I agree with the examiner that the contribution lies in the fact that the topic position determining means determines the actual position of the items of context data within the text on the basis of the number of words from the start of the text to that item and providing graphical indicia representing some of the context data such that the spacing between visual indicia depends upon the spacing of the corresponding text item.
- 17 Addressing step (3), the examiner argues that the identified contribution relates solely to a computerised procedure – namely determining the position of the context data by counting the word number, relative to a first word (word 0) – and in the presentation of information with regard to the highlighting of the relative position and significance of the context data on the display. In the correspondence, in the context of the previous CPFH⁵ test, the applicant argues that the claimed invention is not a computer program as such because the claimed invention is not concerned with how the computer program would be structured or written but with what the computer program must do in practice, that is, with the functionality required of the programmed computer to implement the invention. I agree but I fail to see how this advances his

³ [1989] RPC 561 ⁴ [1997] RPC 608

⁵ [2005] EWHC 1589 (Pat); [2006] RPC 5

argument on the patentability of the invention. Put simply, the applicant seems to suggest that telling a computer which steps to perform is patentable but instructions on how to write a computer program are not patentable. Following this logic to its natural conclusion would mean that all computer programs would patentable by setting out a series of method steps rather than reciting specific data structures. Moreover to do so is to extol form over substance which is clearly not right. It is true the invention uses technical means to implement the invention such a computer but that, in itself, is not enough to make an invention patentable.

- The agent has also argued that the way the representation is produced provides a technical solution to a technical problem, namely how to provide consistency in the identification of context data. Since the determination of the actual positions of the items of context data is based on counting the number of words, this determination is thus independent of the formatting of the text. Hence, the possibility of different results being obtained if the format of the text is altered or there is a change in the type of printer driver with which the apparatus is associated, is avoided. Whilst this may represent an advantage of the invention, I do not agree that this aspect provides a contribution, technical or otherwise.
- 19 I therefore conclude that the contribution lies solely in a computer program and the presentation of information. Having determined that the contribution lies squarely in the excluded area, the step (4) check is redundant.
- For completeness, I note in the earlier exchange of correspondence that the examiner also raised an objection to mental act in that the claimed apparatus amounted to an automated method of textual analysis which, although undoubtedly laborious, could be carried out manually. 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 and the presentation of information, I need not come to a conclusion on this.

Claims 42 to 44

- I now move on to consider claims 42 to 44. The *Aerotel/Macrossan* judgment leaves open the question over whether claims to a computer program (or a program on a carrier) are allowable. In the past, the Office has allowed such claims if the program when running produced a "technical effect". However, that approach no longer applies. Whilst the judgment maintains the emphasis on substance over form, it also characterises the first step as deciding what the monopoly is, and if the monopoly does not go beyond the program, the contribution is also unlikely to go beyond "a program for a computer". Accordingly, whilst each case must be assessed on its merits, it seems likely that few claims to programs in themselves (or programs on a carrier) will pass the third test.
- I will now apply the *Aerotel/Macrossan* tests to claims 42 to 44. Claim 42 relates to program instructions for programming processor means to provide apparatus as claimed in claims 1-41 for providing a user with an indication of the content of a text. Claim 43 relates to a storage medium comprising

program instructions and claim 44 relates to a signal comprising program instructions. The monopoly sought is for a computer program and I can find no contribution in those claims that goes beyond the program. I therefore conclude that for the purposes of step (3), the invention is excluded as a computer program. Step (4) is therefore redundant.

Decision

- I have decided that the invention as claimed in claims 1 to 41 is excluded from patentability under section 1(2) as a computer program and the presentation of information. I have also decided that the invention as claimed in claims 42 to 44 is excluded from patentability as a computer program. I can see nothing in the application that could form the basis of a patentable invention.
- I therefore refuse the application under section 18(3).

Appeal

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

MRS S E CHALMERS

Deputy Director acting for the Comptroller