Intellectual Property Office

BL O/1065/24

11 November 2024

PATENTS ACT 1977

APPLICANT	WORLDR TECHNOLOGIES LIMITED
ISSUE	Whether patent application GB 2109577.3 complies with section 1(2) of the Patents Act 1977
HEARING OFFICER	Barnaby Wright

DECISION

Introduction

1 This decision relates to the issue of whether patent application GB2201295.9 ("the application") meets the requirements of section 1(2) of the Patents Act 1977 ("the Act").

2 Patent application GB 2109577.3, entitled "Systems and methods for implementing intelligent loading of data", was filed 2nd July 2021. In response to a combined search and examination report, amendments were received 29th July 2022. The application was published, with amended claims, as GB 2608437 A on 4th January 2023.

3 In subsequent examination the examiner raised an objection to the claimed invention as being excluded under section 1(2) of the Act as a program for a computer as such. Despite further rounds of correspondence and amendment, the applicant and examiner have not been able to reach agreement, with the examiner remaining of the view that the invention is excluded. On 7th June 2024, the applicant submitted a request to be heard.

4 This matter came before me at a hearing on 19th August 2024, held via videoconference, at which the applicant was represented by Dr Marcelo Motta and Richard Bickford-Smith, both of Basck Limited. I am grateful for the skeleton arguments dated 12th August 2024.

5 Following receipt of the skeleton argument, the applicant was invited to address me at the hearing on the contribution made by independent claims 11, 12 and 13 given that these claims appear to be broader in scope than the two independent claims considered by the examiner and discussed in previous correspondence. Following discussion at the hearing, I gave the applicant a two-week window in which to provide written submissions in respect of just these three claims. In correspondence filed 2nd September 2024, claims 11 to 13 were deleted. These claims will not be considered as part of this decision. The correspondence of the 2nd September 2024

also included written submissions in respect of claims 1 to 10. These have not been considered.

The application

6 In broad terms the application is concerned with the intelligent loading of data in client application databases. The background section of the description describes how data loading technology is being improved to keep up with demands for up-to-date data in various fields such as businesses, social networks, internet-of-things, e-commerce and the like. However, there are said to be problems with existing data loading techniques.

7 A first problem is said to be the requirement of complete loading of an entirety of data on devices associated with a user, so that the data may be presented to the user. This can take a considerable amount of time, leading to large latencies/delays, adversely affecting the users' experience of accessing the data. Loading an entirety of data on a device is also computationally intensive, using network bandwidth and high power.

8 Another problem is the lack of synchronisation when a user utilises numerous devices to access the same data. It is said that if a user uses multiple devices to access a business communication application, there could be a lack of synchronisation in updating chat lists, chat member lists, the appearance of last messages, and the like, between a user's computer and their mobile phone.

9 A third problem relates to issues regarding unreliable and error prone current data loading techniques when data loading is attempted when a communication network is intermittently unavailable.

10 The claimed invention is said to overcome these issues and allows a user to access an updated version of the data with loading in real-time or near real-time with minimal latency or delay, imperceptible to the user, using minimal bandwidth, less power than when receiving a considerable amount of data. This is even said to be the case when temporary unavailability of a communication network occurs.

11 Figure 4 of the application, reproduced below, shows an exemplary process flow utilised during start-up of a client device. At step 402, an assessment is made as to whether data is present in the client application database. As shown at step 404, if data *is* present, a first process is employed to obtain an updated version of the data from a target server. If data is *not* present a second process is employed, as shown at step 406. According to the description, the first process involves the use of recent updates or incremental updates whereas the second process involves recent updates.

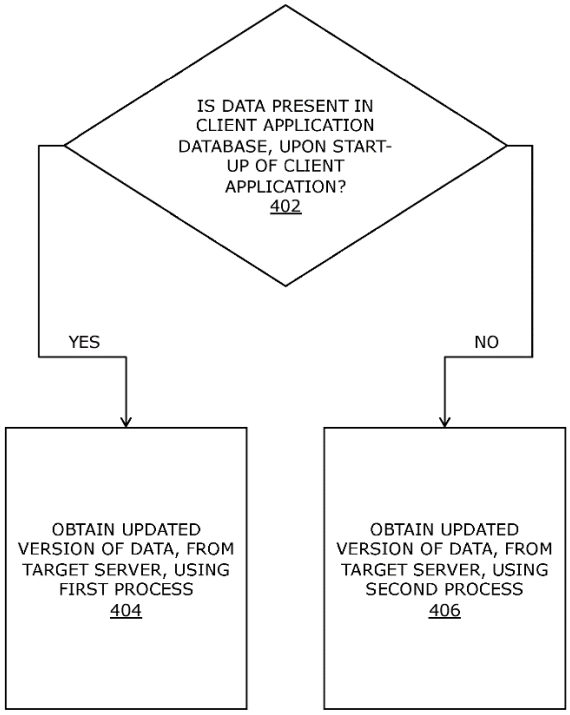

FIG. 4

12 Claims 11 to 13 have been deleted by amendment. That leaves the two independent claims considered at the hearing, they are claims 1 and 6 and I have reproduced them below. The amendments of 2nd September 2024 did not change the wording of these claims, as submitted 14th February 2023.

> 1. A system for implementing intelligent loading of data in a client application database in real time or near real-time, the system comprising:
>
> at least one client device configured to execute a client application, the client application being associated with the client application database; and
>
> a target server communicably coupled to the at least one client device,
>
> wherein, upon start-up, the client application is configured to:
>
> - determine whether the data is present or not in the client application database, the data comprising content of at least one communication thread, wherein a user using the client application on the at least one client device is a member of the at least one communication thread;
>
> - when the data is present in the client application database, obtain from the target server, an updated version of the data using a first process, wherein the client application is further configured to:
>
> - obtain a list of updates that have been made to the data since a time of storing the data in the client application database, wherein the list of updates comprises identification information of the at least one communication thread along with a status of the at least one communication thread;

- determine whether an incremental update of the data is feasible or not, based on the list of updates;

wherein upon determining the feasibility of the incremental update of the data, the client application is configured to:

- delete the data stored in the client application database, in the event the incremental update of the data is not feasible, and receive a most recent data slice of the at least one communication thread;

- receive an incremental data slice of the at least one communication thread, in the event the incremental update of the data is feasible; and

- use the most recent data slice or the incremental data slice to generate the updated version of the data; and

- when the data is not present in the client application database, obtain from the target server the updated version of the data using a second process, wherein the second process the client application is configured to:

- receive a first list including identification information of the at least one communication thread, and a second list of members of the at least one communication thread;

- receive a most recent data slice of the at least one communication thread, based on the first list and the second list; and

- use the most recent data slice as the updated version of the data; and

- wherein when receiving a given data slice of the at least one communication thread, the client application is configured to receive, from the target server, at least one page comprising a predefined amount of the content of the at least one communication thread in an iterative manner, wherein one page is received at each iteration.

6. A method for implementing intelligent loading of data in a client application database in real time or near real time, the method being implemented by a system comprising at least one client device configured to execute a client application, the client application having a client application database associated therewith, and a target server communicably coupled to the at least one client device, the method comprising:

upon start-up of the client application,

- determining whether the data is present or not in the client application database, the data comprising content of at least one communication thread, wherein a user using the at least one client device is a member of the at least one communication thread;

- when the data is present in the client application database, obtaining from the target server, an updated version of the data using a first process, wherein the first process is based on recent updates or incremental updates,

wherein the step of obtaining the updated version of the data using the first process comprises:

- obtaining a list of updates that have been made to the data since a time of storing the data in the client application database, wherein the list of updates comprises identification information of the at least one communication thread along with a status of the at least one communication thread;

- wherein upon determining the feasibility of the incremental update of the data, during the step of obtaining from the target server, the updated version of the data using the first process, the method comprises:

- deleting the data stored in the client application database, in the event the incremental update of the data is not feasible, and receiving a most recent data slice of the at least one communication thread;

- receiving an incremental data slice of the at least one communication thread, in the event the incremental update of the data is feasible; and

- using the most recent data slice or the incremental data slice to generate the updated version of the data; and

- when the data is not present in the client application database, obtaining from the target server the updated version of the data using a second process, wherein the client application is configured to:

- receive a first list including identification information of the at least one communication thread, and a second list of members of the at least one communication thread;

- receive a most recent data slice of the at least one communication thread, based on the first list and the second list; and

- use the most recent data slice as the updated version of the data; and

- wherein the step of receiving a given data slice of the at least one communication thread comprises receiving, from the target server, at least one page comprising a predefined amount of the content of the at least one communication thread in an iterative manner, wherein one page is received at each iteration.

The law

13 Section 1(2) of the Act is as follows:

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) ...;
(b) ...;
(c) … a scheme, rule or method for…doing business, or a program for a computer;
(d) …;

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.

14 The Court of Appeal has said that the issue of whether an invention relates to subject matter excluded by section 1(2) must be decided by answering the question of whether the invention reveals a technical contribution to the state of the art. The Court of Appeal in *Aerotel*[1] set out the following four-step approach to help decide whether a claimed invention is patentable:

> *(1) Properly construe the claim;*
> *(2) Identify the actual contribution;*
> *(3) Ask whether it falls solely within the excluded subject matter;*
> *(4) Check whether the actual or alleged contribution is actually technical in nature.*

15 In *Emotional Perception*[2] the Court of Appeal clarified that the second step may involve the 'alleged contribution' when considering a patent application, and that the 'check' of the fourth step needs to be carried out if not already covered when considering the third step.

16 The operation of the approach is explained at paragraphs 40-48 of *Aerotel*. Paragraph 43 confirms that identification of the contribution is an exercise in judgment involving the problem said to be solved, how the invention works and what its advantages are; essentially, what it is the inventor has really added to human knowledge, looking at substance, not form. Paragraph 47 adds that a contribution which consists solely of excluded matter will not count as a technical contribution.

17 In *Symbian*[3] the Court of Appeal reaffirmed the *Aerotel* approach while considering a question of "technical contribution" as it related to computer programs emphasising the need to look at the practical reality of what the program achieved, and to ask whether there was something more than just a "better program".

18 Lewison J (as he then was) in *AT&T/CVON*[4] set out five signposts that he considered to be helpful when considering whether a program for a computer makes a relevant technical contribution. In *HTC/Apple*[5] the signposts were reformulated slightly in light of the decision in *Gemstar*[6]. The signposts are:

> *i. whether the claimed technical effect has a technical effect on a process which is carried on outside the computer;*
> *ii. whether the claimed technical effect operates at the level of the architecture of the computer; that is to say whether the effect is produced irrespective of the data being processed or the applications being run;*
> *iii. whether the claimed technical effect results in the computer being made to operate in a new way;*
> *iv. whether the program makes the computer a better computer in the sense of running more efficiently and effectively as a computer;*

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[1] *Aerotel Ltd v Telco Holdings Ltd and Macrossan's Application* [2006] EWCA Civ 1371; [2007] RPC 7
[2] *Comptroller General of Patents, Designs and Trade Marks v Emotional Perception AI Ltd* [2024] EWCA Civ 825
[3] *Symbian Ltd v Comptroller-General of Patents*, [2009] RPC 1
[4] *AT&T Knowledge Ventures/Cvon Ltd* [2009] EWHC 343 (Pat)
[5] *HTC Europe Co Ltd v Apple Inc* [2013] EWCA Civ 451
[6] *Gemstar-TV Guide International Inc v Virgin Media Ltd* [2010] RPC 10

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

19 I must bear in mind that the signposts are mere guidelines for a technical contribution and should not be applied in a prescriptive manner. I also note that the paragraph after signposts in the *AT&T/CVON* judgment cautions me to consider if the claimed technical effect lies solely in excluded matter if I decide that there is a technical effect based upon the signposts. I must decide whether the claimed invention makes a technical contribution when considered on its own merits.

Assessment

20 The applicant's attorneys were of the opinion that claims 1 and 6, some minor clarity issues notwithstanding, had essentially the same scope and submissions made in relation to claim 1 would also apply to claim 6. Claim 1 was discussed at the hearing and I will base my assessment on the invention of claim 1, with the same reasoning applying to claim 6.

(1) Properly construe the claim

21 Helpfully, the description provides guidance regarding most of the specific terms of the claims:

- A "client device" is "a computing device that is associated with the user and is capable of 30 executing the client application"; it may be a smartphone, laptop or table or a desktop computer or a workstation (page 12, line 28 to page 13, line 3).

- The "client application" is "a software application that comprises a set of instructions which are executable to perform steps of the aforementioned method" (page 13, lines 7 to 9).

- A "target server" is "hardware, software, firmware, or a combination of these for backing up and storing data of at least one client application in real time or near real time" (page 14, lines 6 to 9).

- The client device(s) and the target server are "communicably coupled" via a communication network, such as the internet, a local network, a wide area network, or the like (page 14, lines 14 to 23).

- A "communication thread" is "a string of electronic communication between two or more members of the at least one communication thread" (page 15, lines 12 to 14).

- The "identification information" of a communication thread can be one of a "an identification number, an identification code, a name, of the given communication thread" (page 17, lines 8 to 10).

- The "status" of a communication thread can be "added, removed, updated" (page 16, lines 28 to 29).

22 In regard to the two types of "data slice" that the claimed invention features, an "incremental data slice" is "a data portion comprising incremental content of the at least one communication thread which succeeds and is additional to the content of

the at least one communication thread that is already present in the client application database" (page 19, lines 15-19). A "most recent data slice" is "a data portion comprising latest (i.e., up-to-date) content of the at least one communication thread" (page 18, lines 25-27).

The "data slice" can comprise one or more "pages". A "page" is a predefined amount of content of the at least one communication thread, for example a predefined number of messages of chats, but is not limited to this. If there is more than one "page" to be received from the target server, these "pages" could be iteratively requested and received by the client application in either newest-to-oldest order or oldest-to-newest order, though the claimed invention is not limited to this (see page 23, line 15 to page 25, line 21).

23 The terms "feasible", "not feasible", and "feasibility" appear in the claims and require consideration. Again, the description provides good guidance about the meaning of these terms and the applicant's attorneys seemed to accept this, though it was suggested at the hearing that the term was unspecific. I believe the skilled person would interpret the term in light of the description. In the description it is stated that:

> "It will be appreciated that when determining whether the incremental update of the data is feasible or not, based on the list of updates, the client application evaluates how much updates to the data have been accumulated on the target server. Greater the amount of the updates to the data, lesser is a feasibility of the incremental update of the data." (page 18, lines 4 to 8)
>
> "Optionally, when the list of updates indicates that a considerable amount of updates to the data are accumulated on the target server, it is determined that the incremental update of the data is not feasible." (page 18, lines 12-14)
>
> "Alternatively, optionally, when the list of updates indicates that a minimal amount of updates to the data are accumulated on the target server, it is determined that the incremental update of the data is feasible" (page 19, lines 8-10)

24 No alternative meanings relating to "feasibility" are provided. So, the feasibility of an incremental update of the data is based the number of updates since the client application database was populated with data. Whether an incremental update is feasible or not is determined based on the amount of updates in the list of updates.

25 At the hearing, I enquired about the meaning of the expression "intelligent" (loading of data), noting what is set out in the description (page 12, lines 20 to 24). The applicant's attorneys confirmed that this is meant to be a qualification, a modification, to differentiate the claimed invention from systems currently used to load data.

26 The other features of the claimed invention appear to have a scope that is consistent with the normal meaning of the features in the art.

27 I will keep the above in mind when assessing the remaining stages.

(2) Identify the actual/alleged contribution

28 The examiner and applicant did not reach agreement on the contribution made the claimed invention with the examiner stating in their pre-hearing report that the precise formulation of the contribution is unresolved.

29 So far as the applicant is concerned, in their letter of 9th October 2023 and repeated again in the skeleton arguments of 12th August 2024, they say:

> "the contribution of the present invention, namely the reduction of the wait time between the user running software and between the user using it via the intelligent loading of data solves the technical effect of creating a more effective communication system. As such, the contribution of the present invention is technical in nature."

30 In their skeleton arguments and in correspondence with the examiner, the applicant submitted that:

> "…the primary benefit of the present invention is to reduce the wait time between the user running software and between the user using it via the intelligent loading of data. In other words, the benefit is on the communication system as a whole, rather than simply the program itself. As such, the effect is on how the entire communication system runs, rather than simply the program, ie. it creates a better and more effective communication system which includes beneficial effects on hardware such as reduced CPM cycles, bandwidth and memory usage etc. For example, line 24, page 11 states:
>
> > 'The system employs a requisite technical process for obtaining the updated version of the data upon at least start-up of the client application, wherein the requisite technical process is based on recent updates or incremental updates. These updates can be used directly as the updated version of the data or can be easily added to existing data present in the client application database for generating the updated version of the data. Beneficially, this facilitates in obtaining the updated version of the data, in real time or near-real time with minimal latency/delay which is imperceptible to the user.'"

31 At the hearing, when asked if there were any relevant additions that might be made to their stated contribution, the applicant's attorneys offered that there are examples in the application text that point out how the technical process leads to the reduction in time and therefore leads to a device operating with less memory, faster, with less CPU cycles. The synchronisation of multiple devices, as per claim 2 and 5, was something that the applicants attorneys were keen to highlight when asked about the contribution made by the invention.

32 For their part, the examiner has suggested that the contribution can be found in the proposed benefits of the claimed invention found at page 18, line 30 to page 19, line 7:

> "This improves user's experience when the user uses the client application as an up-to-date content of the at least one communication thread would be readily presented to the user as soon as the user starts using the client application on the at least one client device. Moreover, when receiving the

most recent data slice from the target server, minimal bandwidth, lesser power, and shorter loading time is required, as compared to that associated with receiving the considerable amount of the data."

33 In making this statement the examiner also refers what is said in page 18, understood to be lines 4 to 11:

> "[In] determining whether the incremental update of the data is feasible or not, based on the list of updates, the client application evaluates how much updates to the data have been accumulated on the target server. Greater the amount of the updates to the data, lesser is a feasibility of the incremental update of the data. This is because receiving large amount of the updates to the data from the target server would be extremely time-consuming and would burden the communication network between the target server and the client device."

34 But this does not, however, appear to form part of the examiner's stated contribution.

35 I do not believe the contribution can be defined as broadly as the applicant and examiner suggest since both assessments of the contribution appear to rely too heavily upon the benefits of the invention and make little reference to how the invention works and what the inventor has really added to human knowledge, as suggested in paragraph 43 of *Aerotel*.

36 The problems addressed by the claimed invention are set out in "The Application" section above. In addition to the other benefits, the applicant has previously stated that the reduced use of computing resources leads to a reduction in energy use. I will consider this together with the reduction in computer usage (CPU cycles).

37 In terms of how the invention works and what it does, the invention of claim 1 relates to a system for the loading of data in a client application database (database). The system comprises a client device, able to execute a client application (application) associated with the database, and a target server in communication with the client device. When the application is started, a check is made to determine whether or not data comprising content of a communication thread for which the user of the application is a member, is present in the database. If data is present in the database, then an updated version of the thread data is obtained by the application using a first process. This first process involves receiving a list of updates that have been made to the data since the time of storing the data within the database. The list of updates includes identification information and status information for the communication thread. Based upon the list of updates, the application determines whether or not an incremental update of the data is feasible. If there are relatively few updates, then an incremental update is feasible, and the application receives an incremental data slice that can be added to the data already in the database to form the updated version of the data. If there are a relatively high number of updates, then the application determines that an incremental update is not possible. In this case, the data already within the database is deleted by the application, and a most recent data slice (the latest content) of the communication thread is received by the application and this forms the updated version of the data within the database. If there was no data in the database, then the application obtains an updated version of the data by a second process. In the second process the application receives a

first list of identification information of a thread and a second list of members of the thread. The application further receives a most recent data slice (the latest content) of the thread which is used as the updated version of the data. Whichever variety of data slice is received from the target server, the data slice is received iteratively via one or more pages having a predefined amount of content.

38 In light of this, I consider the contribution of the invention of claim 1 to reside in a system for the loading of data as set out immediately above, one that is said to present up-to-date content of a communication thread to a user with minimal delay, minimal bandwidth, reduced computing power, and shorter loading time is required, as compared to that associated with receiving a considerable amount of the data that may be present at the target server for the client application. The hardware used within the system and methods of communication between device(s) and the target server are considered entirely conventional.

(3) Ask whether it falls solely within the excluded matter, and
(4) If the third step has not covered it, check whether the actual or alleged contribution is actually technical

39 The third step of the *Aerotel* test involves considering whether the contribution falls solely within excluded categories. I shall begin by considering the computer program exclusion. In terms of the contribution that I have set out above, it is, ultimately, a program for a computer. The question is therefore whether there is an allowable technical contribution beyond being *just* a program for a computer 'as such'?

40 At the hearing and in the previous written submissions, there was much discussion regarding the first and fourth *HTC/AT&T* signposts.

41 The applicant and their attorneys have submitted that the examiner has conceded that the claimed invention, which they contend is a technical process, leads to a reduction in the time taken for a user to be able to use the application once the application is started. They argue that because time is measurable, this means that there is a technical effect outside of the computer. Further, the reduction in time leads to a device operating with less memory, faster, and less CPU cycles.

42 At the hearing the applicant's attorneys also submitted that they considered that the examiner may have been mistaken in their analysis and thought that the applicant was intending to claim as their monopoly only the benefit, the technical effect, rather than the claimed system, which embodies a technical process in the claimed steps. I do not think that this is case, even though the examiner has used only the benefit as their stated contribution. What the examiner has attempted to communicate in their previous reports is that a reduction in loading time as provided by the claimed invention is not, in their opinion, a "technical effect" on a process which is carried on outside of the computer, as per the wording of signpost 1.

43 Through their attorneys, the applicant has attempted to align their claimed invention to those inventions considered in *Vicom*[7] and *Halliburton*[8], in relation to both signposts 1 and 4.

44 The invention in *Vicom* related to image processing where the resultant image was provided using fewer computations for discrete convolution than conventional convolution whilst providing a good approximation of the results achieved by conventional convolution. At paragraph 81 of *Aerotel* it is stated:

> *"The "technical contribution" in Vicom (beyond the mere fact that the program ran on a computer) is perhaps a little elusive. Essentially however it was that the patent was for a new method of and apparatus for manipulating images."*

45 Whilst the applicant's attorneys suggested that the data transferred within a data slice could be image data, the invention as claimed is not limited to this. Though the description suggests that an image or video could be part of content of the communication thread this part of the description also states that the content may be text (see page 15, line 30 to page 16, line 5).

46 Also, the claimed invention does not relate to image processing, or image manipulation in the words of *Aerotel*, in the same way as *Vicom*. The claimed invention concerns the transfer of data, which could relate to text just as much as it could relate to images. So *Vicom* is of no assistance to the applicant.

47 The invention in *Halliburton* related to a method to design a roller cone drill bit. It was held that this was more than a computer program as such. The invention of *Halliburton* is therefore of a different nature to the invention claimed here and I do not see that it is of particular relevance to the present invention given the difference in the subject matter of the inventions.

48 In relation to signpost 1, I am not persuaded that there is any technical effect on a process which is carried on outside of the computer. It does not matter whether the computer is the client device, the target server or the system as a whole. The reduction in time to provide up-to-date content to the user provided as the technical effect of the claimed invention is not controlled process, as such, time taken is merely reduced. Signpost 1 does not aid the applicant.

49 Signpost 4 is of potentially greater relevance to the claimed invention given the reduction in time from start-up to usage of the client application and the additional benefits to the client device that this provides in terms of reduced bandwidth requirements, fewer CPU cycles and consequent reduced power requirements.

50 In paragraph 13 of their examination report of 3rd November 2022, the examiner considered signpost i), explaining that the claimed "improvement is not to the computer as a whole, but rather to the specific task of synchronising the contents of a communication thread" and that the alleged benefits are "not sufficient to impart patentability, because the benefit is localised to the particular program, not generally applicable to the working of the computer."

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[7] *T 208/84 Vicom/Computer-related Invention* [1987] OJEPO 14
[8] *Re Halliburton Energy Services Inc* [2011] EWHC 2508 (Pat)

51 He went on to highlight the relevance of *Raytheon*[9] to signpost iv):

> "…a program which "*reduces the load on the processor and made an economical use of the computer memory*" was found to still be a computer program as such; the efficient use of resources to run a single program did not result in a "*more efficient and effective computer*".

52 The examiner is essentially summarising what Kitchin J said at paragraph 37 which reads:

> "The result is not a new combination of hardware as in *Aerotel*. Nor is it an improved computer or an improved display as in *Vicom*. The result is a computer of a known type operating according to a new program, albeit one which reduces the load on the processor and makes an economical use of the computer memory. I agree with the Hearing Officer that this aspect of the contribution relates to a computer program as such."

53 Also instructive are the comments of Lewsion J, as he then was, in paragraph *Autonomy*[10]*,* also referenced by the examiner in correspondence:

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

54 I agree with the approach taken by the examiner in the light of caselaw: the benefits, or "technical effects", of reduced CPU use, power consumption and bandwidth requirements of the claimed invention do not remove the invention from the program for a computer exclusion.

55 It is also necessary to consider how the main benefit, the reduction in wait time between the user starting the client application and being able to access up-to-date information arises. This can be seen from consideration of the claimed invention. The data received that forms the updated version of the data is either the most recent data slice (when an incremental update of the data is not feasible in the first process or the second process) or the incremental data slice (when an incremental update is feasible in the first process). The most recent data slice is only the latest content of the communication thread rather than all of the content of the communication thread. The incremental data slice is also a relatively small amount of data, given that the feasibility of the incremental update is based upon a minimal amount of updates to the data have been accumulated on the target server. Whichever process or option within that process is used the amount of data to be transferred to the client application from the target server is minimal, and it is this that leads to the reduced time and the subsequent other benefits discussed above,

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[9] *Raytheon Company v Comptroller General of Patents, Designs and Trade Marks* [2007] EWHC 1230 (Pat)

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

when compared to updating what might be a considerable amount of data from the target server.

56 Whilst there will be occasions when reducing the time between an application being started and being usable involves a technical contribution, I do not think this will always be the case. What makes the difference is how the time is reduced. In the claimed invention it is because the invention ensures that only a small amount of data is transferred from the target server to the client application and so only a small amount of data has to be processed by the client application. The inventor has decided that only a small amount of data, the incremental data slice or the most recent data slice, is necessary for the user. It is that decision that leads to the reduced wait time between client application start and use. That does not appear to me to make the computer a more efficient or effective computer; it's simply that the computer has less data to process than it might otherwise have.

57 Taking all things into account, I find that signpost 4 is not satisfied.

58 At the hearing the relevance of signpost 3 to the claimed invention was discussed. Dr Motta suggested that this signpost was also satisfied because the claimed system is new. I do not think the signpost 3 is satisfied. In order to satisfy this signpost there must be more than a new system on the basis of a new program. If this were not the case then every new computer program could be said to satisfy this signpost and I do not believe that Lewison J meant this to be the case when the signposts were drafted.

59 Also during the hearing, the applicant's attorneys provided me with an extreme hypothetical example of trying to download an entire patent database, which comprise pages of data, using a standard laptop. Dr Motta suggested that the time required to achieve this would tend to infinity. However, he submitted that using the claimed invention, because of the use of feasibility and data slices, then the standard laptop could perform such a task. I find this hypothetical example to be unhelpful. For instance, it takes no regard to the meaning of "feasibility" provided in the description. The "feasibility" in the claimed invention relates to the number of updates. The present invention, if I apply it to a patent database rather than a communication thread, would either: delete pre-existing patent documents in my client application database and provide me with the most recent patent documents if there were too many new patent documents; add new patent documents to my client database if the number of new patent documents is relatively low and there were pre-existing patent documents in my database; or add the most recent patent documents to my client database if there were no pre-existing patent documents in the client database. Whatever option is taken, only a relatively small number of patent documents are transferred, rather than the whole patent collection.

60 In their submissions, the applicant has suggested that the effect is on how the communication system operates rather than simply the program, creating a better and more effective communication system which has benefits including reduced bandwidth, CPU cycles and memory usage. I am not convinced that such general benefits exist within the communication system as a whole given that the claimed invention concerns the use of a client application, and the data relates to the content of a communication thread, as specified in claim 1. It is noted that the communication network itself is conventional, the client device is a conventional

computer and the target server need only be a data repository in claim 1, when construed in light of the description.

61 In the course of examination, the applicant has also suggested that using the iterative receipt of pages also helps to provide the reduction in time lag when updating the data. How this reduction in time is achieved is not clearly discussed. From the description at page 23, line 15 to page 25, line 2 what I think occurs is that the size of the page is linked to the client application's ability to update the client application database – see page 23, lines 23-27. When the client application receives the first (or only) page of the data slice it processes it and updates the client application database. The user may then be able to use the client application with the data of this first page within the database, which could take less time than receiving and processing all of the data at once, especially if the client application is unable to update the client application database if it receives the data at once. However, this is not the same as being faster than receiving and processing all of the data of the data slice as it is a comparison based upon receiving and processing a relatively small portion of the relatively small amount of data received as part of the data slice as a whole. The reduction in time lag is restricted only to the use of the client application and this does not appear to me the type of benefit that can be said to satisfy any of the signposts.

62 During the hearing there was a brief suggestion that a client device of lower computing capability could be used to implement the required loading of data using the claimed invention than would otherwise be the case. There appears to be no suggestion of this in the application as filed and I am unclear how a less capable computer would be improved as a computer by the invention, though I concede that a less capable computer could request and receive the lesser amount of content provided in the present invention. However, the claimed invention is not limited by the capability of the client device so this argument is not persuasive.

63 It was common ground at the hearing that signposts 2 and 5 were not relevant to the claimed invention and so I will not discuss them here.

64 Stepping back and considering the claimed invention as a whole, it consists entirely of software running on a conventional computer arrangement, and the computers themselves are not operating in a new way. The reductions in time delay, CPU usage, energy use and bandwidth requirements result from the amount of data transferred being limited rather than a new method or system of computing or communication. Overall, the claimed invention avoids the problem of time delays by only handling a reduced amount of data rather than improving computing or communication techniques in general.

65 I therefore find that the invention defined in claim 1 is excluded from patentability as a program for a computer, as such, because it lacks the required technical contribution.

66 It follows that claim 6 is also excluded from patentability.

67 Although I do not have to consider claims 11 to 13 given their deletion in the amendments filed 2nd September 2024, I observe that these claims would have been found to be excluded from patentability for the same reasons as claims 1 and 6. If

these claims are intended to have broader scope than either of claim 1 or claim 6, it remains that these claims still involve the transmission and processing of a smaller amount of data to provide similar benefits as for the invention of claims 1 and 6. For the reasons given above I do not consider that deciding to transfer and process a small amount of information to be a technical contribution.

Conclusion

68 I have found that the claimed invention does not comply with section 1(2) as it relates to a program for a computer, as such. I therefore refuse the application under section 18(3).

69 I have carefully considered the dependent claims, and the description, and I do not see anything which could form the basis of a valid claim.

Appeal

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

Barnaby Wright

Patent Examination Group Head