



## PATENTS ACT 1977

APPLICANT	Avaya Inc.
ISSUE	Whether application number GB 1122241.1 is excluded from patentability under section 1(2)
HEARING OFFICER	Ben Micklewright

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### DECISION

#### Introduction

- 1 UK patent application GB1122241.1 was filed on 23 December 2011 in the name of Avaya, Inc. with a declared priority date of 29 December 2010. It was published as GB 2486982 A on 4 July 2012.
- 2 The examiner argued that the invention is excluded from patentability as a program for a computer as such and a method of doing business as such under section 1(2)(c) of the Patents Act 1977 ("the Act"). The applicant disagreed. After several rounds of correspondence between the applicant's attorney and the examiner the matter was referred to me for a decision on the papers.

#### The invention

- 3 The invention relates to a message delivery and prioritisation method and associated system. A message server uses member configuration data with a prioritised message list to deliver audio messages to recipient client devices. The system delivers a selection of messages to a recipient based upon criteria designated by the sender and the recipient so that a limited number of the most important messages can be processed on a prioritised basis.
- 4 Such a system is intended to be used, for example, by doctors who have limited time between appointments to take and respond to audio messages and emails. The system delivers a subset of the messages to the doctor based on their specified priorities and the urgency as flagged by the sender.
- 5 The latest version of the claims were filed on 8 January 2018 and include two independent claims, claim 1 relating to a method and claim 10 relating to a computing device, both of which are similar in scope. Claim 1 reads:

1. A method for delivering a message in a messaging system comprising a plurality of sender devices, a server device, and a plurality of recipient devices, the method comprising, at the computing device:

- receiving a plurality of audio messages from a corresponding plurality of sender devices, each of the plurality of audio messages including a sender importance attribute and a sender response urgency attribute, both designated by the corresponding sender;
- accessing, for each received message from a sender device, member configuration data that identifies a plurality of recipient device prioritization attributes comprising a community attribute identifying a particular community of interest with which the corresponding sender of the audio message is associated and a sender attribute identifying the corresponding sender of the audio message and wherein the member configuration data further identifies a priority value for each of a plurality of possible values for each of the sender importance attribute, the sender response urgency attribute, the community attribute, and the sender attribute;
- determining, for the respective ones of the plurality of audio messages, an aggregate message priority value based on the priority value associated with the corresponding value for the sender importance attribute, sender response urgency attribute, community attribute and sender attribute of each audio message;
- generating a prioritized list of the plurality of audio messages based on the aggregated message priority value associated with each of the plurality of audio messages;
- providing a subset of the plurality of audio messages to the recipient device based on the prioritized list;
- receiving an additional audio message from a sender device;
- generating dynamically a revised priority list of the plurality of audio messages based on the aggregated message priority value associated with the each of the plurality of audio messages and an aggregated message priority value associated with the additional audio message; and
- providing a subset of the plurality of audio messages and the additional audio message to the recipient device based on the dynamically revised prioritized list.

## The law

6 Section 1(2) of the Act declares that certain things are not inventions for the purposes of the Act (emphasis mine):

s.1(2) *It is hereby declared that the following (amongst other things) are not inventions for the purpose of the 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 provisions shall prevent anything from being treated as an invention for the purposes of the Act only to the extent that a patent or application for a patent relates to that thing as such.*

7 The provisions of section 1(2) were considered by the Court of Appeal in *Aerotel*<sup>1</sup> where the following four-step approach was laid down to decide whether a claimed invention is excluded from patentability:

*i) Properly construe the claim;*

*ii) identify the actual contribution;*

*iii) ask whether it falls solely within the excluded subject matter;*

*iv) check whether the actual or alleged contribution is actually technical in nature.*

8 The Court of Appeal in *Symbian*<sup>2</sup> ruled that the question of whether the invention makes a technical contribution has to be addressed when considering the computer program exclusion, although it isn't critical whether that takes place at step 3 or 4.

9 In *AT&T/CVON*<sup>3</sup> Lewison J (as he then was) set out five signposts that he considered to be helpful when considering whether a computer program makes a relevant technical contribution. In *HTC v Apple*<sup>4</sup> Lewison LJ reconsidered the signposts in light of the decision in *Gemstar*<sup>5</sup>. The 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*

## **Assessment**

*(1) Properly construe the claim*

10 This step presents no difficulties in the present case. The attorney's points that the contribution is provided on the computing device and that the sender and recipient devices are not part of the independent apparatus claim are noted.

*(2) Identify the actual contribution*

11 In *Aerotel* the Court of Appeal provided useful guidance in relation to determining the contribution. In paragraph 43 of this judgment Jacob LJ said:

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<sup>1</sup> *Aerotel Ltd v Telco Holdings Ltd and Macrossan's Application* [2006] EWCA Civ 1371

<sup>2</sup> *Symbian Ltd v Comptroller-General of Patents* [2009] RPC 1

<sup>3</sup> *AT&T Knowledge Ventures/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

<sup>5</sup> *Gemstar-TV Guide International Inc v Virgin Media Ltd* [2010] RPC 10

*“The second step – identify the contribution - is said to be more problematical. How do you assess the contribution? Mr Birss submits the test is workable – it is an exercise in judgment probably involving the problem said to be solved, how the invention works, what its advantages are. What has the inventor really added to human knowledge perhaps best sums up the exercise. The formulation involves looking at substance not form – which is surely what the legislator intended.”*

- 12 The examiner took the view that the contribution relates to the management of priority listings of audio messages, where messages are prioritised according to both sender and receiver configurations and dynamically re-prioritised on receipt of new messages, wherein a subset of the (higher priority) messages are delivered to the recipient device, thus reducing the volume of messages received.
- 13 The attorney would seem to concur with this but goes on to elaborate that the computing device provides a reduced amount of data to the recipient device compared to the acknowledged prior art so that the recipient device is required to process less data.
- 14 There is no direct discussion in the specification of limiting the number of messages to a smaller subset in order to manage (or limit) the volume of data provided to the recipient device, except for a very fleeting mention in paragraph 37 that the audio messages can be prioritized based at least in part on one or more message attributes “such as size, date, sender or the like.” The overwhelming teaching of the document is directed to limiting the number of messages provided to the end user, the purpose behind this being neatly summed up in paragraph 33 of the description which states “Metering the delivery of messages prevents or reduces the inherent distraction caused when an individual is presented with a substantial number of messages, even when such messages may be prioritized by an attribute such as date.” Any reduction in the volume of data is merely consequential on this.
- 15 Although there may be a link between sending fewer messages to a recipient device and reducing the data delivered to that device I note that there is no discussion or indication that the amount of data moving around the system is problematic. Moreover, whilst it would seem that there may be a reduction in data delivered to the device, it is not entirely clear that this is the case without a detailed analysis of exactly what data is sent for example in managing the process, dealing with prioritisation attributes, etc. It seems to me that the problem the specification seeks to address is not a problem relating to reducing data transferred in a system so that the system works more efficiently or effectively, but rather a problem of ensuring a user (e.g. a doctor) can identify the small number of messages which are the highest priority. This is what, in substance, has been added to human knowledge. I therefore agree with the contribution identified by the examiner.

*Steps (3) and (4) ask whether it falls solely within the excluded subject matter and check whether the actual or alleged contribution is actually technical in nature*

- 16 I will consider steps (3) and (4) together. I have already found that, although the invention may result in less data being sent to, and processed by, the recipient device (although this is not clearly evidenced), this is not in substance part of the contribution made by the invention as a whole. Rather the contribution lies in

prioritising messages and selecting a subset of them for delivery to the recipient so that the recipient does not need to sift through so many messages to identify those that may be urgent.

- 17 The attorney also argues that the invention addresses a technical problem by changing the way electronic communications operate. Specifically, the invention changes to a metered delivery which also prioritises the messages to avoid the problem of important messages being delayed in the delivery queue.
- 18 I do not agree with the attorney that this is a technical problem. On the latter point, I am not convinced that the problem being addressed in the present invention is one of messages being delayed in a delivery queue. There is no suggestion that such delays would occur without the prioritisation which occurs in the present invention. Rather any delays in a user consuming messages are the result of the user being faced with a large number of messages. The invention solves that problem by sending a smaller subset of messages based on the prioritisation criteria. This is an administrative problem concerning how to assist a user manage large volumes of communications. It is akin to the problem of an individual having a very full in-tray and their personal assistant sifting through the communications in that in-tray to bring to the attention of the individual the few communications which are the most urgent. Merely automating this administrative process does not impart a technical contribution.
- 19 It therefore seems to me that the contribution made by the invention claimed in claim 1 is an administrative business method, implemented as a computer program.
- 20 As a further confirmation that the invention does not make a technical contribution I will briefly run through the *AT&T* signposts.

*Signpost i)*

- 21 As pointed out by the examiner, following *Lantana*<sup>6</sup> “the computer” is considered to encompass the “computing arrangement” including both client and server devices. The attorney argues that the delivery of a subset of messages and the dynamic revision of that subset list is a technical effect on a process carried on outside the computer. In my view these are however simply administrative elements of the business method and do not provide a technical effect outside of the computer.

*Signposts ii)-iv)*

- 22 In substance the invention is concerned with prioritisation of messages based on the business need of the recipient. There is clearly no effect at the level of the architecture of the computer. The effect is only produced when the specific program is run on the computer. The attorney argued that the computer operates in a new way in that the server is arranged only to provide a subset of messages to the recipient device and dynamically update the subset. The computer however only operates in a new way in the sense that any computer operating a new program could be said to run in a new way. Moreover the program does not make the computer run more efficiently and effectively as a computer. The computer itself

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<sup>6</sup> *Lantana Ltd v The Comptroller-General of Patents, Designs and Trade Marks* [2013] EWHC 2673(Pat) [30]

operates in a standard manner and there is no generally applicable improvement to the way the computer runs. Even if I were to accept that a reduced volume of data is sent to the recipient device forms part of the contribution, this is not a general improvement to the computer but a specific consequence to the way the particular computer program operates.

*Signpost v)*

- 23 As I have already said, the attorney took the view that the invention addresses a technical problem, namely by changing the way electronic communications operate to a metered delivery which prioritises the messages to avoid the problem of important messages being delayed in the delivery queue. I have already found that this is an administrative problem, not a technical problem, and the solution is an administrative solution. Furthermore, even if I was to consider that the invention addressed a technical problem of the need to reduce data sent to a recipient device, the solution is merely to send fewer messages using an administrative process. This problem is therefore not overcome in any technical sense but is rather circumvented. Thus the fifth signpost does not point to the presence of a technical contribution.
- 24 I therefore conclude that the invention claimed in claim 1 does not provide a technical contribution. Rather the contribution lies wholly in the excluded fields of a method of doing business as such and a program for a computer as such. A similar argument applies to independent claim 10 and I can see nothing in the dependent claims which would take the invention outside of these exclusions.

### **Conclusion**

- 25 I have found that the invention described in Claims 1 & 10 does not make a technical contribution and lies wholly in the excluded fields defined by section 1(2) of the Act. Moreover, having examined the application I can find no basis for an amendment which would overcome this issue. I therefore refuse this application.

### **Appeal**

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

### **B Micklewright**

Deputy Director, acting for the Comptroller