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21 February 2007

PATENTS ACT 1977

APPLICANT Arbitron Inc

ISSUE Whether patent application number GB 0501355.2 complies with section 1(2)

HEARING OFFICER D J Barford

DECISION

Introduction

1 International patent application number PCT/US2003/022377, entitled "Media data usage measurement and reporting systems and methods" was filed on 18 July 2003 in the name of Arbitron Inc, claiming a priority date of 26 July 2002 from a United States application. The international application was published as WO 2004/012121 on 5 February 2004.

2 On 15 October 2003, the United States Patent Office acting as the International Search Authority issued an international search report under article 18 of the Patent Cooperation Treaty. A request to enter the national phase was filed on 21 January 2005 and the application was republished as GB 2406194 on 23 March 2005.

3 The Patent Office examiner issued a first examination report under section 18(3) on 28 April 2005, objecting, amongst other things, that the application was excluded from patentability under section 1(2) as a computer program and mental act, and that the invention lacked an inventive step contrary to section 1(1)(b) having regard to US patent number 5848396 (Gerace).

4 The applicant responded on 1 December 2005 by filing amended claims, but the patentability objection was maintained in a second examination report issued on 15 December 2005. The applicant responded on 18 April 2006 by filing further amendments and argument, and requested a hearing in the event that the objection was maintained. In a letter dated 16 June 2006 the examiner maintained the objection and summarised the issues to be heard, however in a letter of 9 August 2006 the applicant requested a decision on the papers.

5 Following the judgement of the Court of Appeal in *Aerotel Ltd v Telco Holdings and others* and *Macrossan's Application* [2006] EWCA Civ 1371

("*Aerotel/Macrossan")*, the examiner issued a further letter dated 23 November 2006 in which he reassessed the case and maintained the objection that the invention was excluded as relating to a computer program as such. The applicant did not respond and it now falls to me to decide the issue on the papers.

The application

6 The application relates to determining the popularity of various websites, broadcasting channels etc according to certain criteria, eg audience demographics. As described, a user receives "media data" from such sources through a network- connected computer which monitors and pre-processes the data to provide micro reports for sending over a network to a reporting system.

7 In the application as filed there are 66 claims of which nine are independent. In the application as stands amended on 18 April 2006, there are 29 claims of which claims 1, 20 and 29 are independent. These read:

> 1. A method of using a user system comprising a network-connected computer to gather data reflecting usage of media data by a user using the user system, comprising:
>
> receiving a plurality of media data in a user system;
>
> using each of a plurality of media data usage gathering objects running on the user system to collect and preprocess usage data reflecting usage of a respectively different portion of and/or user agent for the plurality of media data received by the user system, by selecting the usage data based on predetermined criteria;
>
> using a micro-level reporting object running on the user system to gather usage data from the plurality of media data usage gathering objects,
>
> the usage data being preprocessed by the user system to associate the usage data with at least one of demographic data of a user or users of the media data, one or more RCL sessions, one or more user sessions, user-specific data, and system data; and
>
> using an object transmission process running on the user system to communicate the micro-level report object to a report system over a network.
>
> 20. A user system comprising a network-connected computer arranged to gather data reflecting usage of media data by a user of the user system, comprising:
>
> a plurality of media data usage gathering objects running on the user system each for collecting and preprocessing usage data reflecting usage of a respectively different portion of and/or user agent for, a plurality of media data received by the user system, by selecting the usage data based on predetermined criteria;
>
> a micro-level reporting object running on the user system to gather usage data from the plurality of media data usage gathering objects,
>
> the usage data being preprocessed by the user system to associate the usage data with at least one of demographic data of a user or users of the media data, one or more RCL sessions, one or more user sessions, user-specific data, and system data; and
>
> an object transmission process running on the user system for communicating the micro-level report object to a report system over a network.
>
> 29. A user system comprising a network-connected computer arranged to gather data reflecting usage of media data by a user of the user system, comprising:
>
> software for measuring the usage of media data including:
>
> a plurality of media data usage gathering objects running on the user system each to collect and preprocess usage data within the user system reflecting usage of a respectively different portion of and/or user agent for, a plurality of media data received by the user system, by selecting the usage data based on predetermined criteria;

a micro-level reporting object running on the user system to gather usage data from the plurality of media data usage gathering objects,

the usage data being preprocessed by the user system to associate the usage data with at least one of demographic data of a user or users of the media data, one or more RCL sessions, one or more user sessions, user-specific data, and system data; and

an object transmission process running on the user system for communicating the micro-level report object to a report system over a network.

8 Some of the expressions used in the claims are defined in the body of the application. Notably, paragraph [0024] states that 'The term "object" as used herein means a distinct software module or collection of computer code..'

9 The initials "RCL" used in the claims stand for "Resource control location ". Paragraph [0025] states that this term 'shall include but not be limited to television and radio stations and channels, as well as entities which exercise control over media data supplied via the Internet or other network.'

The law

10 The relevant part of section 1(2) reads:

> *(2) 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.*

11 In *Aerotel/Macrossan* the Court of Appeal approved the following four-step test for the assessment of patentability under section 1(2):

(1) properly construe the claim;

(2) identify the 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.

The issues

12 The examiner applied the above test in his letter of 23 November 2006, concluding under step (3) that the alleged contribution falls solely within

subject matter excluded under section 1(2).

13 Relevant to the application of steps (1) and (2) of the test are the points made in the applicant's letter of 18 April 2006. This states that

> 'The prior art, as perhaps best represented by Gerace (US patent number 5848396), teaches the compilation of media exposure information by the user systems sending all data regarding media exposure to the host server then compiling what reports are desired. As mentioned in paragraph [0002] of the application, large amounts of data are generated and the system, as a whole, requires substantial processing, bandwidth and storage resources.
>
> The present invention teaches using the user system to form micro-level reporting objects (that correspond to reports on media exposure) and then sending these pre-processed reports to the host server over the network. This is to the detriment of the user systems that must perform more processing, but to the benefit of the system as a whole because (1) the reduced data flow across the network allows the network to operate faster and transmit information more efficiently, and (2) the processing overhead at the host server is far reduced.
>
> Hence, the advance in the art can be seen to be using the user system to pre-process the data to form a micro-level reporting object and to communicate the micro-level reporting object across the network, thereby achieving a faster and more efficient system as a whole.'

14 On whether or not the invention is merely a computer program, the applicant went on to conclude that

> 'A clear technical benefit is realised by the invention, as described above. Namely, the present invention provides a system of networked computers that may function faster and more efficiently in view of the reduced bandwidth required by each user system. This mirrors closely a technical effect identified in *RIM v Inpro* [2006] EWHC 70, "What the claims give is a technical effect: computers running faster and transmitting information more efficiently, albeit ultimately for the purpose of displaying part of that information" (see paragraph 186).'

15 In his letter of 16 June 2006, the examiner concluded from this that the applicant accepted that the contribution was the fact that pre-processing of data is done on the user's system – rather than what the pre-processing actually entails. He also argued that since the idea of pre-processing of data is known, the alleged contribution has to lie in pre-processing in the particular context set out in the claims. He went on to conclude that the only way the invention will lead to a decrease in data transmitted is by reducing the amount of information being sent.

Conclusions

16 The above view on what constitutes the contribution (or alleged contribution) was re-iterated in the examiner's letter of 23 November 2006 when applying steps (1) and (2) of the test set out in *Aerotel/Macrossan.* The examiner identified the contribution as being "that when generating usage data reports, the usage data is pre-processed by associating it with at least one of demographic data of a user or users, one or more RCL sessions, one or more user sessions, user specific data and system data on the user's system". This conclusion has not been challenged by the applicant, and indeed follows largely from the case made by the applicant itself; and in my view it is fully justified.

17 For the purposes of step (3), the question to address is does this fall solely within the excluded subject matter set out in section 1(2)? Of the claims quoted above, whereas claim 1 relates to a pure method, claims 20 and 29 relate to systems, but there is no suggestion that the elements of apparatus in those claims are anything other than wholly conventional, individually or collectively. The claims refer to "objects running on the user system" and as noted above the application defines "object" to be "a distinct software module or collection of computer code". Thus the contribution described above is provided by running a computer program to pre- process data locally. This, it seems to me, is no more than the manipulation of data– albeit on the user's system rather than on a host server – using known hardware. It follows to my mind that as a matter of substance, taken in context, the invention contributes nothing beyond that program.

18 I conclude that the invention fails step (3) of the test as being a program for a computer as such.

19 Having so concluded I do not need to go on to consider step (4). However the applicant has argued – in accordance with the case law applying previous to the *Aerotel/Macrossan* judgement – that the invention cannot be properly regarded as relating to no more than a computer program as such since it results in a technical benefit. For completeness I shall address that argument, which is that the invention provides a system of networked computers that may function faster and more efficiently in view of the reduced bandwidth required by each user system. The applicant draws support for this line of argument from the judgement in *RIM v Inpro* [2006] EWHC 70, quoting from paragraph 186 of that judgement a passage which reads: "What the claims give is a technical effect: computers running faster and transmitting information more efficiently, albeit ultimately for the purpose of displaying part of that information".

20 However, as pointed out by the examiner, the reduction in data flow in the present invention is simply a consequence of a reduction in the volume of information being transmitted – rather than resulting from any new technique for transmitting data. Accordingly I conclude that the invention would also fail step (4).

Decision

21 I have concluded that the invention is excluded from patentability 1(2)(c) as a program for a computer as such. I can see no subject matter in the other claims or indeed anywhere else in application that could be used to remedy this. I therefore refuse the application under section 18(3).

Appeal

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

DAVID BARFORD
Deputy Director acting for the Comptroller