

The claim set filed on the 19th January 2011 thus formed the basis for the hearing and this decision.

The application

- 5 The application relates to a mobile communication device and a method for updating information for a mobile communication device.
- 6 During operation of a mobile communication device a user may activate a communication session between the device and a network where information required by the user is downloaded. The device has a cache for storing the downloaded information wherein each information item has an associated time limit.
- 7 The time limit is used to determine whether a stored information item requires revalidation/refreshing. When the time limit has been exceeded the device automatically revalidates/refreshes the information item when access to the network is available.
- 8 The automatic revalidation/refreshing of the stored information is carried out by the device "offline" with the user unaware that the stored information is being updated. The user experience is therefore enhanced as the offline updating of the stored information allows the user to have up to date information.

The claims

- 9 As discussed in paragraph 4 above, the claim set filed by the applicant on 19th January 2011 formed the basis for the hearing. Since this claim set was filed immediately prior to the hearing, they have not been examined for novelty, inventive step, clarity or support. In the event that I find in the applicant's favour, the application will need to be remitted to the examiner for consideration of these points.
- 10 There are 10 claims in total (including two independent claims and two omnibus claims). Independent claims 1 and 8 read as follows:
 1. *A mobile communication device including:

a user interface for enabling the user to select one or more web pages for display, said web pages comprise one or more information items;

a cache for storing downloaded information items;

a transceiver for communicating with a communications network and retrieving one or more information items from the communications network, each information item having an associated age limit value; and

a user agent arranged to:

after a predetermined polling interval, determine whether the age limit for each retrieved information item stored in the cache has been exceeded; and*

for each information item having an exceeded age limit, automatically operate the transceiver to revalidate and /or refresh said information item when access to the communications network is available.

8. *A method of updating information for a mobile communication device which includes:*

using a user interface to select one or more web pages for display, said web pages comprise one or more information items;

storing downloaded information items in a cache;

communicating with a communications network and retrieving one or more information items from the communications network via a transceiver, each retrieved information item having an associated age limit value; and;

a user agent arranged to:

after a predetermined polling interval, determining whether the age limit for each retrieved information item stored in the cache has been exceeded; and

for each information item having an exceeded age limit, automatically operating the transceiver to revalidate and/or refresh said information item when access to the communication network is available.

Issue to be decided

- 11 The issue before me to decide is whether the claims satisfy section 1(2)(c) of the Patents Act 1977.

The law and its interpretation

- 12 The relevant parts of section 1(2) read 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 performing a mental act, playing a game or 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.

- 13 Current IPO examination practice is to use the structured approach set out by the Court of Appeal in its judgment in *Aerotel/Macrossan*¹ for deciding whether an invention is patentable. In this case, the court reviewed the case law on the interpretation of section 1(2) and approved a four-step test for the assessment of patentability, namely:
- 1) Properly construe the claim;
 - 2) Identify the actual contribution;
 - 3) Ask whether it falls solely within the excluded matter;
 - 4) Check whether the contribution is actually technical in nature.
- 14 More recently, the Court of Appeal in the case of *Symbian*² confirmed that this structured approach is one means of answering the question of whether the invention reveals a technical contribution to the state of the art. In other words, *Symbian* confirmed that the four-step test is equivalent to the prior case law test of ‘technical contribution’, as per *Merrill Lynch, Gale and Fujitsu*.
- 15 Operation of this test is explained in paragraphs 40-48 of the judgment. Paragraph 43 confirms that identification of the contribution is essentially a matter of determining what it is that the inventor has really added to human knowledge and involves looking at the substance of the invention claimed, rather than the form of the claim. Paragraph 46 explains that the fourth step of checking whether the contribution is technical may not be necessary because the third step – asking whether the contribution is solely of excluded matter- should have covered that point.

Application of the Aerotel test

First step: Properly construe the claim

- 16 The first step in the *Aerotel/Macrossan* test requires me to construe the claims. The amended claims now before me relate to a mobile communication device and a method of updating information for a mobile communication device. I note that this claim set now includes features not present in previous claim sets such as “a user agent” and “a predetermined polling interval”. Both of these features were discussed in detail at the hearing.
- 17 Firstly, looking at the “user agent”, Dr Sneary stated that “user agent” is not a specific term of the art and that he considered the “user agent” to be “*a physical entity which is a new piece of hardware that can be plugged into new and/or existing mobile communication devices*”. Dr Sneary explained that the “user agent” would be connected to the memory/cache and would control the transceiver to revalidate/refresh information from the communications network.
- 18 Looking at page 10, lines 16-17 of the application as filed, the “user agent” is

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

² [2009] RPC 1

described as being *“implemented by the processor of the mobile terminal”*. It appears to me therefore, that the “user agent” controls the decision making process for when to revalidate/refresh information from the communications network when available. It is not clear to me however from the application as filed, where support lies for Dr Sneary’s argument that the “user agent” is a new piece of hardware. Contrary to Dr Sneary’s argument, even if it is considered that such an embodiment of the “user agent” is supported, albeit implicitly, the “user agent” need not necessarily take the form of a discrete component which is a new piece of hardware – being described in the application as *“implemented by the processor of the mobile terminal”* which, is essentially through programming. As I have indicated in paragraph 9 above, I am not taking a view as to whether the claims before me are supported by the application as filed.

- 19 Now turning to “a predetermined polling interval”, Dr Sneary explained that this was the time interval for the “user agent” to determine whether information stored in the cache/memory was “out of date” and thus required revalidating/refreshing. Dr Sneary further explained that the polling interval could be set by the user and that the interval could be different for different information items depending on how often the user felt the information required updating e.g. football scores or share prices could be updated every minute whereas the latest news from a new website could be updated every hour. I am content with this interpretation of “a predetermined polling interval”.
- 20 Taking on board what I have learned from the discussion at the hearing and my interpretation of the application, I consider the claims relate to a mobile communication device having a user interface enabling a user to select information items to be displayed, a memory/cache to store the downloaded information items and a transceiver for communicating with a communications network and a “user agent” to control the decision making process for when to retrieve information items from the communications network. Each item of retrieved information has an associated age limit value. The “user agent” is arranged to, after a predetermined polling limit, determine whether the age limit of an information item has been exceeded, and if so, to automatically operate the transceiver to revalidate/refresh the information item when access to the communications network is available.
- 21 In simple terms I view this as a communications device which provides the user with up to date information in a more time relevant manner.

Second step: Identify the contribution

- 22 Dr Sneary stated that a proper interpretation of the contribution made by the claims is **“a new physical piece of hardware providing the user with time relevant content at all times in a power efficient manner.”**
- 23 Dr Sneary and Mr Lyle both argued that the “user agent” provides a mobile communication device that is more power efficient and as such allows for longer battery life.
- 24 I disagree with the contribution as identified by Dr Sneary. Whilst I agree that the

“user agent” provides the user with time relevant content at all times, I do not agree that the contribution is a new physical piece of hardware that provides for a more power efficient mobile communication device.

- 25 As discussed above in paragraph 18, I consider, at least in the embodiment described in the application as filed, the “user agent” to be implemented by the processor of the mobile communication device through programming of the processor. The “user agent” is not necessarily a physical piece of hardware, even if such an embodiment is implicit in the original disclosure.
- 26 It would appear from the application as filed that the “user agent” allows automatic updating of information stored in the cache/memory. The main feature of the “user agent” is that the automatic updating of the information is done without the user being aware. This automatic “offline” background downloading of information can be done at any time during the day when access to the communications network is available. This provides the user with an enhanced user experience as up to date information is available at all times.
- 27 Turning now to the argument that the “user agent” provides a mobile communication device that is more power efficient. I note that nowhere in the application as filed is there any mention of a more power efficient device or to increased battery life. I am not convinced that the “user agent” would necessarily lead to a more power efficient device and in fact it would appear to me that, depending on the polling interval set by the user and the age limit associated with a particular information item, the “user agent” could in fact automatically operate the transceiver to revalidate/refresh the information item more regularly than general prior art devices, which would surely lead to increased power usage and shorter battery life.
- 28 Taking the above into consideration, I consider the contribution (i.e. what has been added to human knowledge in line with paragraph 43 of *Aerotel/Macrossan*) to be a mobile communication device having a “user agent” for (i) controlling the decision making process for when to revalidate/refresh information items stored in the cache/memory through the use of age limits associated with each stored information item and (ii) when determining that an age limit has been exceeded, to automatically operate the transceiver to revalidate/refresh the information item when access to the communications network is available.

Third step: Ask whether the contribution falls solely within excluded matter

- 29 During the examination stage, the examiner reported that the invention defined in previous claim sets on file was excluded as a method of doing business, a mental act and/or a program for a computer. As mentioned in paragraph 9 above, the current claim set has not been fully examined. However, the nature of the fundamental objection to excluded matter has not changed and I will now consider the specific exclusions of section 1(2)(c), namely whether the invention is excluded as a program for a computer, a method of doing business and/or a mental act.

Computer program

- 30 Dr Sneary and Mr Lyle argued that the applicant's interpretation of the contribution clearly does not lie solely within the excluded matter since solving the problem of power efficiency and extending battery life is more than that and is solving a technical problem. A technical problem has been solved by a technical means i.e. the "user agent" provides for a mobile communication device which is more power efficient and thus increases battery life. This leads to a better device that is more reliable and efficient.
- 31 As stated earlier, I do not agree with the applicant's interpretation of the contribution. I consider the contribution to be a "user agent" for controlling the decision making process for when to revalidate/refresh information items stored in the cache/memory as outlined above. The "user agent" may result in a better mobile communication device in the sense that it provides the user with more up to date information than prior art devices but it does not solve a technical problem lying within the mobile communication device itself.
- 32 In my view, the contribution is effected by a code to program the mobile communication device's processor to perform the decision making process and the mobile communication device merely operates in accordance with the programming code.
- 33 Contrary to the allowed invention in *Symbian*, the "user agent" implemented through programming the processor of the mobile communication device in the current application does not result in a mobile communication device with improved speed or reliability. The mobile communication device with the "user agent" still operates in the same way as a similar prior art mobile communication device, it is merely better programmed – the device itself remains unchanged.
- 34 At the hearing I invited Dr Sneary and Mr Lyle to consider the signposts set out by Lewison J in *AT&T/CVON*³ but both stated that they didn't consider it necessary. However, for completeness, I have given consideration to these signposts in order to confirm my view that the contribution falls within the computer program exclusion. I will therefore consider them briefly. In paragraphs 39-41 of *AT&T/CVON*, Lewison J went on to say:

It seems to me, therefore, that Lord Neuberger's reconciliation of the approach in Aerotel (by which the Court of Appeal in Symbian held itself bound, and by which I am undoubtedly bound) continues to require our courts to exclude as an irrelevant "technical effect" a technical effect that lies solely in excluded matter.

As Lord Neuberger pointed out, it is impossible to define the meaning of "technical effect" in this context, but it seems to me that useful signposts to a relevant technical effect are:

i) whether the claimed technical effect has a technical effect on a process which is carried on outside the computer;

³ AT&T Knowledge Ventures LP [2009] EWHC 343 (Pat)

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 there is an increase in the speed or reliability of the computer;

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

If there is a technical effect in this sense, it is still necessary to consider whether the claimed technical effect lies solely in excluded matter.

35 The contribution in this case does not meet any of the above signposts. The contribution clearly lies in the programming of the mobile communication device's processor to implement the "user agent" for controlling the decision making process for when to revalidate/refresh information items stored in the cache/memory in accordance with the criteria set out in the claims.

36 Taking into full consideration the arguments presented at the hearing and the specification, I conclude that the contribution does not have a relevant technical effect and simply consists only of excluded subject matter and is no more than a program for a computer as such.

Business method

37 In practical terms, the mobile communication device provides the user with a better service i.e. more time relevant information, rather than solving some technical failure within the device. Therefore the contribution, in my view, also relates to a business method as such, implemented by a computer program.

Mental act

38 Since I have found the contribution to be excluded both as a computer program as such and a method of doing business as such, I will not go on to consider whether the contribution is also excluded as a mental act as such.

Step four: Check whether the contribution is actually technical in nature

39 I have already given consideration to this in step 3 above.

Conclusion

40 After taking into full consideration the applicant's arguments as presented by Dr Sneary and Mr Lyle, the examiner's objections to previous claim sets and also the patent specification, I conclude that the claims before me define non-patentable inventions which fall within the business method as such and program

for a computer as such exclusions of section 1(2)(c). I can see nothing in the remaining claims or the rest of the specification that could form the basis of a valid claim. I therefore refuse the application under section 18(3) for failing to comply with section 1(2)(c).

Appeal

- 41 Under the Practice Direction to Part 52 of the Civil Procedure Rules, any appeal must be lodged within 28 days.

C L Davies

Deputy Director acting for the Comptroller