

PATENTS ACT 1977

APPLICANT Avaya Inc.

ISSUE Whether patent application
GB1106168.6 complies with section
1(2)(c)

HEARING OFFICER H Jones

DECISION

Introduction

- 1 The application relates to a software distribution architecture in which a software vendor provides a software store that is coordinated with the unique requirements of a software purchasing enterprise. The application was filed on 12 April 2011 in the name of Avaya Inc., with a claim to priority from two US patent applications filed in April and September, 2010. The issue to be decided is whether the invention as claimed in the application consists solely of a method for doing business or a program for a computer which the Act excludes from patentability.

The invention

- 2 The specification describes how the purchasing of software over the Internet provides purchasers with the convenience not only of buying software online but also of installing the software without the use of physical storage devices. These online software stores are said to have certain disadvantages: for example, a customer can become overwhelmed with the very large number of software applications available, thus preventing the customer from locating and purchasing applications of interest to his/her enterprise; the enterprise may have a large number of individuals buying the same software application even though a single purchase and licensing arrangement would be more cost effective; the online store may allow for applications to be purchased and downloaded into the enterprise without regard to the rules and IT environment of the enterprise.
- 3 The invention is able to solve these problems by providing an enterprise-focused software marketplace instead of the traditional customer-market model. The invention provides a computer-implemented arrangement for presenting an enterprise-approved list of software applications to a customer within the enterprise, which takes account of rules and authorisations for purchasing the software required by the particular enterprise. The software marketplace can be coordinated with the purchasing enterprise's environment, e.g. infrastructure, IT requirements and purchase approval process, account billing and licensing criteria, etc., and the list of applications presented to the customer can be selected on the basis of the customer's context within the enterprise, e.g. job title.

4 The examiner considers that the invention relates to subject-matter excluded from patentability under section 1(2) of the Patents Act 1977 (“the Act”), i.e. to a method for doing business and a program for a computer as such. He has reported under section 17(5)(b) that a search of the invention would not serve a useful purpose and has maintained an objection under section 1(2)(c) throughout the examination process. The applicant has attempted to overcome this objection by amending the claims and through argument but has been unable to persuade the examiner that the invention is patentable. The applicant has asked that a formal decision be made on the basis of the papers.

5 The latest set of claims filed on 26 July 2017 has two independent claims (claim 1 to a method and claim 9 to a vendor system) which differ in form but are the same in substance. Claim 1 is set out below:

1. A method, comprising:

identifying a requestor;

receiving, via a network, by a processor enabled software vendor and from a requestor computational device, a request for first content, the requestor computational device being associated with an enterprise other than the software vendor;

determining, by the processor enabled software vendor, an identity of the enterprise;

selecting, by a processor executable presentation module and based on the identified requestor and the identified enterprise, the first content to be forwarded, via the network, to the requestor computational device, the first content including a plurality of possible software programs, software upgrades, software features, and/or software setting options for selection by the requestor at the requestor computational device, wherein a plurality of different enterprises have a plurality of different sets of possible software options wherein the software programs, software upgrades, software features, and/or software setting options in the first content are based on a knowledge of software used by at least one of the requestor and another enterprise member and wherein the software programs, software upgrades, software features, and/or software setting options in the first content are based on a determined set of hardware features, capabilities, and/or preferences used by at least one of the requestor computational device and another enterprise member computational device;

receiving input from the requestor to select one or more of the software programs, software upgrades, software features, and/or software setting options; and

forwarding, via the network, the selected one or more of the software programs, software upgrades, software features, and/or software setting options to at least one of the requestor computational device and the another enterprise member computational device for installation on the at least one of the requestor computational device and the another enterprise member computational device.

The law

- 6 Section 1(2) lists certain categories of subject-matter which are not considered to be inventions. These categories of subject-matter are conventionally known as excluded subject matter:

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.

- 7 The Court of Appeal in *Symbian*¹ stated that the question of whether a computer-implemented invention is patentable has to be resolved by answering the question whether it reveals a technical contribution to the state of the art. It proceeded to answer the question with the aid of the four-step test set out in its earlier judgment in *Aerotel*², namely:

- (1) construe the claim;
- (2) identify the actual (or alleged) contribution;
- (3) ask whether it falls solely within the excluded subject matter;
- (4) check whether the actual or alleged contribution is actually technical in nature.

- 8 The fourth step of the test is to check whether the contribution is technical in nature. In paragraph 46 of *Aerotel* it is stated that applying this fourth step may not be necessary because the third step should have covered the question. This is because a contribution which consists solely of excluded matter will not count as being a "technical contribution" and thus will not, as the fourth step puts it, be "technical in nature". Similarly, a contribution which consists of more than excluded matter will be a "technical contribution" and so will be "technical in nature". In the present case, which concerns a computer-implemented invention, I shall consider whether the contribution is excluded alongside the question of whether the contribution is technical in nature, i.e. I will consider the third and fourth steps of *Aerotel* together.

Argument & analysis

- 9 There is no particular difficulty construing the meaning of the claims: they define a computer-implemented system for vending software.
- 10 Paragraph 43 of *Aerotel* suggests that the contribution can be assessed from the point of view of the problem to be solved, how the invention works and what the advantages are. The examiner says that the hardware required to put the vending system into effect is a conventional arrangement of networked computers. He says

¹ *Symbian Ltd. v Comptroller-General of Patents* [2008] EWCA Civ 1066

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

that the contribution resides in solving the problems of facilitating software selection for a user from a particular enterprise, by forwarding a subset of software related content to a requestor device, the selection being based on software and hardware used by the requestor and another enterprise member, wherein the requestor can select a particular item of software from the subset which is then sent to and installed on the requestor device and/or another enterprise member device.

- 11 In its letter dated 26 July 2017, the applicant characterises the contribution in very similar terms but places particular emphasis on the vending system's ability to control which type of software can be installed on a network based on hardware used by one or more computational devices on the enterprise network. The applicant says that one of the key benefits of controlling the type of software that can be distributed and installed on an enterprise device is the ability to prevent users from adding software components that are incompatible with existing software and hardware, which avoids problems such as software failures, network failures, loss of data and lack of interoperability of communication applications on the enterprise network from occurring. This aspect of controlling which type of software can be downloaded to a user in a particular enterprise is already reflected in the examiner's assessment of the contribution set out above.
- 12 The next step is to assess whether the contribution made by the invention is technical.
- 13 The applicant says that the invention helps solve the technical problem of software/hardware incompatibility and that therefore the contribution falls outside the scope of excluded subject-matter.
- 14 The examiner says that the contribution relates to a way of conducting the business of vending software - by providing requestor and enterprise tailored software vending options - and thus relates solely to a method of doing business. He says that the fact that the method and system of the invention may provide a better or more convenient way of providing software to a vendee of an enterprise does not provide the required technical contribution, rather it provides a better or different way of conducting the business of vending software.
- 15 The examiner has referred to the following comments of Birss J in his judgment in *Halliburton*³ (para. 35) to support his argument that computer systems which implement a better method of doing business are not patentable:

"The business method cases can be tricky to analyse by just asking whether the invention has a technical effect or makes a technical contribution. The reason is that computers are self evidently technical in nature. Thus when a business method is implemented on a computer, the patentee has a rich vein of arguments to deploy in seeking to contend that his invention gives rise to a technical effect or makes a technical contribution. For example the computer is said to be a faster, more efficient computerized book keeper than before and surely, says the patentee, that is a technical effect or technical advance. And so it is, in a way, but the law has resolutely sought to hold the line at excluding such things from patents. That means that some apparently technical effects do not always count. So a computer programmed to be a better computer is patentable (Symbian) but as Fox LJ pointed out in relation to the business method exclusion in Merrill Lynch, the fact that the method of doing business may be an improvement on previous methods is immaterial because the business method exclusion is generic".

³ Halliburton Energy Services Inc. [2011] EWHC 2508 (Pat)

- 16 The examiner says that the present invention is intended to identify a plurality of possible software programs available for downloading to a user within an enterprise. It does not “control” what types of software can be installed on a network based on the hardware, rather it limits the possible software selections based on a description of hardware information received from an enterprise. He goes on to say that limiting an enterprise user’s options for selecting software content to only those which are compatible with the enterprise’s system is not technical in nature - rather it is a way of managing the selection of software options for a business. In other words, the invention does not solve the problem of incompatibility by making otherwise incompatible software compatible, it merely limits the user’s options to purchase only software that is compatible for a given enterprise. The examiner suggests that the need for the user to actually select a relevant item of software from a plurality of possible options again points away from there being a technical effect.
- 17 The examiner has considered whether the contribution also relates solely to a program for a computer and has relied upon the signposts to technical contribution set out by Lewison J in *AT&T/CVON*⁴ and by the Court of Appeal in *HTC/Apple*⁵, namely:
- 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 the program makes the computer a better computer in the sense of running more efficiently and effectively as a computer;
 - v) whether the perceived problem is overcome by the claimed invention as opposed to merely being circumvented.
- 18 The examiner says that the contribution does not relate to any of these five signposts. In particular, he says that the contribution resides in forwarding user-selected enterprise-relevant software to an enterprise device within a computer system and that it has no effect outside this system. He says that the contribution has no effect at the architecture level of the computer system and that the computer system operates in the conventional manner, i.e. it runs the program in the same manner it would any other program. He adds that the computer system is not a better, more efficient computer system as a result of running the program. Finally, he says that the alleged problem of incompatible software is only solved by limiting the user’s options to purchase compatible software for a given enterprise.
- 19 I can see no fault in the examiner’s assessment of the contribution made by the invention and agree with his analysis with regard to lack of technical effect. Although the applicant says that the invention helps solve the technical problem of software/hardware incompatibility, it does so by limiting the choice of software

⁴ *AT&T Knowledge Venture/CVON Innovations v Comptroller General of Patents* [2009] EWHC 343 (Pat)

⁵ *HTC Europe Co Ltd v Apple Inc* [2013] EWCA Civ 451

available to download onto the enterprise network as opposed to identifying the root cause of incompatibility and solving this problem directly. In other words, the invention circumvents a technical problem by re-designing the business model from being a customer-driven software marketplace to a more enterprise-focused marketplace, where the model takes account of the needs of the enterprise ahead of the end-user and avoids some of the technical problems associated with the convention model. In my view, the contribution made by the invention falls solely within the business method and computer program exclusions, i.e. the invention is a computer-implemented method for doing business that provides no technical effect.

Conclusion

- 20 I find that the invention is excluded by section 1(2)(c) both as a program for a computer and a method for doing business. I therefore refuse the application under section 18(3).

Appeal

- 21 Any appeal must be lodged within 28 days after the date of this decision.

H JONES

Deputy Director, acting for the Comptroller