



10 September 2009

PATENTS ACT 1977

APPLICANT Fisher-Rosemount Systems

ISSUE Whether patent application number
GB 0811727.7 complies with section
1(2)

HEARING OFFICER J Pullen

DECISION

1. Patent application number GB 0811727.7 is a divisional application from GB 0523453.9 which is now granted. It has been accorded a filing date of 18th November 2005, with a priority date of 19th November 2004 from an earlier US application and was published under serial number GB 2449370 on 19th November 2008.
2. Despite amendment of the claims during substantive examination, the applicant has been unable to persuade the examiner that the invention is patentable within the meaning of section 1(2) of the Act. The matter came to a hearing before me on 15th July 2009 which was attended by the patent attorneys Dr Alex Lockey (who presented the applicant's arguments) and Mr Nick Palmer of Forresters, Examiner Mr Mark Simms and Mr Nigel Hanley as my assistant.
3. I am grateful for the skeleton argument provided by Dr Lockey before the hearing.
4. In advance of the hearing the applicant's attorneys filed an alternative set of claims for consideration.

The invention

5. The invention claimed in the application concerns the control of a process plant and particularly method and apparatus for generating a script for use in writing data in a process control system.

6. The claims address the interface provided to the user when changes to safety systems are required. A script is automatically generated as a result of one (or a number) or parameters selected by the user and a confirmation is required by the user before the command is sent.
7. The application in its present state contains four independent claims numbered 1, 7, 13 and 17. These are directed to various aspects of the invention, namely a method of automatically generating a script (claim 1), a system for automatically generating a script (claim 7), a machine accessible medium having instructions to automatically generate a script stored thereon (claim 13) and a method of automatically generating a graphical dialog for use in automatically generating a script (claim 17). Claim 1 reads as follows:

A method of automatically generating a script for use in writing data in a process control system, the method comprising:
receiving from a user a selection of a parameter of a process control element;
providing the user a graphical configuration interface associated with the parameter;
receiving user input associated with the parameter via the graphical configuration interface; and
automatically generating a script based on the user input that, when executed;
generates a graphical dialog to confirm a secure data write to the process control element;
sends the graphical dialog to the user,
receives, in response to the graphical dialog, a confirmation input from the user; and
sends a secure write confirm request to a controller in response to receiving the confirmation input.

8. The alternative version of claim 1 reads:

A method of operating a process control system having a process control element and controller, for writing data associated with the process control element to the controller, the method comprising:
receiving from a user a selection of a parameter of a process control element;
providing the user a graphical configuration interface associated with the parameter;
receiving user input associated with the parameter via the graphical configuration interface; and
automatically generating a script based on the user input that, when executed;
generates a graphical dialog to confirm a secure data write to the process control element;
sends the graphical dialog to the user,
receives, in response to the graphical dialog, a confirmation input from the user; and
sends a secure write confirm request to a controller in response to receiving the confirmation input; and
Executing the script in response to a user request.

9. If I find that claim 1 passes (or fails) the requirements of the Act then it follows that a similar finding must also apply to the other independent claims.

The law

10. The examiner raised objections under section 1(2) of the Patents Act 1977 that the invention is not patentable as it is a computer program and mental act.
11. Section 1 (2) reads:

“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.”;
12. I must also interpret section 1(2) in accordance particularly with the decision of the Court of Appeal in *Symbian*¹ concerning a computer program exclusion.
13. In *Symbian* the Court of Appeal, at paragraph 59, considered its conclusion in the light of the *Aerotel*² approach. I therefore consider it right, and Dr Lockey agreed, to base my assessment of patentability in the present case on the same four step approach as explained in paragraphs 40-48 of *Aerotel*, 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

Analysis

Construing claim 1

¹ *Symbian's Application* [2008] EWCA Civ 1066

² *Aerotel Ltd v Telco Holdings Ltd and Macrossan's Application* [2006] EWCA Civ 1371

14. This is not in issue and I do not in any case think that this presents any problems.

Identification of the contribution

15. At paragraph 43 of the *Aerotel* judgement, Jacob LJ described this step as being essentially a matter of determining what the inventor has really added to human knowledge and involves looking at the substance of the invention rather than the form of claim. He also accepted the submission of the Comptroller's Counsel that the test "is an exercise in judgement probably involving the problem to be solved, how the invention works, what its advantages are".
16. As for the present case Dr Lockey identified the contribution as "a new method, and an apparatus, for generating a script to ensure that a data write request in a process control system is performed safely and correctly".
17. In his examination report of 25th September 2008 the examiner identifies the contribution as "a computer program which generates a computer program".
18. Dr Lockey asserts that there are three general advantages, firstly that human error is reduced, secondly that an operator rather than a programmer is capable of generating the script, and thirdly that the script, when invoked verifies that the intended change is correct and then writes the changes safely to the process control system.
19. I see the contribution as being narrower than Dr Lockey's formulation. The substance of the invention is a new method and apparatus for producing a script within a process control system. Ensuring that the data write request, when invoked, is carried out correctly and safely (the third of the above stated advantages) is the subject of the granted parent application and is covered in conjunction with a script creation step in the claims thereof, so is not relevant to the issues here.
20. The contribution appears to be a script generated automatically in response to inputs on a graphical interface, in order to carry out the same safety function as would previously have been carried out had the script been generated manually.
21. The script does not necessarily provide enhanced process control, but a better way of achieving the process control without the need for operator to have any programming skill.
22. The inclusion in the alternative claims of a process control element, a controller and a script execution step does not in this case, unlike BL O/150/07 and BL O/148/07, change the substance of the claims, merely their form, as the hardware is standard and therefore makes no contribution.

Does the contribution fall solely within excluded matter

23. The computer program contribution does not, for instance, improve the speed or reliability of the computer, affect the architecture of the computer, nor does it cause the computer to be made to operate in a new way. The program does not effect the processes which occur outside the computer. Also, the problems associated with human error and correct level of technical ability when manually producing the script are merely circumvented by the proposed solution of automatically generating the script.
24. In my opinion the identified contribution is inherently a computer program which falls within the exclusions of Section 1(2).

Is the contribution technical in nature

25. As noted above the contribution does not appear to be technical.

Conclusion

26. I conclude that the invention is excluded as a computer program under section 1(2)(c). The alternative set of claims does not avoid the exclusion and, having read the specification, I am unable to identify any amendments which would be acceptable. I therefore refuse the application under section 18(3).

Appeal

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

J Pullen

Deputy Director acting for the Comptroller