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For Creativity and Innovation

BL O/252/07

30 August 2007

PATENTS ACT 1977

APPLICANT Canon Europa NV

ISSUE Whether patent application number GB 0225509.9 complies with section 1(2)

HEARING OFFICER R C Kennell

DECISION

1 This application was filed on 1 November 2002, and was published under serial no. GB 2 394 808 A on 5 May 2004.

2 Despite amendment of the claims during substantive examination, the applicant has been unable to persuade the examiner that this is a patentable invention within the meaning of section 1(2) of the Act. This matter therefore came before me at a hearing on 19 June 2007, the examiner having in the meantime deferred further consideration of whether the invention was novel and involved an inventive step. The applicant was represented by Mr Gary Whiting, assisted by Mr Tom Burt, both of the patent attorneys Abel & Imray. The examiner, Mr Paul Marshall, assisted by videolink.

The invention

3 The invention relates to the remote maintenance of electronic devices, particularly office equipment such as printers, photocopiers and scanners. As the specification explains, a known system for monitoring and predicting potential faults (rather than simply waiting for faults to occur) links items of equipment at the client end to a client computer and to a server computer. The server computer is associated with remote diagnostic software (RDS) for monitoring the status of each of the items of equipment, and is also electronically linked with a remote service management computer system or "backend". If the RDS detects any problems or potential problems it alerts the backend and, if necessary, the client computer. The specification further explains that, whilst this works well if there is a single backend maintenance system, if a number of different maintenance systems are involved, possibly in different countries, each will need to be provided with a special application in order to read data sent by a RDS.

4 This is potentially expensive and the invention therefore provides a central server which receives status information from the client RDS about the items of equipment and sends a message to the appropriate maintenance system, which can then obtain the status information from the central server and take any necessary action. The claims in their latest form comprise independent claims 1 and 23 which read as follows:

> "1. A remote maintenance data system comprising a central server and one or more remote entities, wherein the central server is arranged to receive status information about a plurality of electronic devices that from time to time require maintenance, that status information being transmitted from the devices to the central server directly or via one or more intermediary devices,
> wherein the central server comprises:
> receiving means for receiving the status information from a particular electronic device;
> a database for storing the status information received by the receiving means;
> determining means for determining, depending on the received status information, if a message is to be sent to the remote entity relevant to a particular electronic device or not, and, if so, to identify the relevant remote entity; and
> sending means for sending a message to the entity determined by said determining means to be relevant to a particular electronic device,
> wherein each of said one or more remote entities comprises:
> at least one service management computer system containing data about at least some of the devices about which the entity is sent said message; and
> a user interface for providing said message to a user to enable access to said database and for enabling data to be transferred from said central server to said service management computer system under the control of said user."

> "23. A method of interfacing a plurality of electronic devices that from time to time require maintenance comprising:
> receiving at a central server, status information from a particular electronic device, either directly or via one or more intermediary devices;
> storing said status information received by the receiving step in a database;
> determining, depending on the received status information, if a message is to be sent to an entity relevant to a particular electronic device or not, and, if so, to which relevant entity the message is to be sent;
> sending a message to a user interface of the entity determined by said determining step to be relevant to the particular electronic device;
> providing a user at said user interface with access to said database via said user interface; and
> using said user interface to transfer data from said central server to a service management computer system of said entity under the control of sad user, wherein the service management system contains data about at least some of the devices about which the entity is sent said message."

5 In the paragraph commencing at page 10 line 5 (on which Mr Whiting placed much emphasis) the advantages of the invention are succinctly summarized:

> "Using this architecture the problem of providing separate electronic RDS to service management system interfaces for each organisation has been avoided while the users at the maintenance organisation have access to information from the RDS's 22 (via the central server 50). Further the interface provided is quite

simple and so is easily supported by the systems of any service organization. Moreover all the information about the electronic devices and their faults is contained in the central server, as certain functionality in the service management system is not available to correctly support all the data obtained from the RDS."

The law and its interpretation

6 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**."

7 It was not disputed that the assessment of patentability is now governed by the judgment of the Court of Appeal in *Aerotel Ltd v Telco Holdings Ltd* and *Macrossan's Application* [2006] EWCA Civ 1371, [2007] RPC 7 (hereinafter "*Aerotel/Macrossan*"). In this case the court reviewed the case law on the interpretation of section 1(2) and approved a new four-step test for the assessment of patentablity, namely:

1) Properly construe the claim

2) Identify the actual contribution (although at the application stage this might have to be the alleged contribution)

3) Ask whether it falls solely within the excluded matter

4) Check whether the actual or alleged contribution is actually technical in nature.

8 The operation of this test is explained at paragraphs 40-48 of the judgment. Paragraph 43 confirms that identification of the contribution is essentially a matter of determining what it is the inventor has really added to human knowledge, and involves looking at substance, not form. Paragraph 46 explains that the fourth step of checking whether the contribution is technical may not be necessary because the third step should have covered the point.

Argument and analysis

9 The first step of the *Aerotel/Macrossan* test – the construction of the claims – presents no difficulty and is not in dispute.

10 Turning to the second and third steps, the examiner considered the contribution of the invention to be a remote management system comprising in combination

devices that might require maintenance, a server comprising a device status information database and means for sending a device status message to a remote entity if necessary, a remote entity comprising a computer system containing data about some of the devices about which the entity is sent the message, and a user interface for enabling the user to access the database and to transfer data from the central server when a message is received. In his view the invention was simply an arrangement of standard computer equipment to provide a signal to a user that there was information he needed to be aware of concerning the monitored devices: since the invention related to the method of use of standard computer equipment it was therefore excluded as a program for a computer.

11 In response, Mr Whiting took me to the Aerotel appeal in *Aerotel/Macrossan*. Aerotel had provided a "special exchange" as a new item of equipment in the then (in 1985) conventional system for making telephone calls. The customer deposited a credit with the owner of the special exchange and was given a code. To make a call he dialled the special exchange and input his code and the callee's number. If there was sufficient credit in his account he would be put through, thus avoiding the need for pre-payment. The patent contained both system and method claims: allowing Aerotel's appeal, the Court of Appeal reasoned as follows:

> "53. The important point to note is that the system as a whole is new. And it is new in itself, not merely because it is to be used for business of selling phone calls. So, moving on to step two, the contribution is a new system. It is true that it could be implemented using conventional computers, but the key to it is a new physical combination of hardware. It seems to us clear that there is here more than just a method of doing business as such. That answers the third step. Finally the system is clearly technical in nature. ……
>
> 54. Turning to the method claims, they are essentially to the use of the new system. Given that that is free of a s.52(2) *[sic]* objection, then the narrower claim to its use must be too. Again the contribution is not just a method of doing business but the use of a new apparatus for such a method. So there is more than just a business method. And the method involves the use of apparatus and so is technical.
>
> 55. The judge held otherwise. He considered solely the method claim. What persuaded him that it was a method of doing business as such was, we think, a misunderstanding of the evidence. ……
>
> 56. …… That* is not saying that the equipment used in the method is not new. Still less is it saying that the system is not new. It is merely saying that the system could have been implemented at the time using known components. So we think the Judge misassessed the contribution of the inventor – he was not saying 'use existing apparatus for my new method' he was saying 'create a new overall combination of apparatus using known types of apparatus – and use that combination for my method.' "
>
> *[* in relation to expert evidence that the special exchange could have been implemented by the skilled reader in 1985 using an electronic control exchange of the kind known at the time]*

12 Mr Whiting accordingly argued that the examiner had fallen into the same trap as the judge at first instance in Aerotel. He accepted that the various components might be known per se, but thought that their combination in the present invention provided an interface between the service management system and the central database which was new in itself, and not merely because it was used for the maintenance of electronic devices. Applying the logic of Aerotel to the present independent claims, Mr Whiting submitted that the novel interface was not excluded under section 1(2).

13 It is in my view important to be aware of what was actually decided in the Aerotel appeal. Finding that the invention contributed a new physical combination of hardware even though it could be implemented using conventional computers, the Court of Appeal held that Aerotel's system and method was not excluded as a method for doing business. The computer program exception was not in issue, and, as was subsequently made clear by Warren J in *IGT's Applications* [2007] EWHC 1341 (Ch) at paragraphs 29-36, the Court of Appeal was not asked to consider what would have been the position if the special exchange had been implemented purely in software (assuming that to be possible).

14 In this case, I do not think that the provision of a new system architecture or interface or the incorporation of a central data server necessarily avoid the computer program exclusion. In my view, irrespective of the form in which the invention is claimed, the substance of the contribution is a sequence of operations carried out under the control of a computer in order to collect information about the devices to be maintained, store that information in a central database, and allow a user of a remote maintenance system to access the database and transfer relevant information to the maintenance computer. It seems to me that this contribution arises not because there is a new physical arrangement of hardware but because a new computer program has been devised for communication between the devices to be maintained and the appropriate maintenance organisations. As the examiner stated at the hearing, the hardware is nothing more than the conventional items that are required to implement the program. In my view, therefore, the contribution does not lie in hardware and relates solely to a computer program.

15 The business method objection was not raised by the examiner, but I sought comment on this at the hearing should I find - as indeed I have - that unlike Aerotel the contribution was not a new physical arrangement of hardware. Mr Whiting considered that the invention was a method of data processing rather than a method for doing business because it was addressing the problem of how to scale up the prior art arrangements to cope with a plurality of service management systems. The examiner did not accept this and thought that the idea underlying the invention was a business method.

16 Whilst I would accept that the invention is concerned with data processing, I do not think that is sufficient of itself to dispose of the point. *Aerotel/Macrossan* establishes (see paragraphs 67-71) that the business method exclusion is not limited to abstract matters or to completed transactions, and that the provision of a new tool is not decisive of the matter. It seems to me that in the present case the contribution is essentially a way of getting the relevant information about the

devices being maintained to the appropriate service management computer to enable it to take the necessary remedial action, and therefore constitutes a scheme or method for running an equipment maintenance business. Having found above that the contribution is not a new physical combination of hardware this, I am of the view that it falls within the business method exclusion.

17 The contribution therefore relates solely to excluded matter and fails the third *Aerotel/Macrossan* step. There is therefore no need for me to go on to the fourth step and consider whether the contribution is technical in nature.

Conclusion

18 Accordingly I conclude that the invention relates to a computer program as such and to a scheme or method for doing business as such, and is therefore excluded from patentability under section 1(2). Having considered the specification I do not think that any saving amendment is possible to overcome this finding.

19 As I have mentioned, the examiner has deferred consideration of whether the invention is novel and involves an inventive step. In the light of my finding on patentability, it is not necessary to consider this matter any further.

20 I therefore refuse the application under section 18(3).

Appeal

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

R C KENNELL
Deputy Director acting for the Comptroller