Intellectual Property Office

BL O/030/20

16 January 2020

PATENTS ACT 1977

APPLICANT	Motorola Solutions, Inc
ISSUE	Whether patent application GB1818033.1 complies with section 1(2) of the Patents Act 1977
HEARING OFFICER	Phil Thorpe

DECISION

Introduction

1. Patent application GB1818033.1 was lodged on 5th November 2018 claiming divisional status from parent application GB1609164.7 which was filed on 25th May 2016. The request for ante-dating was allowed and the divisional application was published as GB 2564999 A on 30th January 2019.

2. Despite several rounds of correspondence between the examiner and the applicant's attorney, the applicant has been unable to satisfy the examiner that the divisional application met the requirements of the Act. In particular, the examiner remains of the opinion that the claimed invention is excluded from patentability.

3. The matter came before me at a hearing on 3rd October 2019. The applicant was represented by Mr Colin Treleven of Optimus Patents Limited.

The relevance of the decision to refuse the parent application

4. In advance of the hearing I invited the applicant to address me on the relevance of my earlier decision to refuse the parent application to the application in issue here. The parent application, GB1609164.7, was subject of a hearing held on 4th October 2018 which considered whether the claimed invention related to excluded subject matter.

5. As is usual in hearings on excluded matter, I had specifically asked the applicant's representative at the hearing on the parent whether there was anything in the application that might provide the necessary technical contribution should I find the claims on file to relate to excluded matter. Dr Tolfts, also of Optimus Patents Limited, made one suggestion which I subsequently dealt with in my decision.

6. It is rare for the Comptroller to issue oral decisions on the day of a hearing. Fully reasoned written decisions are normally issued a few weeks after the hearing. In this case my decision[1] refusing the parent application issued some 10 weeks after the hearing on 13th December 2018.

7. Of relevance to the issue before me here is paragraph 30 of that decision which reads:

> 30. I therefore find that the invention claimed in GB1609164.7 falls solely within matter excluded under section 1(2) as a program for a computer as such and a method of doing business as such. Dr Tolfts suggested that there may be a saving amendment of adding to claim 1 that the pursuit assets moved in response to the output to corner the fugitive. I do not believe that that would save the application. Further having carefully considered the specification as a whole, I can see nothing that could be reasonably expected to form the basis of a valid claim. I therefore refuse this application under section 18(3).

8. As can be seen, I not only considered the claims that were currently on file for the parent application, I also considered the possible saving amendment suggested by Dr Tolfts. Further, following the hearing I also carefully considered the application as a whole again to check whether there was anything that might provide the necessary technical contribution and concluded that there was not. This latter check was strictly not necessary to deal with the case though it is often done by hearing officers, to assist the applicant and with a view to providing some finality to the process.

9. However, in the period between the hearing on the parent and the issuing of my decision, the applicant filed the divisional application in issue here. I am aware of one other recent instance[2] where a divisional application has been filed in the period between the hearing and the decision refusing the parent application. In that case the hearing officer did not consider the implications of the earlier decision on the divisional even though the examiner during the prosecution of the divisional had raised the possibility that the earlier decision, which did consider whether there was any saving amendment elsewhere in the application, had created an estoppel against the divisional.

Did my earlier decision create any form of estoppel?

10. It is widely accepted that there has to be some finality in litigation. That includes before the Comptroller. It is I believe also generally accepted that decisions of the Comptroller can give rise to estoppel. For example, section 72 of the Patents Act which relates to the powers of the Comptroller (or Court) to revoke a patent, and which sets out in subparagraph 1 the grounds on which a patent can be revoked by the Comptroller, states in subparagraph 5 that:

> (5) A decision of the comptroller or on appeal from the comptroller shall not estop any party to civil proceedings in which infringement of a patent is in issue from alleging invalidity of the patent on any of the grounds referred to in subsection (1) above, whether or not any of the issues involved were decided in the said decision.

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[1] *Motorola* BL O/800/18
[2] *Corethree Ltd* BL O/117/19

Such a provision is only necessary if the possibility of an estoppel from a decision of the comptroller was real.

11. The general nature of estoppel is set out in for example *Carl-Zeiss-Stiftung v Rayner & Keeler Ltd (No 2)*[3] where Lord Guest stated:

> "The doctrine of estoppel per rem judicatam is reflected in two Latin maxims, (i) interest rei publicae ut sit finis litium and (ii) nemo debet bis vexare pro una et eadem causa. The former is public policy and the latter is private justice. The rule of estoppel by res judicata, which is a rule of evidence, is that where a final decision has been pronounced by a judicial tribunal of competent jurisdiction over the parties to and the subject-matter of the litigation, any party or privy to such litigation as against any other party or privy is estopped in any subsequent litigation from disputing or questioning such decision on the merits. As originally categorised, res judicata was known as "estoppel by record". But as it is now quite immaterial whether the judicial decision is pronounced by a tribunal which is required to keep a written record of its decisions, this nomenclature has disappeared and it may be convenient to describe res judicata in its true and original form as "cause of action estoppel".

and in *Crown Estate Commissioners v Dorset County Council*[4] where Millett J (as he then was) stated:

> "Res judicata is a special form of estoppel. It gives effect to the policy of the law that the parties to a judicial decision should not afterwards be allowed to relitigate the same question, even though the decision may be wrong. If it is wrong, it must be challenged by way of appeal or not at all. As between themselves, the parties are bound by the decision, and may neither relitigate the same cause of action nor reopen any issue which was an essential part of the decision. These two types of res judicata are nowadays distinguished by calling them "cause of action estoppel" and "issue estoppel" respectively."

12. The question of whether a decision of a tribunal such as the Comptroller in an ex-parte procedure can give rise to any form of estoppel is not one that seems to have been considered in any real depth. This contrasts with inter-parte disputes.

13. In *Buehler AG v Chronos Richardson Ltd*[5] the defendant who was subject to a claim of infringement had counterclaimed that the patent was invalid. The invalidity claim was based on the same grounds as it had used without success when opposing the patent during opposition proceedings at the European Patent Office (EPO). The claimant, who was also the patent proprietor, sought to have the counterclaim struck out on the basis of *res judicata* or in the alternative as an abuse of process given the earlier decision of the Opposition Board. In rejecting the claim for strike-out, the Court found that there was no cause of action estoppel because the causes of action were different and more significantly the decision of the Opposition Division was not a final judicial decision as to the validity of the patent. The Court based the latter conclusion on the wording of the European Patent Convention which confers jurisdiction on validity of European Patents to the courts of the contracting states.

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[3] *Carl-Zeiss-Stiftung v Rayner & Keeler Ltd* (No 2) [1966] 2 All ER 536
[4] *Crown Estate Commissioners v Dorset County Council* [1990] 1 All ER 19
[5] *Buehler AG v Chronos Richardson Ltd* [1998] RPC 609

14. A similar outcome was reached in *Special Effects Ltd v L'Oreal SA and Another* [6] where it was held that cause of action or issue estoppel was not created where a party litigating in the High Court had lost on a similar issue in the Trade Marks Registry, since the decision of the Registry was not final.

15. The situation is I believe different here in that it was me, acting for the comptroller, who found that the parent application did not contain anything that would form the basis of a valid claim. That was a decision made within the clear framework of the Patents Act and absence any further route for challenging that other than by appeal, is in my view a final decision of a competent tribunal.

16. However, I would note that the part of my earlier decision where I stated that:

> "Further having carefully considered the specification as a whole, I can see nothing that could be reasonably expected to form the basis of a valid claim"

was in fact not necessary to dispose of the earlier case. It would have been enough for me simply to have concluded that the claims as currently filed, together with the possible amendment suggested by Dr Tolfts were excluded. With hindsight I would probably have been better advised not to look beyond what is clearly before me and I will refrain from doing so in future decisions. That is was not essential to my earlier decision does I believe give rise a legitimate question as to whether that particular part of my decision could indeed give rise to any estoppel. As such without a more thorough consideration than was possible at the hearing in this instance, together with the outstanding questions of whether estoppel can really arise in an ex-parte hearing and in the absence of a specific pleading to that effect, I conclude that it would be inappropriate to deny the applicant consideration of the divisional application for reasons of a possible estoppel.

17. There is however a further question which is whether, even if the issue of estoppel or res judicata does not arise, the behaviour of the applicant here an abuse of process?

18. The issue of abuse of process through re-litigation was considered by Lord Bingham in *Johnson v Gore Wood*[7] where he noted:

> "This form of abuse of process has in recent years been taken to be that described by Sir James Wigram V C in *Henderson v Henderson* where he said: 'In trying this question, I believe I state the rule of the Court correctly, when I say, that where a given matter becomes the subject of litigation in, and of adjudication by, a court of competent jurisdiction, the Court requires the parties to that litigation to bring forward their whole case, and will not (except under special circumstances) permit the same parties to open the same subject of litigation in respect of matter which might have been brought forward as part of the subject in contest, but which was not brought forward, only because they have, from negligence, inadvertence, or even accident, omitted part of their case. The plea of res judicata applies, except in special cases, not only to points upon which the Court was actually required by the parties to form an opinion and pronounce a judgment, but to every point which properly belonged to

[6] *Special Effects Ltd v L'Oreal SA and Another* [2007] EWCA Civ 1
[7] *Johnson v Gore Wood* [2001] 1 All ER 481

> the subject of litigation, and which the parties, exercising reasonable diligence, might have brought forward at the time.' Thus the abuse in question need not involve the reopening of a matter already decided in proceedings between the same parties, as where a party is estopped in law from seeking to re litigate a cause of action or an issue already decided in earlier proceedings, but (as Somervell LJ put it in Greenhalgh v Mallard [1947] 2 All ER 255 at 257) may cover— 'issues or facts which are so clearly part of the subject matter of the litigation and so clearly could have been raised that it would be an abuse of the process of the court to allow a new proceeding to be started in respect of them.'"

19. In this case I believe it would have been preferable if the applicant had presented the claims of the divisional as alternative or auxiliary claims at the hearing on the parent. That would have enabled them to be considered there and then, saving time and effort for all concerned including the Intellectual Property Office (IPO) as well as providing more certainty for third parties. That the applicant did not do that but instead sought to exploit the window that typically exists between the hearing and the issuing of the decision is unfortunate. Whether the applicant's behaviour in doing that goes as far as the sort of abuse of process described by Lord Bingham is open to question though the opportunities given to the applicant via their attorney to present alternative claims during the hearing on the parent does I believe lean towards it being abusive. I am not however prepared to go as far as to say in this instance that it is so abusive that it would justify me refusing to consider the claims on the divisional.

20. Should other applicants however seek to exploit that window between hearing and decision by filing further divisionals, and it is feasible for that to happen multiple times for the same parent, then the IPO will need to consider in more depth whether any estoppel arises or whether the behaviour of the applicant does amount to an abuse of process that would justify a stronger response. Of course, all this could be avoided if the decision was issued on the day of the hearing possibly with reasons to follow as typically happens in the EPO and that is something that the IPO may wish to consider further.

21. For the purposes of this application I will proceed to determine it on its own merits giving no weight to my non-essential comment in paragraph 30 of my earlier decision.

The Invention

22. The invention relates to the pursuit of fugitives. More specifically, it involves analysing various input data to predict the likely route of the fugitive and then outputting directions to direct pursuit assets to capture the fugitive at a determined capture location.

23. The invention is implemented by a computer or a network of computers using a number of modules. These modules include a cornering strategy module, a mapping module, a fugitive tracking and intelligence module, and an asset tracking module. The cornering strategy module receives inputs from the other modules and outputs instructions to the pursuit assets. The fugitive tracking and intelligence module takes information from various sources, such as video feeds, social media, transportation systems and records databases, to provide

information to the cornering strategy module. The mapping module gives map information to the cornering strategy module, including ingress and egress information. The asset tracking module monitors the location of pursuit assets, such as law enforcement personnel and vehicles, and passes these to the cornering strategy module.

24. The claims under consideration were filed on 5th November 2018. Claim 1 reads as follows:

> *A networked communication system (100) for identifying (520) a capture location (222) and determining (525) a cornering strategy, the system comprising:*
>
> *a main computer (105) including a cornering strategy module (210);*
>
> *a mapping module (110), the mapping module (110) configured to provide map information (400) to the main computer (105), the map information (400) being based on analysis of one or more outdoor maps and/or one or more indoor maps;*
>
> *the cornering strategy module (210) configured to determine the capture location (222) and a cornering strategy (224) using the map information (400), the map information comprising a plurality of areas that are potential capture locations (410-430), including ingress and egress information to the potential capture locations (410-430);*
>
> *a fugitive tracking and intelligence module (115), the fugitive tracking and intelligence module (115) configured to receive real-time video from a real-time video source (310), information from a records database (315), and/or information from an intelligent transportation system (320);*
>
> *the main computer (105) configured to:*
>
> *communicate with the mapping module (110), the fugitive tracking and intelligence module (115), and an asset tracking module (120);*
>
> *receive (510), from the fugitive tracking and intelligence module (115), the real-time video, the information from the records database (315), and/or the information from the intelligent transportation system (320);*
>
> *identify (520) the capture location (222) using the cornering strategy module (210), based on the received map information (400); determine (525) a cornering strategy, based on the capture location (222) and a cornering strategy function (221); and*
>
> *send (530) turn-by-turn directions to a navigation unit in a pursuit vehicle, or to a personal device or a hand-held device, or send (530) coordinates to an aerial pursuit asset (125), based on the determined capture location (222).*

25. At the hearing Mr Treleven highlighted the differences between the claimed invention of the current application and that of the parent application. The

claimed invention is said to differ in that each of the modules of the networked system are now individually defined, as are the tasks performed by those modules. Further, the use of real-time video is now explicitly defined in the independent claim and more fundamentally, the claimed invention was said to differ in purpose. The proposed invention of the parent application output instructions to pursuit assets in order to influence a fugitive towards a capture location whereas the currently claimed invention determines a capture location and directs pursuit assets to that location.

The Law

26. The examiner has raised an objection under section 1(2) of the Patents Act 1977 that the invention is not patentable because it relates to one or more categories of excluded matter. The relevant provisions of this section of the Act are shown with added emphasis below:

> *1(2) It is hereby declared that the following (amongst other things) are not inventions for the purpose of the Act, that is to say, anything which consists of..*
>
> *(c) a scheme, rule, or method for…**doing business, or a program for a computer**;*
>
> *but the foregoing provisions shall prevent anything from being treated as an invention for the purposes of the Act only to the extent that a patent or application for a patent relates to that thing as such.*

27. As explained in the notice published by the IPO on the 8th December 2008[8], the starting point for determining whether an invention falls within the exclusions of section 1(2) is the judgment of the Court of Appeal in *Aerotel/Macrossan*[9].

28. The interpretation of section 1(2) has been considered by the Court of Appeal in *Symbian*[10]. *Symbian* arose under the computer program exclusion, but as with its previous decision in *Aerotel* the Court gave general guidance on section 1(2). Although the Court approached the question of excluded matter primarily on the basis of whether there was a technical contribution, it nevertheless (at paragraph 59) considered its conclusion in the light of the *Aerotel* approach. The Court was quite clear (see paragraphs 8-15) that the structured four-step approach to the question in *Aerotel* was never intended to be a new departure in domestic law; that it remained bound by its previous decisions, particularly *Merrill Lynch*[11] which rested on whether the contribution was technical; and that any differences in the two approaches should affect neither the applicable principles nor the outcome in any particular case.

29. Subject to the clarification provided by *Symbian*, it is therefore appropriate to proceed on the basis of the four-step approach explained at paragraphs 40–48 of *Aerotel* namely:

> *(1) Properly construe the claim.*

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[8] http://www.ipo.gov.uk/pro-types/pro-patent/p-law/p-pn/p-pn-computer.htm
[9] *Aerotel Ltd v Telco Holdings Ltd and Macrossan's Application* [2006] EWCA Civ 1371; [2007] RPC 7
[10] *Symbian Ltd v Comptroller-General of Patents*, [2009] RPC 1
[11] *Merrill Lynch's Appn*. [1989] RPC 561

(2) Identify the actual contribution (although at the application stage this might have to be the alleged contribution).

(3) Ask whether it falls solely within the excluded matter.

(4) If the third step has not covered it, check whether the actual or alleged contribution is actually technical.

Applying the Aerotel test

Step 1 - Properly construe the claim

30. There is general agreement that no issues of construction arise. The claim is clear. The claimed invention defines a network of devices comprising a number of modules that are each configured to perform a particular set of actions.

Step 2 – Identify the actual contribution

31. Throughout the examination process the examiner has maintained that performing a search for the proposed invention serves no useful purpose. He considered the arrangement of hardware defined in the claims to be conventional and in his pre-hearing report dated 9th July 2019 identified the contribution as:

> *'A computer-implemented method of analysing available information to identify a suitable capture location, an effective cornering strategy, and direction/coordinates to pursuit assets based on the location and strategy. This allegedly leads to an improvement in the efficiency of the pursuit operation, and may result in an increase of speed of capture and a reduction in pursuit asset resource usage.'*

32. At the hearing Mr Treleven asserted that the network as specified in claim 1, with the hardware modules and main computer configured to operate as defined in the claim, cannot be described as conventional. He highlighted that there are no individual modules that carry out these functions and absent a search report the contribution should be considered against the prior art acknowledged in the application. From this prior art, he asserted that the hardware as specified in claim 1 cannot be considered conventional and that the invention therefore contributes a new arrangement of hardware, which is patentable.

33. As no search has been performed for the invention in this application I am content to accept a broad identification of the contribution. However, I do not accept that the invention contributes a new arrangement of hardware. For the contribution to reside in the hardware, the arrangement of hardware must be new in itself and not only new due to the programmed method operating on the hardware. The main computer and each of the modules defined in claim 1 of the current application are no more than a plurality of computers communicating over a network, each programmed to perform a specific set of tasks. At the hearing Mr Treleven accepted that it was known to have a number of computers communicating with one another over a network. Therefore, whilst I am prepared to accept that the individually programmed

modules defined in claim 1 form part of the contribution, it is clear that the invention does not contribute a new arrangement of hardware.

34. Mr Treleven further objected to a number of terms used by the examiner in his identification of the contribution. Defining the information as 'available information' and stating that the advantages were only 'alleged advantages' was said to dismiss or diminish the contribution of the invention. He stated that in this invention the hardware had been specifically arranged to make information available to solve the problem at hand. He drew my attention to the Office decision of *General Electric Company (GEC)*[12] to support this assertion. The invention of *GEC* related to a computer implemented method of identifying faults which may lead to failure of a generator by evaluating diagnostic data obtained from a sensor in the generator. In that decision the hearing officer considered it incorrect to dismiss the sensor and computer system from the contribution, as although the apparatus was a known arrangement of hardware, it was an integral part of the method of identifying faults in the generator. As noted above, I am prepared to accept a broad identification of the contribution, further including that the alleged advantage of improving the efficiency of the capture operation is actually delivered by the proposed invention.

35. Although it was not pressed at the hearing, Mr Treleven's skeleton arguments also highlight that it was incorrect for the examiner to identify the contribution as 'a computer implemented method' when claim 1 states that the invention is a 'networked communication system'. I do not agree with this point. Whilst the form of the claim is a networked communication system, the contribution in substance is a computer implemented method. As noted above the invention does not contribute a networked communication system and at the hearing Mr Treleven noted that they are 'not claiming any network'. To frame the contribution in such a way would be to elevate form over substance, which is not what the legislators intended.[13]

36. Having taken into account Mr Treleven's skeleton arguments and submissions throughout the hearing, I consider that claim 1 can broadly be considered as contributing:

> A computer implemented method of determining a capture location of a fugitive and outputting information to direct pursuit assets to that location. Wherein the method uses a number of sources of information such as real-time video information and is conducted across modules of a network comprising a main computer including a cornering strategy module, a mapping module, and a fugitive tracking/intelligence module. The method providing the advantage of improving the effectiveness and efficiency of the capture operation.

Steps 3 and 4 Ask whether it falls solely within the excluded matter and check whether the actual or alleged contribution is actually technical.

37. I will consider steps 3 and 4 together.

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[12] *General Electric Company (GEC)* BL O/029/19
[13] *Aerotel/Macrossan* [43]

38. Mr Treleven began his submissions under steps 3 and 4 by arguing that the output of the invention, which controls the pursuit assets to the capture location, is technical in nature. He sought to draw comparisons between the invention at issue here and that considered in *Motorola Solutions.*[14] The invention in *Motorola Solutions* related to a method for identifying a subset of devices common to a first and second event by accessing and manipulating stored device and access point data and determining route information for the subset of devices using this data; and subsequently using the route to activate cameras along a predicted path. In that decision the hearing officer considered that switching on a camera was a technical process whether performed manually or automatically. Mr Treleven contended that directing a pursuit asset is every bit as technical a task as activating cameras along a predicted path. He asserted that whether this was done automatically or manually did not matter, in line with the hearing officer's comment in *Motorola Solutions.* Mr Treleven further cited *Halliburton*[15] as supporting this position.

39. It is common ground that the claim is not limited to directly controlling an asset to the capture location. The claim encompasses sending navigational instructions to a vehicle which require human intervention to control (fly, drive, etc.) the vehicle to the capture location. The claim also encompasses sending coordinates to an unmanned asset which Mr Treleven asserts implicitly defines directly controlling the unmanned asset to the coordinates of the capture location

40. Mr Treleven went on to submit that the advantage of improving the effectiveness and efficiency of the capture operation provides a technical effect. He relied on *The Boeing Company*[16] to support this assertion. The hearing officer in that case considered that extending the life and improving the safety of an aircraft were both technical effects. Mr Treleven explained that during any pursuit there is a risk factor associated with the use of the pursuit assets. For example, every time an aircraft takes off and lands there is a risk to the safety of the aircraft. By improving the effectiveness and efficiency of the capture operation the amount of use of the pursuit assets is reduced. This reduction in use was said to improve the safety of the pursuit operation and further extend the life of the pursuit assets, which are the same effects as in *Boeing.*

41. Whilst the decisions in *Motorola Solutions* and *The Boeing Company* hold persuasive value I am bound by decisions of the Courts. Of particular significance to the issues before me here is the decision of the Patents Court in *Cappellini*[17]. The application of *Cappellini* related to a system for planning and varying the route(s) that carriers should take when delivering packages. More specifically, it is a computer implemented method of enabling a carrier to describe a path (or route) that he plans to take, and also establishing the extent to which an individual carrier can deviate from the planned route. By allowing each carrier to deviate from the originally planned route, added

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[14] *Motorola Solutions, Inc.* BL O/375/19
[15] *Halliburton Energy Services Inc v Smith International (North Sea) Ltd* [2006] RPC 2
[16] *The Boeing Company* BL O/312/15
[17] *Bloomberg LLP and Cappellini's Applications* [2007] EWHC 476 (Pat)

flexibility is built into the system because for example two carriers can be diverted from their route by a short distance to enable them to meet at a new “node” or “relay point” and exchange one or more packages. Of relevance is Pumfrey J discussion of claims 11, 12 and 13 of Cappellini’s application where he notes:

> “19. More difficult is the invention claimed by claims 11 and 12. Claim 11, which relates to a method of coordinating a transportation process, in essence using the system of claim 1 for generating the necessary data to direct the transport of unspecified articles by coordinating the respective carriers, is, it seems to me, at least potentially a method of producing a particular physical effect. The problem, it seems to me, is that the physical effect that is produced is essentially the movement of known items (viz. lorries, vans, taxis, etc.) over known and existing routes, but equipped with instructions to deviate so as to meet other carriers at the points determined by the algorithmic analysis. The contribution therefore lies in the instructions given to the drivers as to where and when to begin, break and end their journeys, together with instructions, as appropriate, as to the goods to be transhipped at the breaks. The result is therefore a method of performing a set of journeys, and this I consider to be a method of doing business, as Mr Tappin submits on behalf of the Comptroller. The same objection, in substance, may be levelled at the invention of claim 12, which is the claim to a network relay transportation system, essentially characterised in the manner I have already described. So, too, claim 13, which again gives rise to analytical difficulties, the method of processing loads.
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> 20. Claim 13 is of interest and importance, because it is the claim which, in my view, is closest to comprising patentable subject matter. However, I think that it is important not to be misled by the words "processing of loads". In truth, the loads are not processed at all. They are potentially aggregated, or broken down, distributed to various carriers, transhipped at points on those respective carriers' routes and, ultimately, delivered. Again, all these steps are carried out using conventional equipment, and the inventive contribution lies in the derivation of the order, time and particular route segments concerned. I do not think that this is enough.
>
> 21. I think that it is necessary here to consider whether the invention does, in fact, produce a relevant technical effect. I do not think it does so. The analysis in terms of business method, which commends itself to the Comptroller in this appeal, is, I think, correct. There is, in my judgment, no relevant technical effect in merely moving vehicles and their cargos around according to a routing algorithm.”

42. Mr Treleven argued that the use of real time video information distinguished the invention here from that in *Cappellini*. I accept that the invention here does use real time information, in particular information obtained from video cameras, however the sources of that information appear entirely conventional. Whilst it is not clear whether the invention in *Cappellini* provided for use with real time data, I do not believe that would have saved that application.

43. Mr Trevelen also argued that the business method exclusion was relevant in *Cappellini* because the invention was concerned with a clearly commercial operation namely the delivery of parcels. However, I note that the Courts have not restricted the expression “doing business” to just financial or commercial activities, but have considered that it also embraces administrative, organisational and managerial activities. In *Aerotel/Macrossan* it was noted that the idea of having three document trays - “in”, “out” and “too difficult” - was a way of conducting business and no more. The provision of directions to

enable a fugitive to be captured is in my view a logistical or organisational activity within the meaning of a method of doing business.

44. Mr Trevelen further contended that *Cappellini* was not directly comparable as it had a very different starting point. *Cappellini* started with a simple business manifest whereas the current invention starts with a mapping module, derives a cornering strategy, and uses real time video information before the step of directing assets. Mr Trevelen noted that if there was any analogy to be drawn to *Cappellini* it was to the last step of the claim, i.e. directing the assets, but it was not to the whole claim.

45. Considering Mr Trevelen's submissions in respect of *Motorola Solutions* and *The Boeing Company,* it is clear that these arguments must fail in light of the analogies that can be drawn with at least the last step of *Cappellini*. Mr Treleven argued that the invention's output of directing an asset is technical in light of *Motorola Solutions*. However, the output of *Cappellini* is also the directing of assets and that was not considered to provide the relevant technical contribution. Similarly, Mr Treleven argued that the advantages of the invention had the effect of improving the safety of the pursuit operation and further extending the life of the pursuit asset. These were said to be technical effects in light of *The Boeing Company.* An advantage of the invention in *Cappellini* is likewise to improve the efficiency of the operation. Following the same logic as Mr Treleven, this could similarly be said to provide the effect of improving the safety of the operation and extending the life of the asset. Again, that was not considered to be a technical contribution in *Cappellini* and it follows that such an advantage does not provide one in this case.

46. Overall, the contributions here and in *Cappellini* relate to how the data, whether it be real time or not, is used. In both cases it is to provide routing instructions for assets. That was not considered to be a relevant technical contribution in *Cappellini* and I believe it is also not a relevant technical contribution in this case. The contribution here is in my view a logistical or organisational activity within the meaning of a method of doing business and is not technical in nature.

47. Whilst the invention of *Cappellini* required the driver of the vehicle to act on routing instructions, I do not consider that automating the movement of the vehicles would necessarily change the contribution. As I have concluded above, the contribution is really about providing a more efficient and effective logistical or administrative task– a better business method. The automated travel of an unmanned asset to provided coordinates is conventional and I consider this consequential to the contribution, not a part of it *per se*. As noted in *Cappellini* "The result is therefore a method of performing a set of journeys, and this I consider to be a method of doing business". Whether the journeys are performed manually or automatically appears inconsequential as they remain a set of journeys, which Pumfrey J considered a method of doing business. The contribution is still applied within the field of logistics and administration and is aimed at increasing the efficiency and effectiveness of the operation, which is not inherently technical following *Cappelini.*

48. Mr Treleven also sought to draw comparisons with the invention considered in *Landmark Graphics Corporation*[18]. The invention of that application related to a computer-implemented process for planning, monitoring or controlling hydrocarbon production, wherein a grid size is re-scaled to allow sufficiently fast simulations to be done with sufficient accuracy for them to be used in ongoing operations. The hearing officer found the contribution to lie outside of the excluded fields as the method relied on data from a real reservoir, modified a model that could be said to form an object akin to those discussed in *Vicom*[19] and ultimately lay in a technical field of endeavour. Mr Treleven asserted that the current invention uses real maps, real capture locations, and does more than simply modify a model as was the case in *Landmark.*

49. The process of reproducing the image in *Vicom* was considered to be a technical process however there is no comparison to be drawn here with the current invention. Similarly the invention in *Landmark* was deemed to be in relation to what the hearing officer, paraphrasing HHJ Birss in *Halliburton* considered to be "a highly technical process capable of being applied industrially….The detailed problems to be solved … are technical problems with technical solutions". In contrast the invention here is not for such an industrious application nor are the problems to be solved, namely efficiently directing assets, similarly technical in nature.

50. Mr Treleven further highlighted the decision of *Landmark Graphics Corporation*[20] which considered the issues of 'reasonable doubt' in light of *Fujitsu*[21]. The hearing officer decided that in cases where reasonable doubt exists, and the applicant makes a reasonable case that their invention is patentable, a hearing officer is bound to find in favour of the applicant. However, in the case of the current application I am content that there is no reasonable doubt for me to give the applicant the benefit of.

51. The examiner also considered that the invention here was excluded as a computer program. The relevance of the signposts in *AT&T/CVON*[22] (as reformulated in *HTC*[23]*)* was considered during the examination process, although the signposts were not discussed at the hearing or in Mr Treleven's skeleton arguments. I have reviewed the correspondence on file and having fully considered the signposts cannot identify any technical contribution.

Conclusion

52. Having carefully considered the arguments, I am of the view that the problem addressed by the claimed invention is purely logistical/administrative, with no technical content. That the invention is implemented by a computer, which in itself is technical, does not confer a technical contribution to an invention which would be otherwise lacking in that respect. The contribution falls solely within

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[18] *Landmark Graphics Corporation* BL O/148/18
[19] *Vicom* T 0208/84
[20] *Landmark Graphics Corporation* BL O/112/18
[21] *Fujitsu Ltd's Application* [1996] RPC 511
[22] *AT&T Knowledge Venture/CVON Innovations v Comptroller General of Patents* [2009] EWHC 343
[23] *HTC v Apple* [2013] EWCA Civ 451,

the matter excluded under section 1(2) as a program for a computer and a method of doing business.

53. I therefore find that the proposed invention defined in GB1818033.1 is excluded from patentability as it relates to matter excluded under section 1(2) as a program for a computer and a method of doing business, as such. I therefore refuse this application under section 18(3).

Appeal

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

Phil Thorpe
Deputy Director, acting for the Comptroller