



- 5 The application has three independent claims: claims 1 and 9 respectively relate to a method and apparatus for receiving one or more services and claim 17 is to a computer program for providing delivery of one or more services. These claims define a single invention, differing only in form rather than substance, and thus can be considered together. Claim 1 reads:

A method for receiving one or more services for a terminal apparatus, which method comprises:

transmitting a request for a service;

receiving a message comprising an ordered list of one or more entries for providing the service, wherein each entry comprises one or more requirements associated with the entry;

iteratively evaluating the one or more entries in the order specified by the ordered list by

determining one or more attributes associated with the terminal apparatus related to the one or more requirements associated with the respective entry

wherein the determining comprises evaluating at least one hardware information, wherein the hardware information is current central processing unit utilization, charging status, power source, battery charge percentage, battery time remaining, current memory usage, current memory available, available hard drive space, network bandwidth, network connection type, current screen resolution, mouse availability, keyboard availability, speaker availability, and/or microphone availability,

evaluating whether the one or more attributes satisfy the one or more requirements associated with the respective entry, and

re-evaluating a hardware information upon a condition adjustment in reaction to a determination that one of the attributes does not satisfy one of the requirements of entry; and

receiving delivery of the service as specified in an entry upon a determination that the one or more attributes satisfy the one or more requirements of the entry.

### **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*<sup>1</sup> 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*<sup>2</sup>, 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 With regard to the first of the four steps, despite a minor clarity issue noted by the examiner, there is no particular difficulty in construing the meaning of the claims.

10 The second step involves identifying the actual (or alleged) contribution. In his letter dated 5 September 2018, the examiner has defined the contribution as "A time-saving, accurate evaluation of both the user device and network condition performed at the time of providing a software service". At the hearing Mr Leffers formulated the contribution in a slightly different way to the examiner. Specifically, Mr Leffers defined the contribution as:

"An accurate evaluation of the user's current device hardware and network conditions, performed at the time of providing a software service in order to be able to provide a software service best suited for the user's current device hardware or hardware conditions."

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

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

- 11 I do not think that Mr Leffer's definition of the contribution is inconsistent with the examiner's - it merely aims to emphasise the evaluation of current device conditions. I will therefore consider whether the contribution as set out by Mr Leffers falls solely within the relevant excluded categories, i.e. a computer program and/or method for doing business, and will also consider whether the contribution is technical in nature.
- 12 Mr Leffers explained that the invention was concerned with something internal to the computer, in particular the current central processing unit (CPU) utilisation, and that the invention finds a service which is most suitable to current hardware conditions. Such current hardware conditions cannot be predicted by external users such as administrative or IT staff. Mr Leffers then directed me to the judgment in *Symbian* and the guidance set out in the Manual of Patent Practice (paragraph 1.36.1), where he noted that an invention which solves a technical problem within the computer was not considered to fall under the computer program exclusion. While he agreed that the problem of the present invention was not the same as in *Symbian*, Mr Leffers considered that there was a problem inside the computer that has to be taken into account because, as he put it, "you have to know the current CPU utilisation in order to be able to provide the most suitable service".
- 13 However, I do not agree that the present invention solves a technical problem within the computer. While a part of the invention is concerned with an operation(s) internal to the computer – in that the current CPU utilization is considered – the actual problem is not technical and is concerned with providing the most suitable service for the computer. In particular the present invention does not fix a problem within the computer due to how it has been programmed, nor does it provide a more reliable computer, as per *Symbian*.
- 14 Mr Leffers also considered the signposts set out by Lewison J in *AT&T/CVON*<sup>3</sup> and by the Court of Appeal in *HTC/Apple*<sup>4</sup>. As Mr Leffers noted at the hearing, these signposts are guidelines only, but may provide an indication that a computer program provides a technical contribution. These signposts 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 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.
- 15 Mr Leffers focused on signposts (iii) and (iv) and I shall do likewise. With regard to signpost (iii), Mr Leffers stated that common devices and/or common methods for receiving services do not determine and evaluate current CPU utilisation whereas the current method/device does. This, he argued, meant the computer of the present invention operates in a new way.

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<sup>3</sup> AT&T Knowledge Venture/CVON Innovations v Comptroller General of Patents [2009] EWHC 343 (Pat)

<sup>4</sup> HTC Europe Co Ltd v Apple Inc [2013] EWCA Civ 451

- 16 The fact that the present invention does something not found in the prior art does not necessarily mean that a computer is operating in a new way. In my opinion it is the program running on the computer that makes it operate in a new way, rather than the computer itself being made to operate in a new way.
- 17 Mr Leffers emphasised that the present invention determines and delivers a service which is most suitable for a current hardware conditions, thus there is better utilisation of current hardware conditions and therefore a better computer. However, the computer itself does not operate more effectively or efficiently, the contribution simply provides a service to a computer that best meets its current circumstances. This is a better selection of a software service rather than a better computer, therefore signpost (iv) is not met.
- 18 Whilst not explicitly mentioned at the hearing, I have considered signposts (i), (ii) and (v), and I do not believe they indicate the presence of a technical contribution. I therefore conclude that the contribution provided by the present invention is not technical in nature and falls solely within the computer program exclusion.
- 19 The examiner has also assessed the contribution to fall solely within excluded subject-matter as a method for doing business. Mr Leffers argued that the invention is more than just the implementation or use of a computer to implement a business method as current CPU utilisation cannot be predicted or known by administrative or IT staff when determining the most suitable services. In my opinion, selecting which software service to deliver to a computer based on its capabilities is an administrative task. The fact that the invention implements this task on a computer and evaluates conditions IT staff may not readily consider – such as the current CPU utilisation – does not indicate a technical contribution, rather it indicates utilising a computer to better conduct the business of selecting a suitable software service for a user's device. As discussed by Birss J at paragraph 35 in *Halliburton*<sup>5</sup>, computer systems which provide 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”.*

- 20 Therefore, the contribution is not technical in nature and also resides solely in excluded subject-matter as a method for doing business.

## **Conclusion**

- 21 I find that the claimed invention is excluded under section 1(2) because it relates to a computer program and a method for doing business as such. I have read the

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<sup>5</sup> *Halliburton Energy Services Inc.*, [2011] EWHC 2508 (Pat)

specification carefully and I can see nothing that could be reasonably expected to form the basis of a valid claim. I therefore refuse the application under section 18(3).

### **Appeal**

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

**H JONES**

Deputy Director, acting for the Comptroller