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PATENTS ACT 1977

APPLICANT	Google LLC
ISSUE	Whether patent application GB1621532.9 complies with section 1(2)(c) of the Patents Act 1977
HEARING OFFICER	Ben Buchanan

DECISION

Background

1 This decision relates to whether patent application GB1621532.9 complies with section 1(2)(c) of the Patents Act 1977 ("the Act").

2 The application was filed on 15 September 2015 as a Patent Cooperation Treaty application and was published as GB2544662A on 24 May 2017.

3 The application was first examined on 3 February 2021, when the Examiner reported that the application related to a program for a computer and a method for doing business, and as such considered that it was excluded from patentability under section 1(2)(c). All other considerations, including updating the search for prior art, were deferred and that remains the position.

4 Correspondence and amendment ensued during which the Applicant was unable to persuade the Examiner that the objections were overcome. In their letter dated 18 October 2021 the Agents for the Applicant requested a hearing. Skeleton arguments and an amended main claim set were submitted as the basis for discussion. An auxiliary claim set was also filed. A hearing was subsequently arranged and took place by video-conference on 26 January 2022. Peter Thorniley represented the Applicant as Agent. Also present was Jason Scott as my Hearing Assistant.

Subject matter

5 The claimed invention relates to a method, computer system, and computer-readable medium for the provision of content to a user who has more than one device at their disposal and the notification of relevant content to a particular user device at an appropriate time in order to enable that user to access the content on another of their devices.

The Claims

6 Claim 1 reads:

A computer- implemented method of notifying a user of relevant content, comprising:

identifying a plurality of client devices used by the user;

detecting activation of a first client device of the plurality of client devices on which the user consumes content;

receiving relevancy information describing a relevance of a digital content item to the user;

calculating a relevancy score based on the relevancy information, the relevancy score indicating the user's predicted interest in consuming the digital content item based on the relevancy information;

determining, responsive to the relevancy score, whether to notify the user of the digital content item;

responsive to determining to notify the user, inferring from activities of the user a time when the user is favorably disposed to consume the digital content item, wherein the inferring comprises calculating a notification score based on user activity information received from the plurality of client devices used by the user that describes one or more activities of the user at a current time;

identifying a plurality of notification types supported by a second client device of the plurality of client devices;

selecting a notification type of the plurality of notification types responsive to the relevancy information, wherein selecting the notification type includes combining the relevancy score and the notification score to produce a type score normalized between a lowest value and a highest value and selecting the notification type based on the type score;

sending a message having the selected notification type to the second client device used by the user at the time when the user is favorably disposed to consume the digital content item to notify the user of the digital content to notify the user of the digital content item; and

responsive to selection of the message by the user on the second client device, causing the digital content item to be provided to the first client device.

7 Claim 8 reads:

A computer system for notifying a user of relevant content, comprising:

a computer processor for executing computer program instructions;

a non-transitory computer-readable storage medium storing computer program instructions executable by the processor to perform steps comprising:

identifying a plurality of client devices used by the user;

detecting activation of a first client device of the plurality of client devices on which the user consumes content;

receiving relevancy information describing a relevance of a digital content item to the user;

calculating a relevancy score based on the relevancy information, the relevancy score indicating the user's predicted interest in consuming the digital content item based on the relevancy information;

determining, responsive to the relevancy score, whether to notify the user of the digital content item;

responsive to determining to notify the user, inferring from activities of the user a time when the user is favorably disposed to consume the digital content item, wherein the inferring comprises calculating a notification score based on user activity information received from the plurality of client devices used by the user that describes one or more activities of the user at a current time;

identifying a plurality of notification types supported by a second client device of the plurality of client devices;

selecting a notification type of the plurality of notification types responsive to the relevancy information, wherein selecting the notification type includes combining the relevancy score and the notification score to produce a type score normalized between a lowest value and a highest value and selecting the notification type based on the type score;

sending a message having the selected notification type to the second client device used by the user at the time when the user is favorably disposed to consume the digital content item to notify the user of the digital content item; and

responsive to selection of the message by the user on the second client device, causing the digital content item to be provided to the first client device.

8 Claim 14 reads:

A non-transitory computer-readable medium storing computer program instructions executable to perform steps comprising:

identifying a plurality of client devices used by the user;

detecting activation of a first client device of the plurality of client devices on which the user consumes content;

receiving relevancy information describing a relevance of a digital content item to the user;

calculating a relevancy score based on the relevancy information, the relevancy score indicating the user's predicted interest in consuming the digital content item based on the relevancy information

determining, responsive to the relevancy score, whether to notify the user of the digital content item;

responsive to determining to notify the user, inferring from activities of the user a time when the user is favorably disposed to consume the digital content item, wherein the inferring comprises calculating a notification score based on user activity information received from the plurality of client devices used by the user that describes one or more activities of the user at a current time;

identifying a plurality of notification types supported by a second client device of the plurality of client devices;

selecting a notification type of the plurality of notification types responsive to the relevancy information, wherein selecting the notification type includes combining the relevancy score and the notification score to produce a type score normalized between a lowest value and a highest value and selecting the notification type based on the type score;

sending a message having the selected notification type to the second client device used by the user at the time when the user is favorably disposed to consume the digital content item to notify the user of the digital content item; and

responsive to selection of the message by the user on the second client device, causing the digital content item to be provided to the first client device.

9 The auxiliary request is essentially the same claims with the further restriction that the first and second client devices are a TV and a smart phone respectively. The auxiliary request is also useful in providing a context through which to appreciate the main claims though it should be remembered that the TV and smart phone combination is but one embodiment encompassed by the amended main claims.

The law

10 The Examiner raised an objection under section 1(2) of the Act that the invention is not patentable because it relates to a method for doing business and a program for a computer. The relevant provisions of this section of the Act are shown below:

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…

(c) a scheme, rule, or method for performing a mental act, playing a game or doing business, or a program for a computer;…

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.

11 The assessment of patentability under section 1(2) is governed by the judgment of the Court of Appeal in *Aerotel*[1], as further interpreted by the Court of Appeal in *Symbian*[2]. In *Aerotel* the court reviewed the case law on the interpretation of section 1(2) and set out a four-step test to decide whether a claimed invention is patentable:

(1) Properly construe the claim;

(2) identify the actual 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.

12 The Court of Appeal in *Symbian* made it clear that the four-step test in *Aerotel* was not intended to be a new departure in domestic law; it was confirmed that the test is consistent with the previous requirement set out in case law that the invention must provide a "technical contribution". Paragraph 46 of *Aerotel* states that applying the fourth step of the test may not be necessary because the third step should have covered the question of whether the contribution is technical in nature. It was further confirmed in *Symbian* that the question of whether the invention makes a technical contribution can take place at step 3 or 4.

13 Lewison J (as he then was) in *AT&T/CVON*[3] set out five signposts that he considered to be helpful when considering whether a computer program makes a technical contribution. In *HTC/Apple*[4] the signposts were reformulated slightly in light of the decision in *Gemstar*[5]. 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

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[1] *Aerotel Ltd v Telco Holdings Ltd & Ors Rev 1* [2007] RPC 7
[2] *Symbian Ltd v Comptroller General of Patents* [2009] RPC 1
[3] *AT&T Knowledge Ventures/CVON Innovations v Comptroller General of Patents* [2009] EWHC 343 (Pat)
[4] *HTC v Apple* [2013] EWCA Civ 451
[5] *Gemstar-TV Guide International Inc v Virgin Media Ltd* [2010] RPC 10

v) whether the perceived problem is overcome by the claimed invention as opposed to merely being circumvented.

14 The Manual of Patent Practice explains the IPO's practice under the Act and makes helpful references to relevant case law. The Manual can be viewed online at the IPO's website: https://www.gov.uk/guidance/manual-of-patent-practice-mopp

In particular, sections 1.18-1.25.1 and 1.35-1.39.2 relate to the *Aerotel* approach to assessing excluded matter and the *AT&T* signposts. Sections 1.33-1.39.2 relate to business methods and computer programs.

15 There is no dispute concerning the relevant law and its application to the facts of this case.

Arguments and analysis

16 The arguments and analysis presented below are done so within the confines of claim 1 of the amended claims. Claims 8 and 14 are essentially a computer system and a non-transitory computer-readable medium storing computer program instructions executable to perform steps of claim 1. In that context they stand or fall on the same arguments as claim 1. This was agreed at the hearing.

17 In addition, the Agent explained that the auxiliary request claims technicality for the same reasons as the main claims under discussion. My analysis and decision are therefore applicable to the auxiliary request too.

Patentability

18 The Examiner has referred to *Aerotel* and *AT&T* in their examination report of 16 August 2021 and in the pre-hearing letter of 16 November 2021. They argued that the claims do not define a patentable invention because they relate only to a program for a computer and a method for doing business as such and so the application as it stands was considered excluded under section 1(2)(c). The *Aerotel* test was discussed at the hearing and it is the basis for my analysis herein.

19 I will apply the *Aerotel* steps as follows:

(1) Properly construe the claim

20 The claims appear as though they may be readily construed. However, I did seek clarification of my interpretation on several minor points.

21 With respect to: "identifying a plurality of client devices used by the user; detecting activation of a first client device of the plurality of client devices on which the user consumes content;" I confirmed that the first client device was a subset of the first "plurality of client devices" and that first client device is one on which the user is able to consume content. In other words the section is to be read as: "identifying a plurality of client devices used by the user; detecting activation of a first client device (of the plurality of client devices), on which the user consumes content;".

22 Where the claim states: "calculating a relevancy score based on the relevancy information, the relevancy score indicating the user's predicted interest in consuming

the digital content item based on the relevancy information", the second reference to "based on the relevancy information" is merely a confirmation that the relevancy score is based on it and is not intended to add anything else.

23 Where "sending a message having the selected notification type to the second client device used by the user at the time when the user is favorably disposed to consume the digital content item to notify the user of the digital content item to notify the user of the digital content item;" is merely erroneous repetition of "to notify the user of the digital content item".

24 Finally, the claim defines providing content to the first client device but stops short of specifying that the device subsequently displays the content. Whilst it is perhaps implicit from the determination of a user being disposed to *consume* the content that the first device (in the case of the auxiliary claims a TV) does *display* the content, neither this nor the nature of the content (e.g. video) are explicit in the claim. The strict scope of the claim is perhaps broader than the embodiments would suggest.

25 The Agent confirmed my thoughts on construction and subject to the above, the claims may be construed as read.

(2) Identify the actual contribution

26 Jacob LJ outlined the considerations to be applied when identifying the contribution made by the claims in paragraph 43 of *Aerotel.* At the hearing the Agent very helpfully adopted the same starting point so this is the approach I shall follow here:

> *"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."*

27 In the Examiner's assessment in their letter of 16 November 2021, the contribution was assessed as:

> *A computer implemented method of notifying a user of relevant content at a time when they are favourably disposed to consume the content comprising the steps of identifying a plurality of client devices used by the user, detecting activation of a first client device of the plurality of client devices on which the user consumes content, determining to notify a user of content following calculating a relevancy score based on information describing the relevance of the content to the user, inferring from activities of the user a time when the user is favourably disposed to consume content wherein the inferring comprises calculating a notification score based on user activity information describing one or more activities of the user at a current time, selecting a notification type supported by a second client device and by combining the relevancy score and the notification score to produce a type score normalized between a lowest value and a highest value selecting the notification type based on the type score, sending a message having the selected notification*

type to the second client device used by the user notifying them of the relevant content at the inferred time, wherein responsive to selection of the message by the user on the second device the digital content item is provided to the first client device.

28 In reaching this conclusion, they considered that the hardware did not contribute towards the contribution as it was a known arrangement.

29 In their correspondence dated 19 January 2022 the Applicant discussed the contribution at length and then summarised it as:

> *The contribution here therefore lies in the realm of optimising the use of technical resources when streaming media content*.

30 Identifying the contribution is not the same as identifying what is new and inventive. Neither is it a question of simply defining the remit of the claim. A search for prior art may not have been carried out and the contribution may reflect what effect the claimed invention has when put into practice. These points, and further guidance, are relayed in the Manual of Patent Practice in sections 1.20 – 1.21.4. In summary the art is to identify *what has been added to human knowledge.* To do so needs to take account of the context of the invention.

31 I think both the Examiner's and the Applicant's formulations of the contribution consider relevant points. The Examiner's focuses on *how the invention works* but does not adequately reflect the problem to be solved or what the advantages are. To my mind it is too closely based on the claim to express the value the contribution adds and the benefits which arise in effect.

32 The Applicant's reflects the problem and arguably something of the advantages but say nothing about *how the invention works*. I do not think either is a particularly helpful starting point for a determination of whether they are technical.

33 The Agent argued that the contribution should acknowledge that by linking up the devices in a new way there was a better use of the existing device resources where each could be optimised. This speaks towards the advantages of the system. It is perhaps most readily witnessed in the auxiliary request where the devices are specified. The smart phone is better for receiving the notification; the TV is better for displaying content. Of course, I must bear in mind that that is only one way in which the main request claims could be construed. In theory, the claim could be worked by notifications being received on the television and causing the content to be displayed on the smart phone. This may optimise device capability, if for example the user needs to be mobile, or if the television is being used for another purpose, although the application does not suggest these scenarios. On balance I am content to accept the assertion, but with the key understanding that the respective device capability or resources is not improved – it is merely used in a specific way.

34 There is another point of difference, too, which is the part the hardware plays. Contrary to the Examiner, the Applicant, and the Agent at the hearing, asserted that the hardware is part of the contribution as a "new arrangement of devices". This is a reference to the way in which the first and second client devices connect and interact and an analogy was drawn with the "special exchange" of the *Aerotel* patent itself.

35 The premise for this was that whilst a user watching television is not "technical", a television switched on and displaying content is. It was acknowledged that interconnecting a television and a telephone, for example via Bluetooth™, already exists, but that doing so as defined by the claimed invention was new and enabled the timely provision of relevant content to a user at an appropriate time. The Agent considered that it was wrong to "slice and dice"[6] the claim to find known elements and that the system as a whole must be assessed. This putative new system contributes towards human knowledge. I will return to the part the hardware plays in assessing whether the contribution is technical, below.

36 Finally, towards the end of the hearing, I asked the Agent if they could define the contribution used as the basis for the argument. Although it had been extensively discussed, it had not been succinctly defined.

37 The formulation offered was:

[The contribution relates to the realm of optimising the use of technical resources by:]

> *optimising the capabilities of each of two devices and selectively notifying a user on a second device when content is available following activation of a first device in such a way that selection of the notification causes the content to be displayed on the first device.*

38 On reflection I think this omits the determination (by inference) of a time *when* a user will be disposed to consume content. This is a key feature and indeed advantage of the claimed invention. Other than that, this formulation reflects the problem of optimising the use of device capability and the advantage of providing the content to one device in response to user action of a notification on a second device. It is largely silent as to *how* this is achieved, although it was widely discussed at the hearing. As discussed above with regard to construing the claim, the actual display of content is at best implied in the claim, but having regard to the contribution, this is where the realisation of the advantage lies. On this basis and with the inclusion of these prior omissions (underlined) I can identify the alleged contribution as:

> *Optimising the <u>use of the</u> capabilities of each of two devices and selectively notifying a user on a second device <u>at a time when the user is disposed to consume the content</u>, when content is available, following activation of a first device in such a way that selection of the notification causes the content to be displayed on the first device <u>by determining likely relevance of the content, inferred disposition of the user and selecting a suitable notification type for the relevance of the content and sending a message having an associated notification to the second client device</u>.*

<u>(3) ask whether it falls solely within the excluded subject matter; (4) check whether the actual or alleged contribution is actually technical in nature.</u>

39 Steps (3) and (4) may be considered together. The Agent has presented the argument by considering steps (3) and (4) together and I shall do the same.

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[6] I agree, as MoPP 1.21 makes clear; "salami-slicing" is to be avoided.

Method for doing Business

40 The Agent's starting point for argument was that if something in the contribution is non-excluded, then the invention is patentable. In this respect they returned to the *Aerotel* "special exchange" (i.e. hardware) argument; although the individual devices were known, the specific interconnection and interaction defined in the claims allegedly was not. They therefore, so the argument ran, constituted a new overall apparatus or system. The new combination of known elements enables new user functionality. Insofar as the contribution provides something technical, it does not relate to a method for doing business as such.

41 The Manual of Patent Practice is again helpful here. At section 1.34.1 it states:

> Inventions may, however, relate in some way to a business method and yet avoid exclusion. Following the approach of Birss J in *Lenovo (Singapore) PTE Ltd v Comptroller General of Patents [2020] EWHC 1706 (Pat)*, "it is useful to ask: what more is the … invention than a method of doing business?" If the answer to this question is nothing more than a computer program running on a conventional computer system, as was the case in *Merrill Lynch* discussed above, then the invention is excluded. In *Lenovo* the invention (which concerned a contactless card payment system) was found to be more than a business method as such. Birss J held that the invention involved "a different physical interaction with the world outside of the computer" that was "technical in character and, in the context of the invention as a whole" it was "not just one of the normal incidents of a conventional computer" (see also 1.38.1). Similarly, Jacob LJ when considering the invention of *Aerotel* in paragraph 53 of his judgment, considered the then invention to be "more than just a method of doing business as such." Considering the contribution of Aerotel's claimed telephone system, he noted that "the [telephone] system as a whole is new. And it is new in itself not merely because it is to be used for the business of selling phone calls." Even though the telephone system of *Aerotel* could have been "implemented using conventional computers" Jacob LJ held that "the contribution is a new [telephone] system" because it was "a new combination of hardware" in the form of a telephone system including a "special exchange".

42 In order to ascertain whether the claimed invention is more than a method for doing business as such I must ask:

- Is it also more than a program for a computer as such?
- Is there a different physical interaction with the outside world?
- Is the system as a whole new?

43 The first two points will be addressed by applying the *AT&T* signposts in due course when assessing the computer program exclusion, as all that exists beyond the method of providing content is the programmed hardware. The third is the most relevant to the "special exchange". Is the combination of hardware new?

44 There is no suggestion in the specification that the network or its operation is unconventional. Rather its implementation is specific to the application. There are no details of new hardware devices, communication protocols or improved physical

capabilities. The specific devices performing specific data processing and communicating specific messages are doing so using a specific implementation of conventional programming techniques. Nothing points towards any new arrangement beyond the devices, services, sources and modules under the control of a specific application layer implementation.

45 In making the argument the Agent helpfully referred to paragraphs 51 and 56 of *Aerotel* in particular. Of these I find a quote from paragraph 56 most helpful. In exemplifying an interpretation of what was not excluded, Jacob LJ said:

> *"create a new overall combination of apparatus using known types of apparatus – and use that combination for my method."*

So is the claimed arrangement of the present application a "new overall combination of apparatus" in the sense required to provide a technical contribution? I do not think so for the reasons given above. These days "new combinations of apparatus" are potentially created every time a device joins or leaves a network or the internet. They do so using conventional connections and protocols. Something more must be necessary for such a combination to provide a technical *contribution* and I cannot see it here. Of course, at the time of the *Aerotel* judgment the *AT&T* signposts had not been devised (although some of the precedents had been established). They may now offer further assistance on this point. Furthermore the "special exchange" was subsequently found not to be novel after all. At this stage then, I am left to conclude that if there is anything more than a conventionally implemented (albeit perhaps novel) combination of apparatus, then I must turn to the *AT&T* signposts to identify it for it will lie in the programmatic implementation, and the consequential effect, of the overall combination of apparatus. If I find it, then the question will be *is it technical*?

46 On the face of it, then, the claimed invention would seem to relate solely to a method for doing business, namely an administrative method of determining the provision of content (taking into account relevance, timing and notification type), because I cannot conclude that the system as a whole is new in a technical sense. If the analysis below does not identify a technical effect in the programmatic implementation, then this assessment will stand.

Program for a computer

47 As noted, the claimed invention is implemented by means of a computer program. In practice several components, libraries and modules will doubtless be required to implement the invention, collectively considered for the purposes of this decision as a program for a computer.

48 The Examiner and the Applicant, and the Agent in the hearing, have used *AT&T* signposts in the course of their argument. They are a useful summary of the precedent case law and I shall apply them here.

49 The Agent started by stating that the *AT&T* signposts are not exhaustive, or determinative, but nevertheless provide a solid framework for discussion. They indicate the likely existence, or not, of a technical contribution and are a helpful tool to aid analysis and decision. I agree with this pragmatic assessment.

50 The Examiner applied the signposts and found no technical contribution. The first of these is particularly relevant, as foreshadowed above: (i) whether the claimed technical effect has a technical effect on a process which is carried on outside the computer.

51 In the Examiner's objections, they had argued that the devices were known in combination, even at the level of a TV and smart phone specified in the auxiliary request. They considered that the connections are not new in themselves. The Examiner therefore considered the system as a whole to be the computer. In doing so, the Examiner cited *Lantana v Comptroller-General*[7]*.*

52 The Agent took a different view. Although they recognised that a smart phone and TV may have been connected in the past, the connection was *new for this purpose*. They suggested that showed that the two devices should therefore be considered as two computers; operating the second device therefore caused something to happen outside its computer, i.e. to cause the first device to display content. In this view the Agent considered that the facts of this application were closer to those of the *Aerotel* patent itself, where data was routed in a new way between known connected devices.

53 Although the Examiner's view was based on a different formulation of the contribution to that set out above, their arguments on this point are still relevant. In my opinion the system is not new, inasmuch as the devices and the manner of their interconnection is known; and the "new" connections are merely configured by software, i.e. programming. This configuration is directed to the purpose. There is no suggestion that the devices join and leave the network in anything other than a conventional way. As such they constitute a single computer, albeit configured for a purpose, and so we must look for an effect beyond the network itself.

54 There is no physical interaction with the outside world, beyond the user receiving and responding to a notification and subsequently content being displayed. These are entirely conventional processes which are relevant to the administration of content but are not unconventional in themselves. Whilst they are essential for the realisation of the invention they are not determinative of the contribution. In other words, they are incidental to the determination of relevance, inference of disposition and selection of a notification type which *are* fundamental to the contribution and enable the (technically conventional) activation of a device to display content. By the same token that a conventional computer when suitably programmed does not confer technicality and yet has an input means (e.g. a keyboard) and a display, so the input means and display (the two conventional client devices) of the current invention do not add technical character. Signpost (i) is therefore not satisfied.

55 Signposts (ii)-(iv) relate to the level of operation of the effect within the computer (namely whether it is data/application specific); whether the computer operates in a new way (not merely under "new" conventionally-implemented application-layer instruction); and whether the computer runs more efficiently and effectively as a computer.

[7] Lantana v Comptroller-General of Patents [2013] EWHC 2673 (Pat) [30]

56 The Agent noted that signpost (ii) was not very apposite because the alleged effect is outside the computer. I agree. There is no suggestion that the architecture of the computer (or any part of it) is different, and the very advantage of the program implementation is specific to particular content, determined relevance, inferred timing and selected notification types. The effect is dependent upon the data processed and applications run. This signpost then does not suggest a technical effect.

57 Signpost (iii), in the Agent's view, depends somewhat on the boundary of what is regarded as the computer. If all the elements were to be found lying within a single computer, then a new operation could be conceived of where one part of that system was causing content to be displayed on another part. But in the Agent's main argument they preferred to regard the devices as distinct computers and contended that one computer was causing another computer to be operated in a new way.

58 I find that neither scenario satisfies the signpost. As Lewison J effectively noted in paragraph 31 of *AT&T* this signpost "points towards some generally applicable method of operating a computer rather than a way of handling particular types of information". As noted above, there is no suggestion that the computer (or any part of it) is different beyond running a new application, and the very advantage of the programmatic implementation is specific to particular types of information. Whether as separate devices or as a network, "the computer" operates conventionally under the instruction of an application program and does not operate in a *new way* as the signpost requires.

59 Signpost (iv), in the Agent's view, again depended on "the computer". The Agent did not argue that the client devices themselves were better, but rather, that as a part of the whole system, their capabilities were optimised. They characterised this as the system being a "hybrid device" which made the most of individual device capability while combining the capabilities of both. The argument was that therefore the hybrid device operated more effectively and efficiently as a whole.

60 In practice this means that a telephone is used to receive notifications and a TV is used to display content, when previously the different capabilities of each device may not have been distinguished for the purposes of presenting content to a user for consumption. It is an attractive argument, but it is hard to see how it extends beyond the administrative method considered above. Neither device capability is enhanced per se and there is no improvement in the efficiency or effectiveness of their operation. It is the selection of the device for its preferred purpose which is key here, but that is an administrative decision, not a technical one.

61 The Examiner provided a useful quote in their latest examination report which is relevant. They noted paragraph 29 (part viii) of *Autonomy*[8] which states:

> *"The mere fact that a computer program reduces the load on the processor or makes economical use of the computer's memory or makes more efficient use of the computer's resources does not amount to making a better computer, and thus does not take it outside the category of computer program as such"*

[8] Autonomy Corporation Ltd v The Comptroller General of Patents, Trade Marks & Designs [2008] EWHC 146 (Pat)

62 It is difficult to envisage the argued alleged efficiency of the present contribution to be anything more than the more efficient use of resources. “The computer” is using its existing resources in an efficient way and so this signpost does not assist.

63 Regarding signpost (v), the problem was previously formulated as *how to optimise the use of technical resources when streaming media content.* The Agent argued that they were not circumventing a problem which might be considered as the limitation of display capability on one device, by incorporating technical abilities from another device.

64 Insofar as the problem is one of limited device capability, it is not solved. The device capability of any specific device is unchanged. Instead, an alternative device is used. At an appropriate time, when a user activates a first client device (e.g. a TV) a notification is provided to a second client device, that relevant content is available. Selection of the notified message causes content to be provided to the first client device. There is no improvement to the display technology at all. The specification does not teach a better television, nor does it teach a better smart phone. Instead it teaches that each client device can be used for its preferred purpose, circumventing the problem of one device being less suitable than another for a particular purpose.

65 On the other hand, the problem of how to determine relevance of content, infer appropriate timing and select a notification type to prompt a user to consume content may be solved, but that is not a technical problem. As noted previously, it is an administrative problem and as such its solution is not indicative of a technical effect. In summary then, signpost (v) does not assist the Applicant.

66 For the reasons set out above, the Agent has not persuaded me that there is any technical effect arising from the programmatic implementation of the invention, which means that I consider it to be excluded as a program for a computer as such. As noted previously, I also consider that the business method exclusion stands.

Conclusion

67 The invention fails to comply with Section 1(2)(c) of the Act, as the main claims, and the auxiliary claims, define something which is excluded as a method for doing business and a program for a computer as such. The application is therefore refused under section 18(3) of the Act.

Appeal

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

Ben Buchanan

Deputy Director, acting for the Comptroller