



PATENTS ACT 1977

APPLICANT Claria Corporation

ISSUE Whether patent application number

GB0724938.6 complies with section 1(2)

HEARING OFFICER J E Porter

Introduction

- Patent application GB 0724938.6 entitled "Method and system for controlling and adapting a media stream" results from the entry into the UK national phase of international application PCT/US2006/025103, in the name of Claria Corporation.
- The international application was filed on 28 June 2006, with a claim to a priority date of 28 June 2005. It was published as WO 2007/002728 A2 on 4 January 2007, and was reprinted as GB 2 441 708 A after entering the UK national phase.
- Following amendment of the claims and correspondence between the examiner, Mr Ben James, and the applicant's attorneys, D Young & Co. LLP, the examiner remains of the view that the claimed invention is excluded from patentability under section 1(2). With the position unresolved, the applicant has requested that the matter be referred to a hearing officer for a decision on the papers.

The law

4 Section 1(2) declares that certain things are not inventions for the purposes of the Act, 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) a discovery, scientific theory or mathematical method;
- (b) a literary, dramatic, musical or artistic work or any other aesthetic creation whatsoever:
- (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. The examiner and the applicant agree that the assessment of patentability under section 1(2) is governed by the judgment of the Court of Appeal in *Aerotel*¹. In this judgment, the court reviewed the case law on the interpretation of section 1(2) and approved a four-step test for the assessment of what is often called "excluded matter", as follows:

Step one: properly construe the claim

Step two: identify the actual contribution (although at the application stage this might have to be the alleged contribution)

Step three: ask whether it falls solely within the excluded matter

Step four: check whether the actual or alleged contribution is actually technical in nature.

- Subsequently, the Court of Appeal in *Symbian*² made clear that the *Aerotel* test is not intended to provide a departure from the previous requirement set out in case-law, namely that the invention must provide a "technical contribution" if it is not to fall within excluded matter.
- The applicant's written submissions in response to the examination reports cover various points concerning how the *Aerotel* test should be applied to the invention in question. I consider these submissions as a part of my analysis below.

The invention

- The invention lies in the field of controlling and adapting media content supplied from more than one source in particular content from a website and a cable television source.
- A media server receives the content and distributes it to a user via one or more media outlets, such as a television, computer, media player or mobile device. The media content provided to the user is categorised. Furthermore, the user's behaviour is monitored, and examples given include the user's search requests or "click-throughs" (the process of clicking on an online advertisement in order to reach the web destination of the advertiser). The media categorisation and user behaviour information is then used to create and update a user profile, and the media content can then be adapted to particular users' preferences based upon their user profile. In particular, tailored commercial information can be provided based upon the user profile.
- The latest claims set, which was filed on 16 November 2010, comprises 2 independent claims, each with 3 claims dependent upon it. Claim 1 is a method claim and reads as follows:

A method comprising:

receiving, by a media server, media content and metadata from a website and a cable television broadcast source;

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

² Symbian Ltd's Application [2008] EWCA Civ 1066, [2009] RPC 1

categorizing the media content using the metadata received from the website and the cable television broadcast source:

monitoring, by the media server, media content and navigation information, wherein the media content is from the website and the cable television broadcast source;

generating a user profile based on the categorized media content and the navigation information; and

providing commercial information to a media outlet based on the user profile.

11 Claim 5 is directed to a media server and reads as follows:

A media server comprising:

a behavior-watching module configured to monitor media content from a website and a cable television broadcast source and navigation information;

a browser/server module configured to receive media content and metadata from the website and the cable television broadcast source, to categorize the media content using the metadata received from the website and the cable television broadcast source, to generate a user profile based on the categorized media content and the navigation information, and to provide commercial information to a media outlet based on the user profile.

Arguments and analysis

- The examiner maintains that the claims define an invention which consists of a mental act or acts, a program for a computer and (where the media content is "commercial information") a method for doing business. His position in respect of the latest claims is set out in his pre-hearing report of 29 November 2010. The applicant disagrees, with detailed arguments set out in their attorney's responses of 9 July 2010 and 16 November 2010.
- What I must do is determine whether the claimed invention relates solely to excluded subject matter under section 1(2).

Construing the claims

- There does not appear to be any great difficulty in construing the two independent claims, and there was not a great deal of discussion on this point in the papers on file.
- 15 Claim 1 sets out that the method of the claimed invention comprises using a media server to receive media content and metadata from a website and a cable television broadcast source, categorising that media content using the metadata, using the media server to monitor that media content and also user navigation information, generating a user profile based upon the categorised media content and the navigation information and finally, based upon that profile, providing commercial information to a media outlet.
- 16 Claim 5 is directed to a media server comprising two modules which are configured to carry out the method steps of claim 1. Thus the "behaviour-watching" module is configured to monitor media content from a website and a cable television broadcast source, and also to monitor user navigation

information. The "browser/server" module is configured to receive the media content and metadata, to categorise that media content using the metadata, to generate a user profile based upon the categorised media content and the navigation information and then, based upon that profile, to provide commercial information to a media outlet.

Identifying the contribution

- In paragraph 43 of *Aerotel*, it is made clear that identifying the contribution is probably best summed up as determining what the inventor has really added to human knowledge, and this involves looking at the substance and not the form of the claims (as construed in step one).
- The applicant's position is that the contribution as set out in the claims includes the ability to receive, monitor and categorise media content and metadata from multiple sources, including both a website and a cable television broadcast source, and claim 1 requires that it is the media server which does this.
- The examiner maintains that the contribution made by the claimed invention does not include the ability to receive and monitor media content, but comprises the categorisation of media data, the compilation and updating of user profiles, and the consequent targeted provision of commercial information.
- It does not appear to be in dispute that the media server is, of itself, a conventional piece of hardware and, having studied the description carefully, I agree with this point. The description sets out how the media server may be "a personal computer, equipped with appropriate interface devices" and it goes on to say how a separate computer can be devoted to performing the function of a media server or, because of increasingly powerful desktop computers, "a portion of the computing resources of a general purpose computer....will be devoted to performing the media server functions". The description also sets out how the media server communicates in a conventional way with the local network and the various media sources "via a network, ported through a conventional NIC".
- I also have no doubt that using the media server to receive the media content was, at the priority date, entirely conventional. That function is part of what a conventional media server does, and there is no suggestion in the description that the media server does anything differently in this particular respect. See, for example, paragraph [0016] of the description, which sets out "readily available" software which is "capable of providing the functionality of both an internet browser…and a server".
- What also appears to be conventional or well-known is the fact that the media content being supplied to the server contains what the description refers to as "the wide variety of metadata that accompanies or is available concerning content". I have no difficulty in accepting that it was conventional or well-known at the priority date for a server to receive metadata associated with received media content.
- As noted earlier, the media server also categorises the media content. In discussing briefly a potential novelty-destroying document, the examiner asserted

in his report of 16 July 2010 that "the use of metadata to categorise files is so notoriously well-known that it is implicit in [the disclosure of the document in question]". In their reply of 16 November 2010, the applicant disagreed with this statement – although their arguments are directed against the examiner's assertion about implicit disclosure in the cited document, rather than countering the more general assertion that use of metadata to categorise files is well-known.

- In any event, the claims at the time did not specify that one of the media streams was from a cable television broadcast source and so, to the extent that this discussion is relevant, it was not in any event directed to the use of metadata to categorise content from that particular medium. Furthermore, the discussion on this point did not continue because the examiner deferred further consideration of the novelty question, pending the outcome of this decision on excluded matter.
- I find myself in a similar position when it comes to the feature concerning the monitoring of user navigation information. The examiner has cited a document showing that, in his view, the claims lack novelty and that must mean that he considers the feature of monitoring user navigation information to be known. However, the applicant has refuted the novelty argument (albeit not with arguments focused on this particular feature), and the question has been deferred.
- It is therefore not clear to me from the papers I have on file whether the specific feature of categorising media content from a website and cable television broadcast source using metadata is known or not, and whether the specific feature of monitoring user navigation information is known or not. However, the court in *Aerotel* acknowledged that, for a patent application (as opposed to a granted patent), it may only be possible to identify the alleged, and not the actual, contribution when applying step two.
- Turning to the remaining features, it is not in dispute that at least a part of the contribution made by the invention is the generation and updating of a user profile based upon the categorisation and navigation information, and the provision of commercial information to the user based upon that user profile. I agree that these features must form at least a part of the contribution made.
- However, in determining the contribution made by the claimed invention, ascertaining that individual features are known or conventional is not the end of the matter. It does not necessarily follow that, because a particular feature of a system is known, any contribution made by that feature can be dismissed.
- This is because it is not as simple as slicing the invention up into its component parts and then assessing the novelty or inventiveness of each of those parts. What is required is to assess the contribution made by the claimed invention as a whole, and so the interaction between the various features (known or otherwise) needs to be considered when making that assessment.
- Having considered the disclosure of the application in suit carefully, I am not persuaded that there is any particular interaction between the known features of the invention such as providing a media server for the receipt of media content and metadata and the individual features of the invention which do (or may, see

paragraph 26) make a contribution under step two of the *Aerotel* test – such as the categorisation of media content, generation and updating of a user profile and provision of commercial information – for it to be said that there is a contribution made to the sum of human knowledge by the features interacting in combination.

- The media server receives media content and metadata in a conventional way, and there is nothing to suggest that these or the other known elements of the claimed invention have a different quality or work in a different way as a result of the later steps of categorisation of content, monitoring of user navigation information, profiling of users and provision of tailored information. The known features do not, it seems to me, interact with the other features in such a way that <u>all</u> the features identified can be taken together as providing the contribution to be identified in step two.
- In my view the contribution or alleged contribution made by the claimed invention as a whole is the categorisation of media content from a website and cable television broadcast source using metadata, the monitoring of user navigation information, and the use of that categorisation and navigation information to generate and update a user profile based upon which commercial information is provided to the user.

Does the contribution fall solely within excluded matter?

- What I must now decide is whether the contribution relates <u>solely</u> to one or more of the matters which are excluded from patentability under section 1(2).
- In terms of categorisation of media content, the description talks of "organizing a hierarchical category system for websites, which provides a system of several thousand commercially-significant categories, with which individual websites are associated" and goes on to say that the "categorisation scheme" is extended to all media content. Categorising media content involves understanding the type of content and then seeing which of one or more particular predetermined categories it falls into. That process of categorisation is one which is not, in my view, a technical matter but which is a mental exercise concerned with the processing of information.
- Turning to the navigation monitoring aspect, the description refers to monitoring and storing information such as the search requests that a user inputs, or the user's choice to click on an on-line advertisement. In a similar way to the categorisation aspect, I cannot see that this is a technical matter rather, it is again a mental act which involves choosing particular user behaviour that one wants to monitor, and then processing information about that behaviour.
- Similarly, building up a user profile based upon the categorisation and navigation information is a process which involves no more than collating information in order to build up a picture of a user's preferences, habits, interests, and so on. Finally, choosing to send the user particular information tailored to their preferences is a matter of making choices based upon the information that has been collated. Again, therefore, it seems clear to me that this collating of information and provision of further relevant (commercial) information is no more than a mental exercise, and cannot be regarded as a technical matter.

- It follows that the categorisation of content, monitoring of user navigation information, resultant user-profiling and sending of tailored information to the user is no more than a scheme, rule or method for performing a mental act. During prosecution of the application, the claims have been narrowed to refer specifically to the provision of commercial information, but it is clear to me that the information would not have to be commercial in order for this process still to be solely a scheme, rule or method for performing a mental act.
- The categorisation, monitoring of user navigation information, subsequent userprofiling and provision of tailored commercial information is all implemented in
 software in the browser/server and behaviour-watching modules of the media
 server. I have already found that the system as described involves use of a
 media server operating in a technically-conventional way to receive media
 content and to run the necessary software. The contribution does not lie in these
 features of the claimed invention, and it follows that the categorisation of content,
 monitoring of user navigation information and the building up of a user profile
 amounts to no more than a program for a computer, when implemented in the
 way described in the application in suit. I note that the Court of Appeal in
 Symbian commented that one effect of the computer program exclusion is to
 prevent other excluded material becoming patentable merely by use of a
 computer in its implementation.
- Finally, it seems clear that the provision of commercial information based upon information about the user is entirely within the realm of a scheme, rule or method for doing business, and contains nothing of a technical nature. It is a business choice to collate particular user information and to provide commercial information tailored to the user based upon that user information. It may result in the user profiling being more relevant or accurate, or it may result in the commercial information being more effective or of interest to the user, but if it does so then it remains no more than an improved scheme or method for doing business.
- I conclude that the contribution identified in step two falls solely within excluded matter and therefore fails to meet step three of the *Aerotel* test.

Is the contribution technical in nature?

- In paragraph 46 of *Aerotel* it is stated that applying this fourth step may not be necessary because the third step should have covered the question. This is because a contribution which consists solely of excluded matter will not count as being a "technical contribution" and thus will not, as the fourth step puts it, be "technical in nature". Similarly, a contribution which consists of more than excluded matter will be a "technical contribution" and so will be "technical in nature". Also, as noted above, the Court of Appeal in *Symbian* confirmed that the *Aerotel* steps do not depart from the requirement set out in previous case-law that the invention must provide a "technical contribution" if it is not to fall within excluded matter.
- As a part of my consideration under step three in deciding whether the contribution made by the invention is excluded, I have already concluded that the contribution made by the invention is solely within the realm of being a scheme,

rule or method for performing a mental act and for doing business, and that it also comprises a program for a computer where the media server involved operates in a technically conventional way. There is no improvement to the technical way in which the media server, or other parts of the described invention, operate or interact.

- I derive further reassurance on this point by looking at the five "signposts" that may indicate that there is a relevant technical contribution and which would thus overcome an excluded matter objection, as set out by Lewison J in *AT&T / CVON*³. I can see nothing in the present application which meets any of these "signposts" for example, there is no suggestion that there is a technical effect on a process carried on outside the computer, nor that there is a technical effect operating at the level of the architecture of the computer or that the computer operates technically in a new or better way.
- I am therefore satisfied that the contribution made by the invention is not "technical in nature" – and thus it should be regarded as excluded under step three.

Conclusion

- I conclude that the claimed invention is excluded from patentability under section 1(2)(c) because it relates solely to a scheme, rule or method for performing a mental act and for doing business, and is also no more than a program for a computer.
- I can find no further disclosure in the specification upon which patentable claims might be based. I therefore refuse the application under section 18(3) for failure to comply with section 1(2)(c).

Appeal

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

Dr J E PORTER

Deputy Director acting for the Comptroller

³ AT&T Knowledge Ventures' Application and CVON Innovations Ltd's Application [2009] EWHC 343 (Pat), [2009] FSR 19