

HEARING OFFICER

PATENTS ACT 1977

APPLICANT Motorola Solutions, Inc.

ISSUE Whether patent application GB1910434.8 is excluded under section 1(2)

excluded under section 1(2

DECISION

H Jones

Introduction

- The decision relates to patent application GB1910434.8 entitled 'System, device, and method for managing emergency messaging'. The application was filed on 22 July 2019 in the name of Motorola Solutions, Inc. and claims an earlier priority date of 29 July 2018. The application was published as GB 2576629 A on 26 February 2020.
- The first combined search and examination report, dated 23 December 2019, raised the objection that the invention was excluded from patentability as a computer program and a method for doing business. Despite amendment and several rounds of correspondence the applicant has been unable to convince the examiner that the invention is patentable under section 1(2)(c) of the Patents Act 1977 ("the Act"). The applicant's attorney, Dr Pippa Tolfts of Optimus Patents Limited, requested a hearing to resolve the matter.
- In response to the examiner's pre-hearing report of 25 August 2021, Dr Tolfts enclosed skeleton arguments with her letter of 17 September 2021. In this letter, Dr Tolfts stated that the applicant's representative would not be attending the hearing and requested that the Hearing Officer make a decision about the application on the papers up to and including this pre-hearing submission. Arguments were provided for the claims presently on file (main request) as well as for four sets of amended claims (first, second, third and fourth auxiliary requests).
- 4 Although a preliminary search was carried out, the search was truncated and is therefore not complete. Other aspects of the examination have also been deferred.
- The only issue to be decided here is whether the invention consists solely of a method for doing business or a program for a computer, which are excluded from patentability under section 1(2)(c) of the Act. My reasoning considers the arguments presented for the main request as well as for the four auxiliary requests.

The invention

The invention relates to managing emergency messaging. The application describes how reverse emergency communications may be used by organisations to deliver

emergency notifications to groups of people. These may include missing child alerts or notifications regarding dangerous weather or natural disasters. For example, a public safety organisation may transmit a reverse emergency message to one or more network-connectable devices located within a geographic area impacted by the emergency. The application further explains how initiating a reverse emergency message may be cumbersome. For example, obtaining permission from multiple supervisors might delay transmission; additionally, a reverse emergency message may be transmitted in error. Therefore, a problem arises with respect to determining whether to transmit such a message. In the invention, a processor is configured to determine that a data feed from a network-connectable device is related to an incident, determine a confidence value for the incident, and according to the confidence value either: transmit a reverse emergency message automatically, or transmit it after confirmation. Therefore, as the application explains, the invention seeks to solve the above-noted problem in a systematic and efficient manner.

The latest claims were filed on 28 January 2021 (the main request) and comprise two independent claims directed to an electronic computing device (claim 1) and a method of managing emergency messaging (claim 9). Claim 1 and claim 9 are of very similar scope and will stand or fall together. In a similar way to the skeleton arguments, I will begin with the main request and deal with the four auxiliary requests afterwards. For each, I will limit my analysis to claim 1. For the main request, claim 1 reads as follows:

An electronic computing device comprising:

a network interface configured to receive one or more data feeds from one or more first network-connectable devices:

an electronic processor configured to

determine that each data feed of the one or more data feeds is related to an incident based on content included in each data feed, a location from which each data feed was received, and a time associated with each data feed.

determine a confidence value for the incident based on an incident type of the incident, a location type of the incident, and at least a portion of the data feeds wherein the confidence value corresponds to a probability that the incident is occurring,

determine that the confidence value is above a first predetermined threshold that is higher than a second threshold,

transmit, via the network interface, a message including information about the incident to a second network-connectable device in response to determining that the confidence value of the incident is above the first predetermined threshold;

determine that the confidence value is above the second threshold and below the first predetermined threshold;

provide a notification on a communication device in response to determining that the confidence value is above the second threshold and below the first predetermined threshold,

receive an input from the communication device in response to providing the notification on the communication device.

transmit, via the network interface, the message including the information about the incident to the second network-connectable device in response to receiving the input from the communication device.

The law

- The examiner raised an objection that the invention is not patentable because it relates to one or more categories of excluded matter. This 'excluded matter' is set out in section 1(2) of the Act:
 - 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.

- The Court of Appeal's judgement in *Symbian*¹ tells us that in order to determine whether an invention falls solely within the any of the exclusions listed in section 1(2), the four-step test set out in its earlier judgement in *Aerotel*² must be used. The four steps are:
 - (1) properly construe the claim(s);
 - (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.
- 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. I shall consider whether the contribution is excluded alongside the question of whether the contribution is technical in nature, meaning I will consider the third and fourth steps of *Aerotel* together.
- 11 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

¹ Symbian Ltd. v Comptroller-General of Patents [2009] RPC 1

² Aerotel Ltd v Telco Holdings Ltd & Ors Rev 1 [2007] RPC 7

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

- 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

Argument and analysis

Main request

<u>Step 1 – Properly construe the claim</u>

Both the examiner and Dr Tolfts agree that there are no significant problems construing claim 1. The examiner, in paragraphs 7-11 of his pre-hearing report, provides a useful overview of how claim 1 should be interpreted. He summarizes this in paragraph 12 of his report as follows:

In short, the proposed invention determines the probability that an incident is occurring by considering the content, associated location and associated time of incoming data, as well as the type of location and the type of incident. Based on this probability, information about the incident is either sent to a third party automatically, sent only after further approval, or not sent at all.

Step (2): Identify the actual contribution

- In his pre-hearing report, the examiner takes the approach outlined in paragraphs 43 and 44 of *Aerotel* to arrive at the contribution. The examiner's reasonings are set-out clearly in paragraphs 13-21 of his report and I adopt them here. Dr Tolfts confirms in her skeleton arguments that she has noted these comments and agrees there is not any problem with step 2 of the *Aerotel* test.
- Although as discussed above the search is not complete, the examiner explains that the invention defined in claim 1 is distinguished over the closest prior art found, <u>US 2018/0189913 A1 (KNOPP)</u>. KNOPP fails to explicitly disclose a second threshold below the first predetermined threshold. There is also no disclosure of a confidence value related to the probability that a particular incident is occurring. As the examiner points out, it is not the case that an invention is unpatentable if its inventiveness was contributed only by excluded matters. I agree, however, that it is useful to consider the inventive step made by the invention over the cited prior art.
- I also agree with the examiner that the proposed invention is implemented as software running on known computing and networking hardware. Therefore, as he points out, I must look at what the computer does when the program is run.
- 16 The examiner assesses the actual contribution to be:

Determining whether to transmit a reverse emergency message automatically or only after being confirmed, the determination based on assessing the probability that content included in a data feed indicates an emergency incident is occurring. If the probability falls between two thresholds, the reverse emergency message is only transmitted after being confirmed. However, if the probability exceeds the higher of the two thresholds, the reverse emergency message is transmitted automatically.

17 Dr Tolfts, in the skeleton arguments, considers the contribution to be as follows:

With regard to step 2, the actual contribution of this application is to provide a device and method that can determine whether to transmit a reverse emergency message in a systematic and efficient manner, based on specific thresholds, such that the reverse emergency message is either automatically transmitted, or is only transmitted after the reverse emergency message is confirmed by another communication device. This allows for the transmission of the most important messages, thus improving the efficiency and functioning of the emergency message communication system.

- There does not appears to be any substantial difference between the two; I agree that the contribution can be expressed in either way. For avoidance of doubt, I will adopt the contribution provided by the examiner.
 - <u>Steps (3) & (4): Does the contribution fall solely within the excluded subject matter;</u> check if the contribution is actually technical.
- I will consider steps 3 and 4 together. Dr Tolfts does not agree with the examiner that the invention merely relates to a business method or to a computer program as such. The examiner and Dr Tolfts both consider the *AT&T* signposts listed above. The signposts are guidelines, providing a list of some of the factors that can indicate whether a contribution may be technical. I will refer to the signposts where appropriate.
- Dr Tolfts, in her skeleton arguments, refers to the decision in <u>BL O/112/18</u> (Landmark Graphics) where it was held that given the field of endeavour of the invention, modelling subterranean geological structure, the contribution was considered technical in nature. Dr Tolfts submits here that 'the overall field of the application is public safety, but the more specific field is concerned with transmission of reverse emergency messages'. She asserts that 'the steps leading to the transmission of the messages are technical steps, and that this invention is in a technical field of endeavour, namely the more efficient transmission of reverse emergency messages'. She concludes that the contribution of the invention is a technical contribution.
- 21 Similarly, Dr Tolfts refers to the decision in <u>BL O/312/15</u> (Boeing) where it was held that identifying potentially faulty components during aircraft maintenance has real implications for improved aircraft safety and as such the contribution made by the invention is more than a mere business method. Dr Tolfts applies the same reasoning here to assert that 'the use of the processer to determine that a data feed is related to a public safety incident, determine a confidence value for the incident, and either: transmit a reverse emergency message automatically, or after confirmation, according to the confidence value, are all inherently technical steps that are performed by the processor, and not merely steps that are administrative or resource management.' She concludes that 'the claims of this application are not merely claims for a business method, but are claims that have a technical nature'.
- In response, I agree with the examiner that the inventions in these two decisions are very different to the situation here. I refer to the examiner's detailed reasonings outlined in paragraph 27 (Landmark) and paragraphs 28-29 (Boeing). In particular, I agree that the activity being performed in the current invention is an administrative one of deciding whether or not approval is needed before transmitting a message. Moreover, as the examiner states, the 'proposed invention does not make the

technical transmission of a given message any faster or more efficient, but rather streamlines the administrative process of deciding whether to transmit that message by entirely conventional means.' Therefore, arguments surrounding these two decisions do not convince me that claim 1 has a technical nature.

- Dr Tolfts refers in the skeleton arguments to signpost (iii). She asserts that in this invention, 'different actions are performed by the electronic processor depending on the calculated confidence value for an incident. Because performance of these different actions at different thresholds of the calculated confidence value is not disclosed in the prior art as explained above, the electronic processor is "made to operate in a new way", and is not merely operating in a standard manner'.
- In response, I agree with the examiner's arguments set out in paragraph 39 of his pre-hearing report. In particular, the fact that the proposed invention is not disclosed in the prior art does not prevent it making a contribution solely within the excluded fields. The computer in the invention operates entirely conventionally in a technical sense; the underlying technical operation of the computer remains unchanged as a consequence of the contribution. Therefore, the invention does not meet signpost (iii).
- Dr Tolfts also believes that signpost (iv) is satisfied. In summary she submits that by more accurately determining a confidence value and more accurately determining whether to send a reverse emergency message, the claimed electronic processor reduces unnecessary traffic on the communication system. Further, she asserts that the claimed electronic processor allows the entire communication system to run more efficiently and effectively by reducing the number of erroneous reverse emergency messages that are transmitted.
- In reply, as the examiner concludes in paragraph 40 of his pre-hearing report, the contribution does not allow the computer to carry out more processing steps or transmit more data in a given time. The invention here requests known computer hardware to do less work; this does not result in a better computer or make the computer any more efficient or effective. Therefore, signpost (iv) is also not satisfied.
- 27 Regarding signpost (v), Dr Tolfts maintains that deciding when to initiate different actions by an electronic computing device is a technical problem. She submits that: 'This decision relates to one of the core purposes of electronic computing devices to provide outputs to users and/or other devices. If programmed in a deficient manner, the electronic computing device could not function properly and could not serve its purpose.' She adds that this problem is overcome by the features recited in claim 1.
- In response, as the examiner points out in paragraph 41 of his pre-hearing report, the problem of deciding when to initiate different actions here is an administrative problem rather than a technical one. Moreover, the problem has been addressed by the invention in a non-technical way by using conventional hardware and network resources. In addition, I note that it has been established that the solution of a non-technical problem cannot take technical character from the problem, but it may have some other technical effect. However, as discussed above no relevant technical effect is apparent. Looking at it another way, the invention circumvents any possible technical problem by using conventional hardware and programming techniques to make appropriate decisions. Therefore, signpost (v) also does not point to a technical contribution.

- 29 Dr Tolfts does not refer to signposts (i) and (ii) in the skeleton arguments for the main request. I do not consider them relevant to these claims and so will not consider them explicitly here. However, I am in agreement with the examiner's arguments set out in paragraphs 36-38 of his pre-hearing report in this regard.
- Finally, the examiner sets out in paragraphs 22-26 of his pre-hearing report why he considers the contribution made by the invention to comprise steps which are of an administrative, managerial and organisational concern. He explains that it has been held that while an invention may represent a better business method, this is immaterial regarding exclusion under section 1(2)(c). Similarly, he explains that mere use of a computer to implement a better business method also does not confer patentability. He also describes how the business method exclusion is broad enough to encompass activities having administrative, managerial or organisational (amongst others) character. I am in agreement with all these arguments and adopt them here.
- In summary, I have considered all the proposed arguments in light of the suggested AT&T signposts for the main request. I am satisfied that the identified contribution is not a technical contribution in nature and falls solely within excluded subject matter. I am unable to find any technical effect which would extend the effect of the contribution outside excluded subject matter. The invention is implemented by software running on an entirely conventional computing arrangement. I therefore consider the contribution to relate to a computer program as such. Further, the invention is directed to managing reverse emergency messages which has a clear business objective. I therefore consider the contribution to also relate to a business method as such. My conclusion applies equally to independent claim 9.
- I will now deal with each of the auxiliary requests. Again, due to the similarity in scope between the independent claims, I only need to consider claim 1.

First Auxiliary Request

In the first auxiliary request, claim 1 has been amended to include the features previously in claim 3. The relevant part of claim 1 is shown below with the new text underlined.

determine a confidence value for the incident based on an incident type of the incident, a location type of the incident, and at least a portion of the data feeds by extracting one or more keywords included in each of the data feeds; and determining a number of occurrences of related keywords within a geofence around a location from which at least one of the data feeds was received, wherein the confidence value corresponds to a probability that the incident is occurring.

- There is no problem with the application of steps 1 and 2 of the *Aerotel* test to the claims of this request. Dr Tolfts explains with reference to paragraph 0053 of the application as filed: 'In other words, the electronic computing device may be configured to generate a heat map of occurrences of related keywords within a geographical area'. This feature may be considered part of the contribution.
- I will deal with steps 3 and 4 of the *Aerotel* test together. Dr Tolfts argues that signposts (iii), (iv) and (v) are satisfied for the claims of this first auxiliary request.

- In support of signpost (iii), Dr Tolfts submits that operation of the computer to perform this step is a new operational step. More specifically, she maintains: 'There is no teaching or even suggestion in any of the prior art, that computers would operate in the manner now required by claim 1'. In response, generating such a heat map within a geographical area may not be known in the field of reverse emergency messaging. However, this is not sufficient to confer a technical effect. I agree with the examiner (see paragraph 42 of his pre-hearing report with regard to previous claim 3) that the contribution does not relate to any improvement in either of the processes of keyword extraction or geofencing. Instead the invention merely makes use of these known techniques. Therefore, the computer is not operating in a new way.
- 37 Regarding signpost (iv), Dr Tolfts asserts that the additional features of keyword extraction and geofencing make the computer run more efficiently and effectively because 'the computer can more accurately calculate the confidence value than if such a combination of techniques was not used'. In reply, as for the main request, the processor and other components are entirely conventional. They may be able to calculate the confidence value more accurately with these additional features but will be running as normal. Therefore, again this signpost cannot be met.
- Finally, with respect to signpost (v) Dr Tolfts submits that 'this unique **combination** of keyword extraction and geofencing ... also overcomes the problem of determining an accurate confidence value that indicates whether a reverse emergency message should be transmitted'. In response, as discussed above for the main request, I consider the problem of whether (or when) to issue a reverse emergency message to be an administrative one rather than a technical one. Moreover, the further features use conventional techniques to solve the problem in a non-technical way. I do not consider signpost (v) to be satisfied.
- 39 Dr Tolfts has not forwarded any arguments for the first auxiliary request regarding signposts (i) and (ii). I do not consider them to be relevant to these claims and so will not consider them here.
- In summary, I find nothing in the claims of the first auxiliary request to provide a technical contribution and consider the contribution to still fall solely within excluded subject matter.

Second Auxiliary Request

In the second auxiliary request, claim 1 has been amended to include the features previously in claim 7; the new text below is inserted at the end of claim 1 of the main request.

establish a geofence based on the location from which one or more of the data feed was received;

determine that the second network-connectable device is located within the geofence; and transmit via the network interface, the message including the information about the incident to the second network-connectable device based on determining that the second network-connectable device is located within the geofence.

I agree with Dr Tolfts that there is no problem with the application of steps 1 and 2 of the *Aerotel* test to the claims of this request. Dr Tolfts refers to paragraph 0059 of the description of the application to explain that claim 1 now allows the electronic

computing device 'to transmit the reverse emergency message to network-connectable devices 105 within a predetermined area near the incident to avoid transmitting the reverse emergency message to recipients that are unlikely to be affected by the incident'.

- With respect to steps 3 and 4 of the *Aerotel* test, Dr Tolfts submits that setting up a defined geographic boundary, the geofence, as well as transmission of the message to a specified device within the geofence are technical features. She also asserts that the claims satisfy signposts (i), (iii), (iv) and (v). Regarding signpost (i) Dr Tolfts argues that 'the claimed features have a technical effect on a process which is carried out outside the computer because a location of the network-connectable device is determined within a particular geographic location, and a message is transmitted to the identified network-connectable device'.
- In response, again the contribution does not relate to any improvement in the process of geofencing. The invention merely makes use of this known technique. Similarly, determining whether a network-connectable device is within a particular area and transmitting a message to such a device are both well known. Therefore, these features cannot represent a technical effect either within the computer/network arrangement or elsewhere. Signpost (i) is not satisfied.
- Regarding signposts (iii), (iv) and (v), I have carefully considered Dr Tolfts' arguments. In response, the computer is using known techniques of establishing a geofence, locating a network-connectable device and transmitting a message to such a device. The computer is therefore not operating in a new way. The new features may reduce unnecessary traffic over the network and mitigate the problem of sending reverse messages to unaffected recipients. However, the processor and other components will be running as normal. Further, I still consider the problem to be an administrative one that has been solved using non-technical means. Therefore, I do not consider any of these three signposts to be satisfied. No arguments have been forwarded regarding signpost (ii); I agree that this signpost is not relevant to these claims.
- In summary, I find nothing in the claims of the second auxiliary request to provide a technical contribution and consider the contribution to still fall solely within excluded subject matter.

Third Auxiliary Request

The amendments in this claim set build on the amendments in the second auxiliary request. Claim 1 has been amended to include the features previously in claim 7 as well as the additional feature that:

wherein the message is configured to be output as a notification by an output device of the second network-connectable device

Again, I agree with Dr Tolfts that there is no problem with the application of steps 1 and 2 of the *Aerotel* test to the claims of this request. In addition to the claim for the second auxiliary request, the current claim now emphasises that the message is output as a notification by an output device of the second device determined to be located within the established geofence.

- With regard to steps 3 and 4 of the *Aerotel* test, Dr Tolfts asserts that the arguments for the second request also apply here. She submits that the additional features of the third request are evidently technical and cannot be considered merely as a method of doing business, or a computer program. Regarding signpost (i) Dr Tolfts argues that the specific feature where the message is output as a notification by an output device of the second network-connectable device clearly occurs outside the computer and so is further support that this signpost is satisfied.
- In response, there is very little in the application regarding an 'output device' but it appears that it may include for example a speaker or a display that is able to output the message about the incident as a notification of some sort. There is nothing to suggest in the application that the output device is anything but a standard type of output device available on any typical network-connectable device. Providing a notification on such device cannot on its own provide a technical effect. Moreover, it is not clear how providing such a notification on an output device has a technical effect on any process outside of the computer and/or network system. The notification will provide the user of the device with information about the incident. It is up to the user how to react to the information or whether to react at all. I can see no process that is affected in any technical way by the receipt of the message. Therefore signpost (i) is not helpful here.
- Dr Tolfts refers to her previous arguments as discussed for the second auxiliary request to state that signposts (iv) and (v) are also satisfied. I have nothing further to add and also refer to my comments for the second auxiliary request. No arguments have been forwarded for signposts (ii) and (iii); I do not consider them helpful here.
- In summary, I find nothing in the claims of the third auxiliary request to provide a technical contribution and consider the contribution to still fall solely within excluded subject matter.

Fourth Auxiliary Request

The amendments in this claim set build on the amendments in the second auxiliary request. Claim 1 has been amended to include the features previously in claim 7 and the additional feature that:

wherein the electronic processor is configured to establish the geofence by establishing a radius of the geofence based on a location of a third network-connectable device that has provided another data feed relating to the incident and that is located farthest away from the estimated location of the incident with respect to other network-connectable devices that have provided data feeds relating to the incident.

- I agree with Dr Tolfts that the claims of this fourth auxiliary request are clear and there is no problem with the application of steps 1 and 2 of the *Aerotel* test. Dr Tolfts explains that claim 1 'further defines a specific example manner in which the electronic processor may establish the geofence'. She refers to paragraph 0059 of the pending application to assert that: 'the more specific manner of establishing a geofence overcomes the problem of sending reverse emergency messages "to recipient[s] that are unlikely to be affected by the incident".'
- Regarding steps 3 and 4 of the *Aerotel* test, Dr Tolfts refers to signposts (i), (iii), (iv) and (v). In relation to signpost (i), Dr Tolfts argues that 'there are claimed features

concerned with how the geofence is established by the processor, based on location data for the incident and various network connectable devices, there are also features related to the determination of a location of the network-connectable device within a particular geographic location, and the transmission of a message to the identified network-connectable device. These are clearly steps that have an effect on a process carried on outside a computer, and so signpost (i) is met'.

- In reply, as before, the contribution does not relate to any improvement in the process of geofencing. The invention merely makes use of this known technique, albeit employing a more specific manner of establishing the geofence. Similarly, as noted previously, determining the location of a network-connectable device and transmitting a message to such a device are both well known. Therefore, these features cannot represent a technical effect either within the computer/network arrangement or elsewhere. Signpost (i) is not satisfied.
- Fegarding signposts (iii), (iv) and (v), Dr Tolfts forwards similar arguments to those for the claims of the second auxiliary request. After careful consideration I have a similar response. Here the computer is using known techniques of establishing a geofence, albeit using specific data, and transmitting a message to a network-connectable device. The computer is therefore not operating in a new way. The new features (including only sending reverse messages to devices within a specified geofence) may reduce unnecessary traffic over the network and mitigate the problem of sending reverse messages to unaffected recipients. However, the processor and other components will be running as normal. Further, I still consider the problem to be an administrative one that has been solved using non-technical means. Therefore, I do not consider any of these three signposts to be satisfied. No arguments have been forwarded regarding signpost (ii); I agree that this signpost is not relevant to these claims.
- In summary, I find nothing in the claims of the fourth auxiliary request to provide a technical contribution and consider the contribution to still fall solely within excluded subject matter.

Conclusion

I find the invention claimed in GB1910434.8 to fall solely within matter excluded under section 1(2) as a program for a computer and a method for doing business as such. I have considered the claims currently on file (the main request) as well as four sets of amended claims in four auxiliary requests and my conclusion is the same in each case. I can find no further amendment in the specification that will render the claims patentable. I therefore refuse the application under section 18(3).

Appeal

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

Huw Jones

Deputy Director, acting for the Comptroller