Intellectual Property Office

BL O/0689/24

19 July 2024

PATENTS ACT 1977

APPLICANT	CCL Global Enterprises Ltd
ISSUE	Whether patent application GB2202708.0 is excluded under section 1(2)(c) of the Patents Act 1977
HEARING OFFICER	Dr Andrew Rose

DECISION

1 This decision relates to the issue of whether the application, GB2202708.0, meets the requirements of section 1(2)(c) of the Patents Act 1977 ("the Act").

2 The application was filed on 28 February 2022 in the name of CCL Global Enterprises Ltd. The application was published as GB 2616060 A on 30 August 2023.

3 Over several rounds of correspondence, despite the claims of the application being amended several times, the examiner has maintained an objection that the invention claimed is excluded from patentability as a method for doing business and a program for a computer as such. Following the most recent examination report dated 20 February 2024, in a letter from their agent received 17 April 2024 the applicant has requested that a Hearing Officer decide on the matter based upon the papers on the file. Consequently, the application has been passed to me to make a decision.

4 The examiner's objections and their consideration of the applicant's arguments can be found in their examination report of 20 February 2024. I confirm that I have considered all relevant documentation on file when coming to my decision and that my decision relates to the claims filed on 28 April 2023.

5 The specification, including the amended claims, the objections raised by the examiner and the applicant's arguments and observations can all be viewed at the IPO's online file inspection service: Intellectual Property Office - Patent document and information service (Ipsum) (ipo.gov.uk)

The invention

6 As the opening paragraph of the description explains the application "*relates to enterprise resource planning (ERP) platforms and in particular, but not exclusively, to*

an improved multi-carrier shipping platform, including systems and methods for implementing the same."

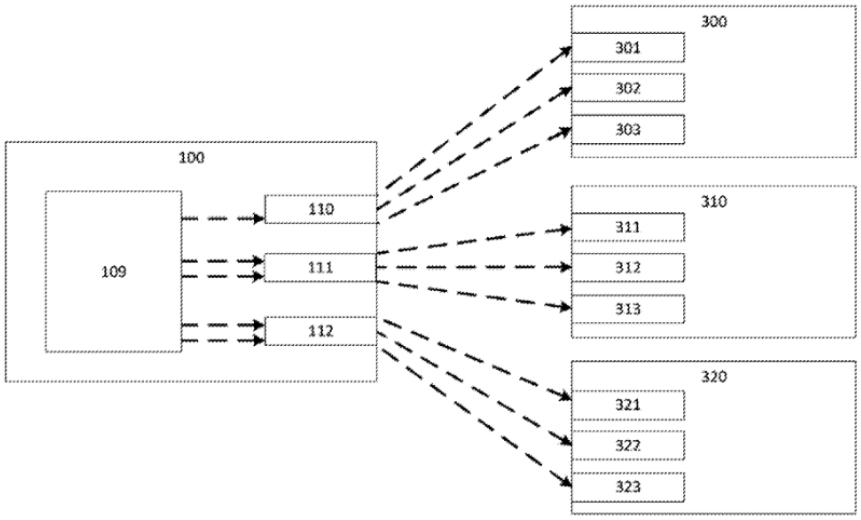

Figure 3

7 As described on pages 8 and 9 of the specification, Figure 3 shows a multi-carrier platform 100 which includes a set of core services 109 providing interfaces 110, 111, 112 with carriers 300, 310, 320. The platform provides a common carrier web service and a plurality of carrier microservices, one for each carrier. The common carrier web service may receive a service availability request and/or a booking request, which it can then forward to the appropriate carrier microservice. The platform provides a manifesting engine which may make a request to manifest or confirm the order at a configurable time or time interval, and a tracking engine which may automatically periodically request tracking information from the appropriate carrier microservice and update it as appropriate.

8 Each of the processes driven by carrier microservices and can be removed, added or swapped without having to build or redeploy the common carrier web service tracking engine or manifesting engine. When a new third party is to be added to the system, then a new microservice is written. A set of functions is identified as common or fundamental and provided as common core services, so that the amount of custom coding involved when providing a third-party interface microservice is reduced.

9 A tracking engine is responsible for retrieving tracking information on a regular schedule for in progress shipments. A tracking function retrieves tracking numbers for shipments due to be manifested from an orders database and, depending on the specified carrier, a configuration is loaded for the appropriate microservice from a carrier microservice configuration data store. The tracking number and configuration data are combined to create a generic request structure sent over HTTP and made against a carrier microservice using the generic request structure. This is then used

to retrieve information from the carrier, typically via a third-party carrier API. The microservice then returns a generic response structure to the tracking function, which includes tracking information for all shipments specified in the request. The tracking function then creates and/or updates shipment progress records in the orders database.

The claims

10 The claims filed on 28 April 2023 relate to a computer implemented system arranged to implement a set of services and a method of providing computer implemented services. There are two independent claims (claims 1 and 10) which relate to the same inventive concept and stand or fall together. I shall consider claim 1, as follows:

1. A computer-implemented system arranged to implement a set of services and comprising:

a first services layer configured to provide a first set of core services; and

a second services layer configured to provide a plurality of third party interface microservices, each of which provides an interface dedicated to one third party, the first services layer comprises one or more of service availability, booking, and voiding;

and the second services layer comprises: manifesting and tracking and wherein tracking comprises a tracking engine which has a tracking function which retrieves tracking numbers for shipments due to be manifested from an orders database and, depending on the specified carrier, a configuration is loaded for the appropriate microservice from the carrier microservice configuration data store and the tracking number and configuration data are combined to create a generic request structure sent over HTTP and made against a carrier microservice using the generic request structure.

The law

11 Section 1(2) of the Act defines certain categories of subject-matter which are not considered to be inventions. These categories are often referred to as 'excluded subject-matter'. The relevant provisions of this section of the Act are shown 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.

12 The Manual of Patent Practice (MoPP) explains the IPO's practice under the Act and makes helpful references to relevant case law. The Manual can be viewed online at the IPO website: https://www.gov.uk/guidance/manual-of-patent-practice-mopp[1].

13 The interpretation of section 1(2) has been considered by the Court of Appeal in *Symbian*[2]. *Symbian* arose under the computer program exclusion, but 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 approach previously followed by the Court of Appeal in *Aerotel/Macrossan*[3]. 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*[4] 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.

14 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;
(2) Identify the actual [or alleged] contribution;
(3) Ask whether it falls solely within the excluded matter;
(4) check whether the actual or alleged contribution is actually technical in nature.

15 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 v Apple*[6] the signposts were reformulated slightly in light of the decision in *Gemstar*[7]. 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] See MoPP, Section 1, paragraphs 1.01-1.47 which sets out the office practice in relation to Section 1 of the Act. Paragraphs 1.31 – 1.39.4 refer specifically to section 1(2)(c).
[2] *Symbian Ltd v Comptroller-General of Patents*, [2009] RPC 1
[3] *Aerotel Ltd v Telco Holdings Ltd and Macrossan's Application* [2006] EWCA Civ 1371; [2007] RPC 7
[4] *Merrill Lynch's Application* [1989] RPC 561
[5] *AT&T Knowledge Ventures/CVON Innovations v Comptroller General of Patents* [2009] EWHC 343 (Pat)
[6] *HTC Europe Co Ltd v Apple Inc* [2013] RPC 30
[7] *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.

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

Application of the Aerotel test

Step (1): construe the claim

17 The examiner has construed the latest claims substantially as written, and this does not appear to be disputed by the applicant. I agree that the claims are clear on a plain reading without any special attention needing to be given to the construction of words or phrases in the claims.

Step (2): identify the actual (or alleged) contribution

18 In paragraph 9 of their latest examination report dated 20 February 2024, the examiner defines what they call the "technical contribution" by reference to the "technical problem solved" and the "technical solution". As this is done at step 2 of the test, and the examiner goes on to conclude the contribution is not technical (page 6), then I think paragraph 9 outlines the examiner's view of the *contribution* with reference to the problem being addressed and how the invention works to solve the problem. The problem and solution in question are taken from the agent's letter of 6 December 2022 and are common ground between the agent and examiner. Specifically, that problem is "*to provide a multi-carrier shipping platform that enables swift integration of new carriers, or that can cope easily with updates to carrier systems*".

19 Based on this, I summarise the contribution as:

> A computer-implemented multi-carrier shipping platform that enables swift integration of new or updated carriers by having a first services layer of core services and a second services layer comprising multiple third-party carrier microservices each of which provides an interface dedicated to one third party, the second layer also comprising a tracking function, where the tracking function retrieves tracking numbers and third-party configuration data from stores and the third-party microservice combines these to send a tracking request to the third party.

Step (3): ask whether it falls solely within the excluded subject matter

20 The examiner has objected to the invention as relating to a method for doing business and a program for a computer. I will deal with each of these categories in turn.

Method for doing business

21 The application of the invention is a business method: it relates to a system whose specific purpose is to reduce integration costs and delays when looking to use new

shipping carriers in a logistics operation, or to respond more quickly to systems changes of existing carriers to maintain or reinstate integrations. As the applicant themselves put it on page 6, the disclosure "*provides systems and methodologies which implement business processes using a first layer of common core services and a second layer of microservices, where each microservice provides functionality associated with a third party entity such as a vendor or carrier.*" This is clearly a method of doing business, and I now need to decide whether the invention contributes anything more than that[8]. If the answer is nothing more than a computer program running on a conventional computer system then the invention is excluded.

Program for a computer

22 The examiner has considered all of the updated *AT&T* signposts to which I referred above. I shall deal with each in turn.

23 Regarding signpost one, there is a relevant argument in the agent's letter of 6 December 2022 that the invention relates to the continuous gathering of raw external data in a variety of formats, and the processing of this into a meaningful location and status of the item. However, I disagree that this indicates a technical contribution in this case. The contribution does not relate to the improved tracking of items to provide a user with better information about the whereabouts and expected arrival times of packages in transit. Instead, the contribution lies in the programming of the system is such a way as to enable quicker and easier updates when new carriers are added to the system or when carrier systems are themselves updated. The avoidance of delays or costs in performing these updates to extend and maintain compatibility with third-party carriers is a business problem and process, and not a technical process in itself.

24 Regarding signpost two, I agree with the examiner that the "architecture" to which this signpost refers generally relates to the operation of the internal workings of a computer: the processor, the cache memory, or other internal components of the computer. I accept the argument in the agent's letter of 28 April 2023 that "computer architecture" could include software aspects. However, considering the origins of this signpost in caselaw precedent, to indicate a technical effect by virtue of signpost two the effect being produced would need to provide a benefit to any software program which runs on the system. In this case the effect is specific to the shipping platform software that is being run on the computer and I cannot conclude that this is a technical effect.

25 In relation to signpost three, the computer does not operate as a better computer: it is not "*some generally applicable method of operating a computer"* as Lewison J noted in *AT&T*. Rather, the contribution relates to a program running on a computer that allegedly is a better, more flexible and more easily updated program than similar state of the art programs. Therefore, signpost three does not lead me to a technical effect of the contribution.

26 This leads on to signpost four. It is noted that the microsystems of the invention are designed to correspond to third-party interfaces and include multiple functions such

[8] See the Manual of Patent Practice, section 1.34.1 and Birss J in Lenovo (Singapore) PTE Ltd v Comptroller General of Patents [2020] EWHC 1706 (Pat) at paragraph 35.

as manifesting and tracking. The microservices are not each dedicated to one function as is common in microsystem programming.

27 However, the structure of the programs being run on the computer to provide a flexible shipping platform that can be updated to maintain and add carrier support with less effort and with less downtime does not make the system a better computer or increase the speed or reliability of the computer itself. The program structure may allow for the program to be updated or maintained more easily. However, this effect is specific to the program and does not, for instance, cause the computer to be programmed more easily in general (as was the case in *HTC v Apple*).

28 For signpost five, the problem that I outlined above in paragraph 18 (as identified by the examiner and the applicant) is a business problem, or one of software design. Given that methods for doing business and programs for a computer are outside of the scope of what is "technical" in the sense of indicating non-excluded subject matter, I cannot see how this problem is inherently technical. Consequently, even if the problem is overcome rather than circumvented, as the applicant's letter of 28 April 2023 suggests, the fifth signpost does not indicate that the claimed invention is allowable.

Step(4): check whether the actual or alleged contribution is actually technical in nature

29 In their agent's letter of 28 April 2023, the applicant submits that, at the fourth step, *"the Vicom test is applied, where the invention must be shown to provide some technical advance on the prior art in the form of a new result."* I understand this to refer to Merrill Lynch, page 569, lines 8-10 where Fox LJ states that, for a contribution to be technical "[t]here must, I think, be some technical advance on the prior art in the form of a new result".

30 I have covered this in the discussion of the third step because, in assessing whether the subject matter lay solely within the excluded subject matter, I looked to identify some technical contribution, or technical advance in the form of a new result that would indicate the contribution was not excluded. A contribution which consists solely of excluded matter will not make a "technical contribution" and thus will not, as the fourth step puts it, be "technical in nature".

31 Turning to the particular argument raised in relation to the fourth step, the applicant submits (in their agent's letter of 28 April 2023) that *"the new technical result relates to the system as a whole including carriers which connect to it, in combination work faster and more efficiently by the implementation of the system of the present invention."* Whilst this argument seeks to describe the technical advance in broad terms as a better (more efficient, faster, more functional) multi-carrier shipping tracking system, it is important to focus on the actual contribution as described in step two above. Focussing on the contribution, I have already concluded in step three that this is not technical. To reiterate, the candidate for a new technical advance is not a better, more efficient and effective shipping system, but the programming of a platform to allow for more efficient and less time consuming or expensive updates. This is no more than a program for a computer or a method for doing business and is not technical.

Conclusion

32 I have considered the claims and found that the independent claims are excluded under section 1(2)(c), as a method for doing business and a program for a computer as such.

33 The application is refused under section 18(3).

Appeal

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

DR ANDREW ROSE

Patent Examination Group Head