

PATENTS ACT 1977

APPLICANT Afilias Technologies Limited

ISSUE Whether patent application number
GB0818639.7 complies with Section 1(2)

HEARING OFFICER Dr. Stephen Brown

DECISION**Introduction**

- 1 This decision concerns the issue of whether the invention claimed in patent application GB0818639.7 relates to non-excluded subject matter as required by section 1(2) of the Act. It is entitled "Transcoding a web page" and was filed with a priority date of 10th October 2008. The application was published as GB2464313 on 14th April 2010.
- 2 The examiner has maintained throughout that the invention claimed in this application is excluded from patentability as some combination of a program for a computer and/or the presentation of information as such. Despite several rounds of amendment the applicants and the examiner have been unable to agree. The case was thus sent for a decision on the papers on 8th April 2013.

The Invention

- 3 The claims relate to transcoding a web site and providing the resultant web page to a mobile communication device. The most current claims were filed on 21 February 2013. There are 16 claims, three of which are independent. Claim 1 relates to a method of providing a transcoded web page, claim 13 to apparatus for providing the transcoded web page, and claim 14 to computer software which when run on a computing device will carry out the method of claim 1. In my view all of these claims express the same inventive concept and thus will stand or fall subject to the conclusions reached in respect of any one of them. For simplicity therefore, the following discussion will deal primarily with claim 1. The wording of claim 1 is as follows:

A method of providing a transcoded web page of a web site to a mobile communication device, the method comprising:

parsing a plurality of web pages of the web site to extract information found on the web site, the information being found on a first but not a second web page of the plurality of web pages;

storing the extracted information;

subsequent to the storing, receiving a request for the second web page of the plurality of web pages;

transcoding the second web page; and

providing the transcoded second web page to the mobile communication device in response to the request,

wherein transcoding the second web page includes generating an element representing the stored information and inserting the element into the transcoded second web page.

The law and its interpretation

4 Section 1(2) of the Patents Act reads:

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:

...

(c) a scheme, rule or method for performing a mental act, playing a game or doing business, or a program for a computer;

(d) the presentation of information;

but the foregoing provision shall prevent anything from being treated as an invention for the purposes of this Act only to the extent that a patent or application for a patent relates to that thing as such

5 In addition to the above there is also the case law established in the UK in *Aerotel/Macrossan*¹, and further elaborated in *Symbian*² and *AT&T/CVON*³. In *Aerotel* the Court of Appeal 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 (or alleged) contribution

¹ *Aerotel Ltd v Telco Holdings Ltd (and others) and Macrossan's Application* [2006] EWCA Civ 1371

² *Symbian Limited's Application* [2008] EWCA Civ 1066

³ *AT&T Knowledge Ventures LP and CVON Innovations Limited* [2009] EWHC 343

- 3) Ask whether it falls solely within the excluded matter
- 4) Check whether the contribution is actually technical in nature.

The operation of the test is explained at paragraphs 40-48 of the judgment. Paragraph 43 confirms that identification of the contribution is essentially a matter of determining what it is the inventor has really added to human knowledge, and involves looking at substance, not form. Paragraph 47 adds that a contribution which consists solely of excluded matter will not count as a technical contribution.

Application of the *Aerotel* test

Properly construe the claim

- 6 I do not think that this step poses any problems. The claims relate to transcoding a web site by parsing a plurality of pages and storing information that is found on one page of the site. When another page is transcoded the previously stored information is inserted before providing a resultant page to a mobile communication device. From the dependent claims and the description, the 'stored information' may be a street address, a map indicating a street address, a telephone number or a brand logo.

Identify the actual contribution

- 7 From the description as a whole I have no doubt that the invention is implemented on standard computing devices connected by a standard communication network. It is also clear that the contribution requires a computer program for its implementation.
- 8 The prior art identified by the examiner shows that it is known to transcode web sites, extract information, such as phone numbers, from them and reinsert it into a display suitable for mobile devices. I note that the applicants do not dispute this conclusion. Rather they argue that what is new in this case is parsing a plurality of web pages and inserting the information extracted from one of them into the transcoded version of a different page. On the basis of the citations found by the examiner this seems a reasonable assertion.
- 9 I thus construe the contribution to be a computer implemented system for parsing a plurality of web pages and inserting the information extracted from one of the pages into the transcoded version of a different page.
- 10 The fact that the invention is effected as a computer program does not of course mean that it is automatically excluded as the thing as such. What matters is whether or not the invention provides a technical contribution beyond that of a program running on a conventional computer.

Ask whether it falls solely within excluded matter

- 11 In their letters to the Office, the attorneys for the applicants have made two main arguments:
- i. That the invention provides a better transcoding of web pages by doing a 'pre-crawl' to extract and store information that would be slow to transcode in real time due to the processing restraints and limited bandwidth inherent in mobile devices. This, they argue, is a technical solution to a technical problem;
 - ii. That providing information is not the same as presenting information, it includes identifying, extracting and transporting the information before any presentation is possible. It is thus not excluded as such;
- 12 I will address these arguments in order. Firstly, does a 'better' transcoder represent a non-excluded contribution? To help me answer this I will turn to the decision in *Symbian*². Paragraphs 54 & 56 of that decision state that:

More positively, not only will a computer containing the instructions in question "be a better computer", as in Gale, but, unlike in that case, it can also be said that the instructions "solve a 'technical' problem lying with the computer itself". Indeed, the effect of the instant alleged invention is not merely within the computer programmed with the relevant instructions. The beneficial consequences of those instructions will feed into the cameras and other devices and products, which, as mentioned at [3] above, include such computer systems. Further, the fact that the improvement may be to software programmed into the computer rather than hardware forming part of the computer cannot make a difference – see Vicom; indeed the point was also made by Fox LJ in Merrill Lynch.

and:

Putting it another way, a computer with this program operates better than a similar prior art computer. To say "oh but that is only because it is a better program – the computer itself is unchanged" gives no credit to the practical reality of what is achieved by the program. As a matter of such reality there is more than just a "better program", there is a faster and more reliable computer.

- 13 In my opinion there are number of differences between this case and the invention in *Symbian*². Firstly, performing a 'pre-crawl' to extract and store information that would be slow to transcode in real time does not appear to solve a technical problem lying with the computing system itself. Rather, it seems to me to be a programming solution to circumvent the processing restraints of mobile devices. Neither does the identified contribution result in a faster or more reliable computing system. The transcoder may, in some circumstances, be able to display a web page faster than a prior art transcoder but that is simply because it is a better application. The computing system itself does not appear better as a matter of practical reality.

- 14 This conclusion is reinforced if I turn to CVON³. In paragraphs 39-41 of this case Lewison J states:

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;*
- 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.*

And, 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.

- 15 In respect of the first signpost, there is no effect outside of the computer system, other than some web pages being displayed faster to a user. I will return to this point below.
- 16 In respect of the second signpost, the identified contribution does not operate at the level of the architecture of the computer system. While it does operate irrespective of what web pages are being accessed, it does not operate irrespective of the *applications* being run. It only *may* occur when a user is browsing the web.
- 17 Turning to the third signpost, the computer system itself does not appear to be operating in any new way. What is new is the transcoding software that is supporting any web browsing applications.
- 18 As for the fourth signpost, I can see no evidence that the computer system itself is operating faster or with greater reliability. All that may be faster is the time taken to view a web page.
- 19 Finally, there is the fifth signpost. In this case the problem being solved is how to transcode web pages quickly given the processing restraints and limited bandwidth inherent in mobile devices. The identified contribution achieves this

by doing a 'pre-crawl' to extract and store information that may be slow to transcode in real time. To my mind, this simply circumvents the problem – the claimed transcoder does not alter the processing ability or bandwidth of any mobile devices using it.

- 20 Next, the applicants also argue that providing information is not the same as presenting information. They maintain that it includes identifying, extracting and transporting the information before any presentation is possible. These steps, they argue, are not excluded as such.
- 21 However, this argument does appear somewhat at odds with Lewison J's words in autonomy⁴. At paragraph 30 of this decision, he states (my emphasis added):

The second of the relevant exclusions is "presentations of information." In a case such as the present, if there is a contribution which is more than would be expected from the mere loading of a new program into a computer, one must then go on to ask: is the additional contribution more than the presentation of information? If it is not, then the contribution remains within an exclusion from patentability. The "presentation of information" includes both the provision of information and also methods of expressing the information: Townsend's Application [2004] EWHC 482 (Pat).

- 22 As he makes clear, Lewison J is following the decision in Townsend⁵. In paragraphs 8-10 of that decision Laddie J said:

Mr Townsend's central submission is that the words "presentation of information" in the legislation can mean either "the expression of information" or "the provision of information". He accepts that the subject matter of Claim 1 is excluded from patentability if "presentation of information" in s 1(2)(d) includes "provision of information". This is because the function of the "additional indicium" is to provide information. On the other hand, if, as he submits, the words in the section are designed to exclude only expressions of information – in other words how information is provided, the claim survives.

The difference may be illustrated as follows. To mark an advent calendar door with the words "only three more shopping days to Christmas" is the provision of information. To require those words to be printed in Times Roman font is to stipulate the expression of the information carried by the words. Mr Townsend argues that the latter, but not the former, is excluded from protection by s 1(2).

In my view, this is a simple point with a simple answer. "Presentation of information" in the section does encompass providing information. It is the natural and primary meaning of those words. As Mr Birss argues, the provision consists of ordinary English words. They are not ambiguous. If the indicium on the advent calendar door consists of the words "this is for Paul" or "don't be greedy, it's your sister's turn", it is conveying or presenting information.

⁴ Autonomy Corporation Ltd v The Comptroller [2008] EWHC 146 (Pat)

⁵ Townsend, Re Patents Act 1977 [2004] EWHC 482 (Pat)

- 23 Thus it is clear that the 'provision' of information is to be considered the same thing as the presentation of information and thus excluded where it is only that thing as such. So returning briefly to the first AT&T³ signpost, there is no effect outside of the computer system other than the (faster) presentation of information. Thus this signpost does not appear to point towards a relevant technical effect.
- 24 I note though that the applicants also mention the "identifying, extracting and transporting of information" prior to its presentation. However, these steps are all performed by the computer programme within an otherwise standard computer system. As discussed above, the computer system is not operating in a new way. Neither can I see any relevant technical effect outside the computer system. The contribution does not, in my opinion, create a better computer system, rather it creates a 'better' web page transcoder. I am therefore forced to conclude that the contribution is excluded as no more than a program for a computer and the presentation of information as such.

Check whether the contribution is actually technical in nature

- 25 As reasoned above, the contribution does not have a relevant technical effect. Thus the application fails the fourth Aerotel step.

Decision

- 26 I have found that the contribution made by the invention defined in the independent claims falls solely in subject matter excluded under section 1(2) as a program for a computer and the presentation of information as such. I have read the specification carefully and 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).

Appeal

- 27 Any appeal must be lodged within 28 days.

Dr. Stephen Brown

Deputy Director, acting for the Comptroller