



13 April 2010

PATENTS ACT 1977

APPLICANT Research in Motion Limited

ISSUE Whether patent applications numbered
GB 0604281.6 and 0604288.1 comply
with section 1(2)

HEARING OFFICER Joanne Pullen

DECISION

Introduction

1. Patent application number GB 0604288.1 was filed on 3rd March 2006, claiming priority from an earlier European application numbered 05101668 and dated 3rd March 2005. The application was published on 6th September 2006 as GB 2423844.
2. Patent application number GB 0604281.6 was filed on 3rd March 2006, claiming priority from an earlier European application numbered 05101667 and dated 3rd March 2005. The application was published on 5th July 2006 as GB 2421825.
3. For procedural efficiency, the applicant requested that the arguments for patentability of these applications be heard together in a single hearing, as the applications contain similar subject matter.
4. During the course of examination the examiner raised a variety of objections against both applications, including that the claims of the applications were excluded from patentability under section 1(2) of the Patents Act 1977 as a computer program and/or mental act. Several rounds of correspondence were exchanged; however, the examiner was not satisfied that any amended claims submitted for either application resulted in a patentable invention. In the absence of any resolution of the matter a hearing was appointed. The hearing took place on 19th February 2010 before me and the applicant was represented by Mr Binesh Patel and Mr Paul Matthews of Barker Brettell.

The law

5. The examiner raised an objection under section 1(2)(c) of the Patents Act 1977 that the invention is not patentable because it relates to a computer program and/or mental act as such; the relevant provisions of this section of the Act are shown below:

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) a discovery, scientific theory or mathematical method;*
- (b) a literary, dramatic, musical or artistic work or any other aesthetic creation whatsoever;*
- (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.

6. As explained in the notice published by the UK Intellectual Property Office on 8th December 2008, the starting point for determining whether an invention falls within the exclusions of section 1(2) is the judgment of the Court of Appeal in *Aerotel/Macrossan*¹.
7. The interpretation of section 1(2) has been considered by the Court of Appeal in *Symbian Ltd's Application*². *Symbian* arose under the computer program exclusion, but as with its previous decision in *Aerotel/Macrossan*, the Court gave general guidance on section 1(2). Although the Court approached the question of excluded matter primarily on the basis of whether there was a technical contribution, it nevertheless (at paragraph 59) considered its conclusion in the light of the *Aerotel* approach. The Court was quite clear (see paragraphs 8-15) that the structured four-step approach to the question in *Aerotel/Macrossan* was never intended to be a new departure in domestic law; that it remained bound by its previous decisions, particularly *Merrill Lynch*³ which rested on whether the contribution was technical; and that any differences in the two approaches should affect neither the applicable principles nor the outcome in any particular case. But the *Symbian* judgment does make it clear, that in deciding whether an invention is excluded, one must ask does it make a technical contribution? If it does then it is not excluded.

¹ *Aerotel Ltd v Telco Holdings Ltd (and others) and Macrossan's Application* [2007] R.P.C. 7

² *Symbian Ltd's Application* [2008] EWCA Civ 1066

³ *Merrill Lynch's Application* [1989] R.P.C. 561

8. Subject to the clarification provided by Symbian, it is therefore still appropriate for me, and the applicant's representatives agreed, to proceed on the basis of the four-step approach explained at paragraphs 40-48 of Aerotel/Macrossan namely:

- 1) *Properly construe the claim*
- 2) *Identify the actual contribution*
- 3) *Ask whether the identified contribution falls solely within the excluded matter*
- 4) *Check whether the actual or alleged contribution is actually technical in nature.*

The applications

9. The systems and methods disclosed provide a conversion capability to transform page-based applications of a web service to component based applications which use messages to access functions of the web service. Conversion tools convert the code of a page-based application into a set of descriptor and workflow components that form a converted component application.
10. The set of descriptor components are defined in a structured definition language (e.g. XML) and augmented by workflow components defined in a scripting/command language (e.g. Java Script). The descriptor components consist of data components defining data elements of the page-based application, message components defining the format of messages used to communicate with the web service and presentation components which define what is displayed by the user interface.
11. The workflow components define processing that occurs when an action is to be performed. The component application produced is transferred to a device and may be converted to native code for execution or interpreted by a software module or operating system on the device.

The claims

12. The most recent set of claims of application 0604288.1 was filed on 13th October 2009. They contain two independent claims, numbered 1 and 20. These are directed towards different aspects of the invention, namely a method for converting a page-based application and a system for converting a page-based application respectively.
13. At the hearing the applicant's representatives agreed that claims 1 and 20 of this application could be dealt with together, in that if I find that claim 1 passes (or fails) the requirements of the Act then it follows that a similar finding must also apply (*mutatis mutandis*) to claim 20.

14. Claim 1 reads

A method in a computing system for converting page based application having at least on presentation page comprising embedded data elements and embedded message elements for interaction with a user interface to a component based application configured for execution on a device configured for communication over a network with a schema-defined service of a data source, the method comprising the steps of:

generating a plurality of components derived from the page-based application, the plurality of components comprising a data component having data descriptors representing the embedded data elements and a message component having message descriptors representing the embedded message elements, the respective descriptors being expressed in a structured definition language;

generating a plurality of dependency links associated with events corresponding to the embedded elements, each respective link being derived from the page-based application and operatively coupling at least two of the plurality of derived components and describing workflow between the coupled components;

generating in an instructional language an instruction set based on the plurality of dependency links, the instruction set coordinating the operation of the plurality of generated components when the component based application is executed on the device;

*generating a workflow component comprising the instruction set;
and*

assembling the workflow component and the plurality of generated components as the component-based application.

15. The applicant also filed an auxiliary set of claims on 19th November 2009 to be considered at the hearing. These claims contain two independent claims numbered 1 and 20. They differ from the claims on file in that the main claims contain an additional step of transmitting the component-based application to the mobile device over a wireless network and the invention is suitable for use with a mobile device.

Applying the excluded matter test

16. I will consider the claims on file of GB 0604288.1 and then the auxiliary claims.

Construing the claims

17. I do not think this presents any real problems since both the applicant and the examiner appear to agree as to the meaning of the claims.

Identify the actual contribution of claims 1 and 20 of GB 0604288.1

18. At paragraph 43 of the Aerotel/Macrossan judgment, Jacob LJ describes step 2 as being essentially a matter of determining what it is - as a matter of substance not form - that the inventor has really added to human knowledge. He also accepted that the test "is an exercise in judgment probably involving the problem to be solved, how the invention works, what its advantages are".

19. In the examination report of 19th October 2009 the examiner concurs with the applicant, in his agent's letter of 13th October 2009, that the contribution of the invention is 'the conversion of page-based applications into component based applications.' I am content that this is the contribution of this invention to what has been added to human knowledge.

Does the identified contribution of claims 1 and 20 of GB 0604288.1 fall within the excluded matter and is the contribution technical in nature

20. The contribution, as identified above, would appear to lie within the excluded field as it appears to be the conversion of a page-based application to a component based application via a computer program.

21. In order to assess the contribution for technical effect I will follow the useful signposts given in paragraph 40 of AT&T/CVON⁴

- 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.*

22. The claimed 'technical effect' of the contribution set out by the applicant in his agent's letter of 13th October 2009 is 'a device that can work (i.e. present pages and provide appropriate responses to events) when 'out of coverage'.' This is because the 'component-based application can provide a similar user experience to a web-page application without required continual network coverage'.

⁴ AT&T Knowledge Ventures LP and CVON Innovations Limited [2009] EWHC 343

23. In consideration of the above signposts:

- i) The contribution has no effect outside the apparatus upon which the conversion takes place. The component-based applications which are created as a result of this conversion method seem to be processed in a conventional way by the apparatus, i.e. mobile device, which uses them.
- ii) Any claimed effect produced by the conversion is entirely dependant on the data being processed, i.e. a page-based application.
- iii) The conversion method does not have any effect on the way the operation of the computer upon which it is run. The component-based applications which are created as a result of this conversion method seem to be processed in a conventional way by the apparatus which uses them, therefore the apparatus which utilises the converted program does not operate in a new way.
- iv) There is no increase in speed or reliability of the computer upon which the conversion method takes place.
- v) The alleged problem of allowing a device to operate when out of coverage is circumvented rather than overcome by the claimed invention.

24. Having followed these signposts I find that the identified contribution does not have a technical effect.

Auxiliary claims

25. The auxiliary claims additionally specify suitability for use in a mobile device and the addition of a transmission step. At the hearing the applicant's representatives submitted that these steps were part of the contribution. However, I do not think the addition of these steps changes the contribution of the invention. These changes alter the form of the claim but not the substance of what has been added to human knowledge.

Application GB 0604281.6

26. I am content to follow the same reasoning for this application, in utilising the both four-step test and the guidance in determining whether a technical effect occurs, and come to the same conclusions with respect to patentability.

Conclusion

27. I have found that the inventions defined in the current claims and auxiliary claims of the present applications are excluded under section 1(2) as a computer program and do not have a technical effect.

28. The examiner has also argued that the inventions are excluded as a mental act. However, having found the inventions to be excluded as a computer program, I have no need to decide this issue.

29. Having read the specifications I do not think that any saving amendments are possible. I therefore refuse the applications under section 18(3).

Appeal

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

J PULLEN
Deputy Director acting for the Comptroller