



PATENTS ACT 1977

APPLICANT	Walmart Apollo, LLC
ISSUE	Whether patent application GB 1620396.0 complies with section 1(2)
HEARING OFFICER	Dr C. L. Davies

DECISION

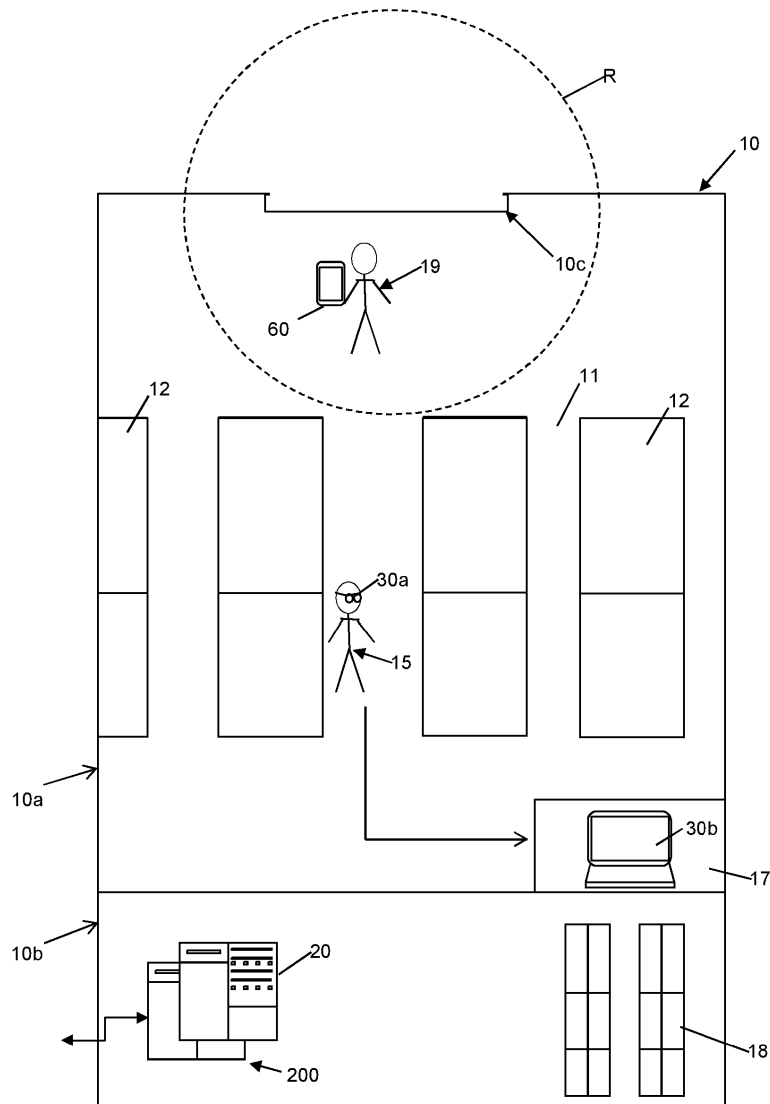
Introduction

- 1 Patent application GB1620396.0 ("the application") entitled "Method and system to support order collection using a geo-fence" was filed on 1 December 2016, with an earliest declared priority date of 2 December 2015. It was published as GB 2546160 A on 12 July 2017.
- 2 Following a number of rounds of correspondence between the examiner and the applicant's attorneys, and amendment of the claims, the examiner remains of the view that the claimed invention is excluded from patentability under section 1(2).
- 3 With the position unresolved the applicant asked to be heard and the matter came before me at a hearing conducted via telephone on 13 December 2018. The issues before me were set out in the examiner's pre-hearing report of 10 October 2018. The applicant was represent at the hearing by attorney Mr Ian Robinson of Appleyard Lees IP LLP. The examiner Mr Peter Doenhoff was present and I was assisted by Mr Marc Collins.

The invention

- 4 The invention relates to a method and system to support order collection using a geo-fence. A system and method comprises an electronic device 60, a computer network 200 and an in-store device 30a/30b. The electronic device places an order for goods through the computer network and selects an intended collection location/point 17 where the goods may be picked up. The device forms a geo-fence R around or near the collection location, and monitors the geo-fence. The geo-fence is triggered when the device is proximate to the collection location, and the device then generates a trigger message. The computer network stores the order in a database, and in response to receiving the trigger message, generates a pre-alert message. The in-store device, in response to receiving the pre-alert message and the order details, displays the order details or otherwise outputs a pre-alert notification. This method allows a store or shop employee to ready the order as the

customer approaches the collection location but before the customer arrives. This is aimed to reduce any delay to the customer.



- 5 The geo-fence is created on the customer device, but is left initially in a dormant state, for example, inactivated. The created geo-fence is activated at a suitable later point in time, which is conveniently consistent with the intended pick up time for the order. In this way, the geo-fence can be installed and created at a time when connectivity with the customer device 60 has already been established, i.e. during the order placement process. However, the created geo-fence then remains dormant until the time when it is needed, for example, some hours or days later at which time that electronic device can activate or wake the geo-fence. In particular, actively monitoring a geo-fence may cause a relatively high workload within the customer device and in consequence may drain battery life significantly. Therefore, minimizing the period when the geo-fence is active helps to preserve battery life within the customer device.
- 6 The customer device is configured to set or generate a wake up alarm. In one example, the wake up alarm is configured to activate relevant geo-fence functions on the customer device at a pre-determined period prior to the indicated pick up time,

such as one hour prior to the intended pick up time. Monitoring an alarm on a customer device typically is less costly than monitoring a geo-fence. Thus, the wake-up alarm assists in minimizing processing costs on the customer device and in turn preserving battery life.

7 The latest set of claims filed on 11 June 2018 has nineteen claims including three independent claims – claims 1, 10 and 14. The independent claims are set out below:

1. A system to support order collection using a geo-fence, comprising:

an electronic device configured to place an order for goods, identify and store an intended collection location, form a geo-fence having a relationship with the intended collection location in response to placing the order, monitor the geo-fence and trigger the geo-fence in response to the electronic device becoming proximate to a geographic location of the intended collection location, and generate a trigger message responsive to triggering of the geo-fence, wherein the electronic device is configured to install the geo-fence initially in a dormant state and to wake the geo-fence at a later time using a wake-up alarm;

a computer network configured to receive the order for goods from the electronic device and to store order details in an order database including the intended collection location, and further configured to receive the trigger message from the electronic device responsive to the geo-fence being triggered on the electronic device, and configured to generate a pre-alert message responsive to receiving the trigger message; and

at least one in-store device in communication with the computer network and configured to receive the order details of the order database from the computer network, configured to receive the pre-alert message from the computer network, and configured to display the order details responsive to receiving the pre-alert message.

10. An electronic device, comprising:

a communication unit arranged to communicate over a communication network with a computer network;

a memory arranged to store an order collection application;

a processor configured to execute the order collection application;

wherein responsive to executing the order collection application the electronic device is configured to place an order for goods, identify and store an intended collection location, form a geo-fence having a relationship with the intended collection location in response to placing the order, monitor the geo-fence and trigger the geo-fence in response to the electronic device becoming proximate to a geographic location of the intended collection location, and generate a trigger message responsive to triggering of the geo-fence; and

wherein the electronic device is configured to install the geo-fence initially in a dormant state and to wake the geo-fence at a later time using a wake-up alarm.

14. A method to support order collection using a geo-fence, comprising:

providing an order collection application to be installed on an electronic device, wherein responsive to executing the order collection application the electronic device is configured to place an order for goods, identify and store an intended collection location, form a geo-fence having a relationship with the intended collection location in response to placing the order, monitor the geo-fence and trigger the geo-fence in response to the electronic device becoming proximate to a geographic location of the intended collection location, and generate a trigger message responsive to triggering of the geo-fence;

installing the geo-fence at the electronic device initially in a dormant state;

setting a wake-up alarm on the electronic device consistent with an intended pickup-time associated with the order; and

activating the geo-fence on the electronic device in response to the wake-up alarm

receiving, by the computer network, the order for goods from the electronic device and storing order details in an order database;

receiving, by the computer network, the trigger message from the electronic device responsive to the geo-fence being triggered on the electronic device and generating a pre-alert message responsive to receiving the trigger message;

receiving, by the at least one in-store device, the pre-alert message from the computer network; and

outputting, by the at least one in-store device, a pre-alert notification responsive to receiving the pre-alert message from the computer network.

The issues to be decided

The issue for me to decide is patentability i.e. whether the invention falls into one of the categories set out in section 1(2)(c) of the Patents Act 1977 as a method of doing business and/or a program for a computer as such

The law

- 8 The examiner has raised an objection under section 1(2) of the Patents Act 1977 that the invention is not patentable because it relates inter-alia to one or more categories of excluded matter. The relevant provisions of this section of the Act are shown in bold 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 –

- (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.

- 9 The examiner and the applicant agree that 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.
- 10 In *Aerotel*, the court reviewed the case law on the interpretation of section 1(2) and approved a four-step test for the assessment of what is often called "excluded matter", as follows:

Step one: properly construe the claim

Step two: identify the actual contribution (although at the application stage this might have to be the alleged contribution)

Step three: ask whether it falls solely within the excluded matter

Step four: check whether the actual or alleged contribution is actually technical in nature.

- 11 Subsequently, the Court of Appeal in *Symbian* made clear that the *Aerotel* test is not intended to provide a departure from the previous requirement set out in case law, namely that the invention must provide a "technical contribution" if it is not to fall within excluded matter. The *Aerotel* test has subsequently been endorsed by the Court of Appeal in its decisions in both *HTC*³ and *Lantana*⁴.
- 12 Lewison J (as he then was) in *AT&T/CVON*⁵ set out five signposts that he considered to be helpful when considering whether a computer program makes a technical contribution. In *HTC* the signposts were reformulated slightly in light of the decision in *Gemstar*⁶. The signposts are:

¹ *Aerotel Ltd v Telco Holdings Ltd and Macrossan's Application* [2006] EWCA Civ 1371, [2007] RPC 7

² *Symbian Ltd's Application* [2008] EWCA Civ 1066, [2009] RPC 1

³ *HTC Europe Co Ltd v Apple Inc* [2013] RPC 30

⁴ *Lantana v Comptroller-General of Patents, Designs and Trade Marks* [2014] EWCA Civ 1463

⁵ *AT&T Knowledge Venture/CVON Innovations v Comptroller General of Patents* [2009] EWHC 343 (Pat)

⁶ *Gemstar-TV Guide International Inc v Virgin Media Ltd* [2010] RPC 10

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.

- 13 It should be clear that the signposts are merely guidelines; although they provide a useful aid in assessing the technical character of a claimed invention, they were not intended to provide a definitive test (as Lewison LJ's obiter remarks in paragraph 149 of *HTC* make clear). Several judgments have emphasised this point - John Baldwin QC (sitting as a Deputy Judge) in *Really Virtual*⁷ noted that the signposts, although useful, are no more than signposts and that there will be some cases in which they are more helpful than in others. Kitchin LJ made similar remarks in paragraph 51 of *HTC* that their usefulness does not mean they will be determinative in every case.

Arguments and analysis

- 14 The examiner maintains that the claims define an invention which consists of a business method and/or a program for a computer. His position is set out most recently in his pre-hearing report. Detailed arguments against the examiner's position are contained in the applicant's responses to the examination reports, through their attorney. These arguments were elaborated clearly and helpfully at the hearing by Mr Robinson. Taking all these arguments into account, I must determine whether the claimed invention relates solely to excluded subject matter under section 1(2).

Step 1: Properly construe the claims

- 15 In his pre-hearing report the examiner has stated that he considers the independent claims to be reasonably clear. The examiner has construed claim 1 as defining a system which comprises; an electronic device configured to place an order for goods, form a geo-fence associated with a collection location for the order, and generate a trigger message when the device is within the geo-fence area; a computer network configured to receive the order, store the order details in a database, receive the trigger message, and generate a pre-alert message; at least one in-store device configured to receive the order details and pre-alert message, and display the order details after receiving the pre-alert message. The geo-fence is initially installed in a dormant state and wakes up at a later time.

⁷ *Really Virtual Co Ltd v UK Intellectual Property Office* [2012] EWHC 1086 (Ch)

- 16 Mr Robinson did not provide any argument to refute the construction of claim 1 put forward by the examiner, but stressed the importance of the feature of the geo-fence initially being installed in a dormant state to be woken by an alarm at a later time set by the user.
- 17 I agree with the examiner that the independent claims are reasonably clear and straightforward to understand. I agree with the construction put on claim 1 above and that of independent claims 10 and 14 as set out in his pre-hearing report. Claim 10 is broader than claim 1, since it does not define the network or in-store device, however it does require the electronic device to additionally have a communication unit, a memory and a processor. Claim 14 defines the method performed by the system of claim 1, although it additionally requires an order collection application to be installed on the electronic device. It also defines outputting a pre-alert notification responsive to receiving the pre-alert message (instead of displaying the order specified by claim 1). Mr Robinson did not provide any argument regarding the construction of independent claim 10 and 14.

Step 2: Identifying the actual or alleged contribution

- 18 The examiner contends that the exact contribution of the invention is somewhat unclear due to the independent claims being obvious. The attorney explained how he feels that the examiner in formulating his objection has allowed himself to be prejudiced by thinking the invention to be obvious, without any prior art to demonstrate this.
- 19 Despite the examiner considering the exact contribution of the invention to be unclear, he has attempted to define the contribution. The examiner explains that the problem solved by this invention is a delay experienced by customers when they arrive to pick up goods ordered online, which may cause customer dissatisfaction and affect online sales. These are entirely business concerns. A secondary problem allegedly solved is the high power consumption of location tracking technology.
- 20 In the examiner's view the contribution of claim 1 lies in a method of placing an order for goods from a shop and selecting a collection location using an electronic device; checking received location data of the device after a predetermined time; and alerting the shop when the device is within a pre-determined distance of the collection location to allow the shop to ready the order. The contribution of claims 10 and 14 is the same.
- 21 The attorney explained that the GPS unit is a high power component of the electronic device which drains a lot of power. Therefore the inventors needed to find a way to implement a geo-fence without killing the battery. Following the formation of the geo-fence there is no point in constantly monitoring the GPS location. To do so would drain battery power and also potentially trigger false positives should the geo-fence boundary be crossed at a time when the goods were not going to be collected. Therefore following the placing of the order and forming of the geo-fence, it is initially in a dormant state to be awoken by a wake-up alarm at a time set by the user when they intend to collect their goods. This leads the GPS unit only monitoring location

when necessary and not draining the battery whilst the location of the device is irrelevant.

- 22 Mr Robinson argued that the inventors had in mind the problem of preserving battery life. A user would be unhappy if the battery life on the electronic device was drained by continuously monitoring GPS location in the background. This is discussed in the application at paragraphs [0058] and [0059].
- 23 Therefore it is the attorney's view that the technical contribution lies in saving battery power for an electronic device that is going to monitor location by not tracking the location until you need to. In his opinion this is purely technical and should lead to a straightforward discussion on novelty and inventive step.
- 24 As discussed by the examiner the problem of high power consumption of location tracking technology is considered in the application. I am therefore in agreement with the attorney that the initial installation of the geo-fence in a dormant state to be awoken by a wake-up alarm at a later time is part of the contribution.
- 25 In my view the contribution is a method of placing an order for goods from a shop and selecting a collection location using an electronic device; forming a geo-fence in relation to the collection location; installing the geo-fence initially in a dormant state and using a wake-up alarm to wake the geo-fence to check the location of the device after a predetermined time; and alerting the shop when the device is within a predetermined distance of the collection location to allow the shop to ready the order.

Steps 3 and 4: Does the contribution fall solely within excluded matter/is it technical in nature?

- 26 What I must now decide is whether the contribution identified above relates solely to a program for a computer as such and/or a method of doing business as such. This corresponds to step three of the *Aerotel* test.
- 27 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 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".
- 28 In this case, the arguments concerning whether the invention is excluded are very much wrapped up with the question of whether the contribution is technical in nature. Given that, I have considered the third and fourth steps together.

Computer program

- 29 In this case, it is clear that the arrangement of hardware used to implement the invention is immaterial to the working of the invention. The hardware is all conventional hardware. Given this point, the contribution must therefore be viewed as being embodied purely in a computer program. Whilst the invention undoubtedly uses a computer program for its implementation, the mere fact that the invention is

effected in software does not mean that it should be necessarily excluded as a program for a computer as such. What matters is whether or not the program provides a technical contribution.

- 30 The examiner has made reference to the *AT&T/CVON* signposts in his pre-hearing report and Mr Robinson discussed each in turn during the hearing. I agree that it is useful to consider the signposts on this point. In his assessment of the five signposts the examiner determined that the contribution failed to satisfy any of the signposts. At the hearing however Mr Robinson argued that the contribution does in fact satisfy each of signposts (ii) – (v). I agree with the attorney and examiner that signpost (i) is clearly not satisfied.
- 31 With regard to signpost (ii) the contribution is implemented as a software application on an electronic device. The attorney argues that the contribution does work at the architectural level of the computer irrespective of the data being processed i.e. the location and time and further it is not tied to a particular software application e.g. the type of GPS software could be any GPS software. I am not persuaded by this argument and I agree with the examiner that the program does not operate at the level of architecture of the computer. The program does not change how the computer runs internally. In practice, this means in the sense of the operation of the processor, the cache memory, or other internal components of the computer. There is nothing that is affected below the application layer of the computer arrangement. In other words, the computer is conventional and runs conventionally.
- 32 The third signpost emphasises that the effect must be more than just the running of a program or application on a general purpose computer – the computer itself must operate differently than it did before as a result of the program being run. The attorney considers the program results in the computer being made to operate in a new way as none of the documented prior art uncovered so far disclose install a geo-fence initially in a dormant state, set a wake-up alarm and then wake the GPS unit to perform the geo-fence processing. Mr Robinson states that this is a new operation because there is nothing in the documented prior art to show it is known and it certainly isn't notorious in the sense of being well-known. Again I am not persuaded by this argument. I consider the computer to be operating in the usual way to perform the instructions of the program in the same way as it would for any program.
- 33 The fourth signpost is approached in a similar way to the third. The computer must operate more efficiently and effectively as a result of running the program. Again, this must be the computer as a whole, rather than the individual program. Mr Robinson argues that the computer runs more effectively and efficiently as the battery life is preserved and therefore better use has been made of the resources in the device.
- 34 The examiner has argued that the program may only cause the electronic device to monitor its location after a certain time, but the electronic device is still operating in an entirely conventional way. It only monitors location after a certain time because of standard computer instructions telling it to do so. Although power may be saved compared to the location being monitored from the time the geo-fence is set-up, the computer itself does not run more efficiently in carrying out the instructions of the computer program. I find myself in agreement with the examiner.

35 The fifth and final signposts asks whether the perceived problem is overcome by the claimed invention as opposed to merely being circumvented. Mr Robinson admitted having some difficulty with this signpost as he didn't see how you can overcome a problem without circumventing it as to him they are the same thing. However, the attorney's arguments concerning whether the invention is excluded are very clear. The contribution solves a technical problem i.e. preserving battery life on an electronic device. The problem is overcome by installing a geo-fence initially in a dormant state, setting a wake-up alarm and then waking the GPS unit to perform the geo-fence processing.

36 The examiner does not consider the problem to have been solved but rather circumvented. He argues that the location tracking technology of the invention is conventional and thus consumes the same amount of power as conventional location tracking technology used as part of any other method. The invention does not provide a way that the electronic device's location can be tracked while consuming less power. It only consumes less power because it is not running the whole time after the geo-fence is established. This is a circumvention of the high power consumption problem.

37 To answer this question I must look to the problem. When the problem is a technical one, the alleged invention can be considered to be technical in nature leading to it falling outside the exclusion if (but not only if) it solves the problem. In *Lantana*⁸, Birss J stated that

"[i]t makes sense to think of something which is a solution to a technical problem as itself having technical character because it takes that character from the technical nature of the problem to be solved. But if a thing is not solving the technical problem but only circumventing it, then that thing cannot be said to have taken any technical character from the problem."

38 Circumventing a technical problem does not automatically imply that an alleged invention is excluded, but indicates that one cannot rely on the addressed problem to deduce its technical character. At paragraph 51 of the subsequent Court of Appeal decision in *Lantana*⁹, Arden LJ noted that

"[c]ircumvention may be the result of truly original linear thinking and may lead to patentability in an appropriate case".

39 This does not happen when circumvention consists of conventional means, as reaffirmed by Kitchin LJ at paragraphs 68 and 70 of the same judgment:

"[o]verall, the invention avoids the problem...but it does so by using a conventional technique [... i]n other words it does not solve those problems but circumvents them".

⁸ *Lantana Ltd v The Comptroller-General of Patents, Designs and Trade Marks* [2013] EWHC 2673 (Pat)

⁹ *Lantana v Comptroller-General of Patents, Designs and Trade Marks* [2014] EWCA Civ 1463

- 40 Similarly, if the problem to be solved is not a technical problem, the solution cannot take technical character from the problem, although it may have some other technical effect.
- 41 In this case the problem identified is one of preserving battery life in an electronic device to be a technical one. Is this a technical problem? To my mind it is. However as mentioned above for the invention to be considered technical in nature it has to solve the problem. The solution put forward by the application is installing a geo-fence initially in a dormant state, setting a wake-up alarm and then waking the GPS unit to perform the geo-fence processing. Is the solution solving the problem? I would say it isn't. In my opinion to solve the problem would be to develop battery technology such that the battery lasts longer or to develop the hardware such that it is less power hungry. The solution does neither of these. There is no improvement, in terms of power usage, to the location tracking technology. To merely place a device in an inactive state (i.e. installing the geo-fence in a dormant state) through a computer program until it is required is not a technical solution but merely circumvention of the problem. Therefore signpost (v) is not satisfied.
- 42 Therefore I consider the contribution identified above to relate to a program for a computer as such.

Business method

- 43 I have identified the contribution above to be a method of placing an order for goods from a shop and selecting a collection location using an electronic device; forming a geo-fence in relation to the collection location; installing the geo-fence initially in a dormant state and using a wake-up alarm to wake the geo-fence to check the location of the device after a predetermined time; and alerting the shop when the device is within a pre-determined distance of the collection location to allow the shop to ready the order. The invention clearly has a commercial context as set out in the application and the effect of the contribution (along with preserving battery power) is to eliminate "false positives" in the process. This leads to a more efficient system for both the customer and retailer since the goods are only prepared for collection at the required time. This is achieved through the use of conventional hardware programmed to install the geo-fence in a dormant state to be awakened at a set time. The contribution includes the placing of an order for goods and the collection thereof and is a method for order collection. In *Merrill Lynch*¹⁰ it was discussed at page 569 that the fact that the method may be an improvement on previous methods is immaterial. The prohibition in section 1(2)(c) is generic and draws no distinction between the method by which the mode of business is achieved. The independent claims are directed to a method and system for supporting order collection. That is simply a method of doing business.

Dependent claims

- 44 At the hearing Mr Robinson highlighted what he considers to be further technical features brought out in the dependent claims to define the invention as a patentable invention should I find the independent claims to be excluded.

¹⁰ *Merrill Lynch's Application [1989] RPC 561*

45 The first of these is the revalidation process introduced in dependent claim 4 which reads as:

4. The system of claim 1, wherein the electronic device is configured to perform an order revalidation process in response to triggering the geo-fence, to confirm that order information held by the electronic device is consistent with the order details stored in the order database.

46 Mr Robinson explained that following the placing of the original order and setting up of the geo-fence in a dormant state, the order data or parameters could be changed from anyone of a number of devices e.g. a home PC, a work PC, mobile phone/tablet or a TV. This could lead to a “false positive” for collection of the goods if when the geo-fence awakes it is triggered but the order data/parameters have been changed in the intervening period. Therefore the order revalidation requires the electronic device upon waking the geo-fence to check that the order data/parameters have not changed and if they have to download the updated order data/parameters. Mr Robinson argues that the order revalidation is technical as it addresses the problem of multiple devices changing data and then bringing the active device up to speed at the right time. It also does so in an efficient manner when compared with other possible solutions e.g. pushing a message to all devices whenever a change to the data occurs.

47 As mentioned above in paragraph 40, a solution cannot take technical character from a problem, if the problem to be solved is not a technical problem, although it may have some other technical effect. To my mind, ensuring an error isn’t made (in this case a “false positive”) due to changes in a set of data is not a technical problem and as such the solution cannot take technical character from a problem. Further there is no other technical effect. As argued by the examiner in his pre-hearing report, comparing two sets of data is a data processing method (carried out over a standard network) is not considered to be technical.

48 The second feature highlighted by Mr Robinson is the feature introduced in dependent claims 9, 13 and 19. Claim 9 reads:

9. The system of claims 1, wherein the electronic device is configured to selectively determine whether or not to install the geo-fence by determining its own hardware form factor and installing the geo-fence only for certain predetermined hardware form factors.

49 Mr Robinson explained that a customer could download the software application onto anyone of a number of devices e.g. a home PC, a work PC, mobile phone/tablet or a TV. However not all devices are “mobile” and it would be highly unlikely that having placed an order using a TV or desk-top PC that a customer would take either of these with them when collecting their goods. Therefore it is pointless setting up the geo-fence on such devices and as a result the geo-fence is only installed on devices likely to be carried with the customer e.g. a mobile phone. He further explained that when logging onto a website, one of the things a website learns is what type of device you are logging in from e.g. in order to configure the screen settings to be compatible with the device. In this case the data exchange is used to decide whether the device being used to log in is one of a predetermined form factor and if not to suppress the GPS unit to save resources on that device as monitoring

the GPS location of your TV or desk-top PC would be pointless as it is unlikely to move location.

- 50 The argument here would appear akin to the argument set out above with regard to the independent claims. The contribution again lies in saving resources on devices by not unnecessarily installing the geo-fence on devices on which it is not required. For the same reasoning as outlined above I consider such a contribution to fail to satisfy any of the *AT&T/CVON* signposts.
- 51 Having considered the argument concerning the order revalidation process and the hardware form factor recognition I would not consider the inclusion of any of the features from these claims to be sufficient in themselves to give rise to a technical contribution and overcome the computer program or business method exclusion. Further, I can see nothing in the remaining dependent claims that would affect the contribution I have identified.

Conclusion

- 52 I find that the claimed invention is excluded under section 1(2)(c) as a program for a computer as such and as a business method as such.
- 53 Having read the specification I do not think that any saving amendment is possible. I therefore refuse the application under section 18(3).

Appeal

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

C. L. Davies

Deputy Director, acting for the Comptroller