

03 February 2012

PATENTS ACT 1977

APPLICANT	Intuit Inc.
ISSUE	Whether patent application number GB0915496.4 complies with section 1(2)
HEARING OFFICER	Dr L Cullen

DECISION**Introduction**

- 1 This decision concerns patent application GB0915496.4, entitled "*Method and system for generating a dynamic help document*", and whether it relates to non-patentable subject matter, as defined by section 1(2) of the Patents Act 1977 (the "Act"). The application was filed on 4 September 2009, and was published on 17 March 2010 as GB2463355A.
- 2 Throughout the examination process, the examiner maintained that the invention defined in the claims, as filed and subsequently amended, was not patentable because it related to a program for a computer *as such*. The applicant disagreed.
- 3 After a number of rounds of correspondence and amendment, the examiner wrote to the applicant, in an official letter dated 5 August 2011, indicating that he remained of the view that the application related solely to excluded matter under section 1(2) and, as such, refusal of the application under section 18(3) was being considered. The applicant was advised of their right to have a hearing before a senior officer before such a decision could be settled. In the eventuality that the applicant did not ask to be heard by the latest date for reply of 5 October 2011, the examiner advised that the application would then be referred to a senior officer for a decision based on the papers on file.
- 4 No request for a hearing was received from the applicant and the application was referred to me on 6 December 2011 for a decision based on the papers on file. The examiner wrote to the applicant in an official letter dated 6 December 2011 outlining the issues that needed to be dealt with and confirming that this application had indeed been referred for a decision based upon the papers on file.

The invention

- 5 The application, as filed, describes (at page 1) how software users frequently need help understanding the features of applications and/or making optimal use of those features. In order to provide help, many software manufacturers offer one or more forms of online support. One such form of support may be a frequently asked questions (FAQ) document, which typically provides a series of questions and answers about those features thought to be most relevant to the largest number of customers.
- 6 The invention relates to generating a dynamic help document, which document comprises questions and answers (question-answer pairs) associated with a client-server application. In fact, the questions and answers are pre-existing ones, and the invention lies in ranking them according to user feedback, so that the questions and answers receiving the most favourable feedback are ranked first. The help document can be continually updated according to the most recent user feedback (hence a “dynamic help document”).
- 7 The latest set of claims, filed on 11 July 2011, comprises three independent claims. Claim 1 specifies:

“A computer-implemented method for generating a dynamic help document comprising:

obtaining a plurality of question-answer pairs associated with a client-server application;

communicating between an application server and a first application client to receive feedback about a plurality of question-answer pairs from the first application client; and

communicating between the application server and a second application client to receive additional user feedback about the plurality of question-answer pairs from the second application client;

determining, by the application server, rankings of the plurality of question-answer pairs based on the user feedback about the plurality of question-answer pairs from the first application client;

determining a first preferred question-answer pair based on rankings of the plurality of question-answer pairs by the application server, wherein determining the first preferred question-answer pair comprises:

determining a high-ranked question from a first question-answer pair of the plurality of question-answer pairs; and

determining a high-ranked answer from a second question-answer pair of the plurality of question-answer pairs; and

combining the high-ranked question with the high-ranked answer to generate the first preferred question-answer pair;

generating, by the application server, the dynamic help document using the first preferred question-answer pair;

updating, by the application server, rankings of the plurality of question-answer pairs based on the additional user feedback about the plurality of question-answer pairs from the second application client;

determining, by the application server, a second preferred question-answer pair based on updated rankings of the plurality of question-answer pairs; and

in response to determining the second preferred question-answer pair, updating, by the application server, the dynamic help document by replacing the first preferred question-answer pair with the second preferred question-answer pair”.

- 8 Independent claim 7 relates to an application server configured to perform the same steps as claim 1, and independent claim 13 relates to a computer-readable medium comprising executable instructions also corresponding to the method of claim 1.

The law

- 9 Section 1(2) of the Act sets out certain categories of invention that are not patentable as follows:

“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) 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.”

- 10 Current IPO examination practice is to use the structured approach set out by the Court of Appeal in its judgment in *Aerotel/Macrossan*¹ for deciding whether an invention is patentable. The test comprises four steps:

- 1) Properly construe the claim;
- 2) Identify the actual contribution;

¹ *Aerotel Ltd v Telco Holdings Ltd and Macrossan’s Application* [2006] EWCA Civ 1371

- 3) Ask whether it falls solely within the excluded matter;
- 4) Check whether the contribution is actually technical in nature.

- 11 The operation of the test is explained at paragraphs 40-48 of the judgment. More recently, the Court of Appeal in the case of *Symbian*² confirmed that this structured approach is one means of answering the question of whether the invention reveals a technical contribution to the state of the art. In other words, *Symbian* confirmed that the four-step test is equivalent to the prior case law test of 'technical contribution', as per *Merrill Lynch, Gale and Fujitsu*. The result being that what matters is what the 'technical contribution' amounts to, not whether it happens to be implemented by a computer.
- 12 During the course of correspondence reference was also made to the decision in *AT&T/CVON*³, and this case is also referred to below.

Argument and Analysis

- 13 Both the applicant and the examiner agreed that the correct approach to take with the present application is to apply the four steps of the *Aerotel/Macrossan* test:

Step 1: Properly construe the claims:

- 14 The examiner found the construction of the claims to be straight forward, and I agree with that analysis. The meaning of the claims is clear, and does not require further comment.

Step 2: Identify the actual contribution:

- 15 Paragraph 43 of the *Aerotel* judgment states that identifying the contribution should involve looking at substance, not form, and is probably best summed up by asking "*What has the inventor really added to human knowledge?*".
- 16 There was disagreement between the applicant and the examiner as regards the answer to this question. The applicant suggested, in their attorney's letter of 9 February 2011 (at paragraph 3.4), that the contribution lies in "*providing a dynamic help document to reduce the risk of a problem in system operation caused by human (operator) error*". However, in his most recent correspondence, of 6 December 2011, the examiner has reported that he considers the contribution to lie in "*automatically generating an updated help document at a server utilising rankings derived from client user feedback about an existing help document to determine question-answer pairs for inclusion in the updated help document*".
- 17 Taking the applicant's suggestion first, I do not think it provides a true assessment of the contribution provided by the invention. This is because I don't think that the invention can reasonably be said to be concerned with reducing the risk of a problem in system operation caused by human error. In fact, the specification is silent on the issue of reducing the risk of problems in system operation caused by 'errors', human or otherwise. In any case, I don't think that it's accurate to say that a 'help' document is truly aimed at the prevention or rectification of errors. Rather, the

² *Symbian Limited's Application* [2008] EWCA Civ 1066; [2009] RPC 1

³ *AT&T Knowledge Ventures LP and CVON Innovations Limited* [2009] EWHC 343

purpose of a help document is to provide information, which could be specifically related to the use of the software, or could be of a more general nature. In the case of a frequently asked questions document, it does this by providing an answer to a question that it is considered a user might be likely to ask. Although it may be that in some circumstances the help document is used to overcome erroneous use of the software, this is not its primary purpose. Indeed, all of the example questions given at figures 4 and 5 of the application, relating to the example of filling in a tax form, are aimed at filling in gaps in the user's knowledge, such as: "*Where do I report income from a Form 1099-q?*" and "*What is self-employment tax?*". None of these example questions are aimed at preventing or overcoming errors, but simply aim to fill in gaps in the user's knowledge.

- 18 The contribution identified by the examiner, on the other hand, seems to me to be entirely reasonable. It is clear from the claims, both before and after amendment, and from the description as-filed, that the invention is concerned with a dynamic help document, that is to say, one that is automatically updated, where the rankings of question and answer pairs are established by the feedback associated with those questions and answers by users of the computer program.
- 19 The applicant has argued, in its attorney's letter of 11 July 2011, that the examiner's comments in his examination report of 9 March 2011, are contrary to the decision in *Merrill Lynch*⁴, as they involve identifying a contribution based on the prior art. However, I don't agree with this analysis. The approach of Falconer J in *Merrill Lynch*, which was subsequently rejected by the Court of Appeal, was that, if the novelty of the claims related to matter excluded by s.1(2), then you ignore this matter and look only at what is left. This is not the approach adopted by the examiner in his assessment of the technical contribution. It seems clear to me from the correspondence on file that the examiner has not based his assessment of the contribution on any prior art document. His only reference to the prior art was in arguing that the contribution identified by the applicant was not a contribution because it addressed problems known at the priority date, and therefore was not what the inventor has added to human knowledge, as referred to at paragraph 43 of *Aerotel*. In this conclusion I think he was entirely correct.

Step 3: Does the contribution relate only to excluded matter?

- 20 It is clear, for instance from claim 1, that the invention is implemented by a computer program, and that the program requires only a conventional computing device in order to run. There appears to be no suggestion in the application that there is anything unusual in the hardware being used, and none of the applicant's arguments suggest as much. Therefore, I must now decide whether the contribution relates to a computer program as *such*, or whether there is something else that takes it outside of this exclusion.
- 21 In his assessment of whether the contribution is technical in nature, the examiner has used the 'signposts' set out by Lewison J in *AT&T/CVON*, and concludes that none of the signposts are shown by the present invention. However, the applicant has argued that the signposts are not relevant, since this decision was primarily concerned with the computerisation of a business method. I do not follow this

⁴ *Merrill Lynch's Application* [1989] RPC 561

analysis, as the judge's comments in *AT&T/CVON* are clearly of relevance to any consideration of technical effect, and are not limited to business methods only. Paragraphs 39 to 41 of this decision are set out below:

"It seems to me, therefore, that Lord Neuberger's reconciliation of the approach in Aerotel (by which the Court of Appeal in Symbian held itself bound, and by which I am undoubtedly bound) continues to require our courts to exclude as an irrelevant "technical effect" a technical effect that lies solely in excluded matter.

As Lord Neuberger pointed out, it is impossible to define the meaning of "technical effect" in this context, but it seems to me that useful signposts to a relevant technical effect are:

i) whether the claimed technical effect has a technical effect on a process which is carried on outside the computer;

ii) whether the claimed technical effect operates at the level of the architecture of the computer; that is to say whether the effect is produced irrespective of the data being processed or the applications being run;

iii) whether the claimed technical effect results in the computer being made to operate in a new way;

iv) whether there is an increase in the speed or reliability of the computer;

v) whether the perceived problem is overcome by the claimed invention as opposed to merely being circumvented.

If there is a technical effect in this sense, it is still necessary to consider whether the claimed technical effect lies solely in excluded matter."

- 22 The applicant argues, in its attorney's letter of 11 July 2011, that the invention is relevant to the second and fourth of these signposts. It asserts that the description, at page 5, lines 1 to 6, explains that the present invention is not limited to any particular type of computer application. This, it suggests, links in with the second signpost as it is "*irrespective of the applications being run*". I think this takes the second signpost out of context. I can see no evidence in the application, or any suggestion in the applicant's arguments, that the invention operates at the level of the architecture of the computer. To accept the reasoning submitted by the applicant would be to accept that any computer implemented invention that can be applied to many different types of computer program would necessarily involve a technical effect, which is clearly wrong.
- 23 With regard to the fourth signpost, in its attorney's letter of 11 July 2011, the applicant argues that since the invention results in a reduction in errors, it results in an increase in reliability. I have already rejected, above, the applicant's argument that the invention results in fewer errors. It therefore follows that I do not accept the applicants arguments based on improved reliability. The first three lines of the description at page 1 explain how users of software applications need help

understanding the features of applications and/or making optimal use of those features. Even if it is accepted that the dynamic help document of the invention is a more helpful help document, it cannot be said that it results in fewer errors of the computer system, nor does it improve the reliability of the system.

- 24 The applicant also argues, in its attorney's letter of 9 February 2011, and with particular reference to the decision in *Symbian*, that the present invention utilises a computer program to provide an improved help document, which makes the system easier to understand and operate for a user, and that "*the practical reality is that the system will be faster and more reliable for the user, and hence there is a technical contribution*". This letter goes on to provide a direct comparison with *Symbian*, which concerned a program for dynamic link libraries (DLL) in a computer, in order to improve the reliability of the computer. In *Symbian*, it was found that the contribution reduced the risk of a problem in system operation caused by human (programming) error, and so was technical in nature. This, the applicant argues, is directly analogous to the present invention, where a dynamic help document reduces the risk of a problem in system operation caused by human error. It goes on to allege that this reduction in risk represents an improvement in the reliability of the computer system as a whole, including the dynamic help facility.
- 25 I do not agree with these arguments. Firstly, the applicant has provided no evidence that a computer system running the invention will operate more quickly, and I cannot see how this could possibly be the case. The only advantage in terms of speed might arise from a user of the system finding a relevant question and answer in the help document more quickly. However, even if this were the case, it does not equate to an increase in speed of the system itself. Secondly, I can see nothing to suggest that the system will become more reliable by using the invention. At most, it may be easier for a user to find a more relevant question and answer due to the way the invention ranks questions and answers; however, the reliability of the system itself is not affected, and remains unchanged. In *Symbian*, the program resulted in a system where there was a reduced risk of a problem in the operation of the system itself. The present invention does not reduce the risk of a problem arising in the system itself; rather, it attempts to reduce the risk of an operator not being able to find a suitable piece of information in a help document as readily as if the dynamic help document were not there.
- 26 For the sake of completeness, I should add that I don't think that any of the other signposts set out by Lewison J in *AT&T/CVON* are present either. There is no technical effect that takes place outside of the computer (signpost (i)), the computer does not operate in a new way as a result of the invention (signpost (iii)), and the problems addressed by the invention do not overcome any problem within the computer itself (signpost (v)).

Step 4: Check whether the contribution is technical in nature

- 27 I think that I have sufficiently considered this issue above, and have concluded that the contribution is not of a technical nature.

Conclusion

- 28 I find the invention is excluded under s.1(2) because it relates to a program for a computer as such. Furthermore, having read the specification carefully, I can find nothing that might reasonably be expected to form the basis of a valid claim. I therefore refuse this application under s.18(3) .

Appeal

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

Dr L Cullen

Deputy Director, acting for the Comptroller