

PATENTS ACT 1977

APPLICANT eBay Inc

ISSUE Whether patent application GB 1003773.7 complies
with section 1(2)

HEARING OFFICER C L Davies

DECISION**Introduction**

- 1 Patent application GB 1003773.7 is in the national phase of a PCT application published as WO 2009/023141. It was republished in the UK as GB 2467455.
- 2 There have been several rounds of correspondence between the attorney and the examiner. The examiner has maintained an objection that the application is excluded under section 1(2) of the Patents Act 1977 as a computer program and as a business method. The attorney disagrees and the examiner therefore offered a hearing in an examination report issued on 26 July 2012.
- 3 The matter subsequently came before me to decide at a telephone conference hearing on 8 January 2013. The applicant was represented by the attorney, Mr Donnacha Curley of Hannah, Moore and Curley. The examiner, Mr Robert Shorthouse and Mr Jim Calvert, acting as assistant to the hearing officer and also a patent examiner, attended too.
- 4 In a letter of 10 December 2012, Mr Curley filed observations together with a revised set of claims for the Hearing Officer to consider. I thank Mr Curley for his extensive analysis and background to the exclusions as set out in that letter. Issues to be decided at the hearing were set out by the examiner in a pre-hearing e-mail of 13 December 2012.

Compliance period

- 5 The compliance period was due to end on 24 September 2012 but has been extended three times by filing F52 such that it now ends on 24 March 2013.

The Invention

- 6 The application in suit concerns a system for enabling a user to access access controlled data at a second system, the access controlled data being obtained from a first system by a peer to peer network. The system controls access to the access controlled data by having a header portion providing digital rights management (DRM) information indicating whether the user is entitled to access the access controlled data particularly according to whether the user has already paid for it. If the user has not paid for the data, they can initiate payment to access it. This essentially allows DRM content to be downloaded and distributed over a peer-to-peer network.

The Claims

- 7 It was established early at the hearing that the Hearing Officer would consider the claim set (1-9) submitted the letter of 10 December 2012. There are 3 independent claims, claims 1, 6 and 8, which read as follows:

1. A system for enabling a user to access access controlled data at a second system, the access controlled data obtained from a first system via a peer-to-peer network, wherein:

the first system comprises an authorisation module; and

the second system comprises a client machine comprising an interface to receive a package of the access controlled data, the package having a data structure that includes a digital content portion and a header portion, wherein:

the header portion provides permission data and control data, wherein the use of the access controlled data is controlled by the control data and the permission data is data for obtaining permission to access the access controlled data from the authorisation module of the first system:

the permission data is embedded into the control information; and

the access controlled data is distributed from the first system to the client machine of the second system over a peer-to-peer network, whereby the access controlled data can be received over the peer-to-peer network prior to authorisation being received from the authorisation module to access the access controlled data in accordance with the restrictions in the control data, wherein:

the control data is Digital Rights Management (DRM) information;

the access controlled data is digital content;

the permission data is data provided by the first system for initiating payment by the user of second system for access to the digital content; and

the authorisation module is for authorising the user to access the access controlled data.

6. A system to distribute access controlled data from a first system to a second system over a peer-to-peer network, the system to distribute digital content comprising:

an interface to receive a package of access controlled data provided by the first system at the second system from a system in the peer-to-peer network, the package including digital content and a header portion, wherein the header portion provides control data and permission data, wherein the use of the access controlled data is controlled by the control data, and wherein the permission data is embedded into the control data;

a module to receive a request to access the digital content from the second system based on the received permission data; and

an authorisation module, after receiving the request, to allow the second system to use the digital content under the restrictions specified by the control data,

and wherein the control data is Digital Rights Management (DRM) information;

the access controlled data is digital content; and

the request includes a payment for the digital content and the permission data is data provided by the first system for initiating payment by the user of second system for the digital content.

8. A method to distribute access controlled data from a first system to a second system over a peer-to-peer network, the method comprising:

receiving a package of access controlled data provided by the first system at the second system from a system in the peer-to-peer network, wherein the package includes digital content and a header thereof, and the header includes control data and permission data, wherein the permission data is embedded into the control data, wherein the use of the access controlled data is controlled by the control data:

storing the package in a digital content storage accessible to the second system;

using the permission data to obtain authorization to access the access controlled data from an authorisation module at said first system; and

upon authorization being granted, allowing the second system to access the access controlled data under the restrictions of the control data, wherein:

the control data is Digital Rights Management (DRM) information;

the access controlled data is digital content; and

the permission data is data provided by the first system for initiating payment by the user of second system for the digital content.

Issue to be decided

- 8 The issue to be decided is whether the invention is excluded under section 1(2)(c) of the Patents Act 1977 as a computer program as such and/or a business method as such. Novelty, inventive step and plurality have been settled but I note that updating of the search has been deferred pending the outcome of this decision. Should I find in favour of the applicant, I will need to remit this application to the examiner for further processing.

The Law

- 9 The relevant part of section 1(2) reads 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.

- 10 Mr Curley agreed that the correct approach for assessing patentability is that set out by the Court of Appeal in its judgement in *Aerotel/Macrossan [2006] EWCA Civ 1371*] for deciding whether an invention is patentable. This test comprises four steps:
- 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.
- 11 The operation of the test is explained at paragraphs 40-48 of the judgement. More recently, the Court of Appeal in the case of *Symbian* confirm 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 4-step test is equivalent to the prior case for test of "technical contribution" as set out in *Merrill Lynch, Yale and Fujitsu*. The result being that what matters is what the "technical contribution" amounts to, not whether it happens to be implemented by a computer.

12 In his analysis of excluded matter and particularly the computer program exclusion, the examiner also referred to the five signposts set out by Lewison J in *AT&T/CVON [AT&T Knowledge Ventures LP and CVON Innovations Limited [2009] EWHC 343 (Pat)]*. Mr Curley accepted the signposts as being a suitable basis for determining whether an application meets a "technical contribution". He made reference to the detailed analysis he had already provided in the applicant's letter dated 10th December 2012 arguments and indicated that he had no further observations to add in that respect. For completeness, I will repeat the five signposts here:

- 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. "

Arguments and analysis

Aerotel/Macrossan Test:

First step: Properly Construe the Claim

- 13 In a pre-hearing e-mail of 13th December 2012, the examiner confirmed he had no issues regarding construing the new claim set, acknowledging that the re-written claims were largely just a re-ordering with minor new wording (the authorisation module) which was largely to emphasise what the different parts of the system are and do. At the hearing, no issues regarding claim construction were identified. I confirm that they are sufficiently clear for me to construe.
- 14 Mr Curley kindly set out the context of the invention. He explained that the usual way of obtaining media files is to download them from a central server together with the necessary permissions, necessitating a large and powerful server computer. If one passed the file on to another computer it would not play because the necessary permissions were not available. The invention sets out however from a different standpoint. It is based on using a so-called "peer-to-peer" network and allows the user to pass on to another user a media file that they have downloaded. That further

user can then request permission to play the file without having to start again by downloading the file from a server, the request however naturally involving a payment. What allows the user to play the file is data incorporated into a "header" which is separated from the main data of the media file, i.e. the music/video data itself.

Step 2: The Contribution

- 15 Prior to the hearing, the examiner considered the amended claim set filed with the letter of 10th December 2012 and in his pre-hearing e-mail to Mr Curley, the examiner confirmed that he agreed with the applicant's assessment of the contribution, as set out in the last paragraph on page 5 of that letter and as reproduced here for completeness: *The contribution "relates to the use of permission data and control data within the header of a package of access controlled data distributed over a peer-to-peer network from a first system. The control data originates from a first system and controls the use of the access controlled data. The permission data also originates from a first system. The permission data is used by the second system to obtain authorisation from the first system to access the digital content at the second system. The claim further specifies that the permission data is used to initiate a payment for the access controlled data"*.
- 16 At the hearing Mr Curley confirmed that the contribution is in the way in which the permission data is organised and in the distribution of DRM content and that he did not consider that payment itself formed part of the contribution.
- 17 To assess the contribution, I need to consider the invention as a whole: I have to consider what the invention adds to human knowledge, taking into account its aims and advantages.
- 18 Having carefully read the specification as a whole, I believe the aim of the invention in enabling a user to access access controlled data is to allow the user to access the content if they have paid for it. In my opinion therefore, the payment feature must be included in the contribution - I do not believe it is possible to divorce payment from the permission data, as payment must be considered inherent.
- 19 In my assessment of the contribution, I therefore build on what the applicant and examiner have already deduced by including the payment feature. For completeness, I will state it here: *The contribution relates to the use of permission data and control data within the header of a package of access controlled data distributed over a peer-to-peer network from a first system. The control data originates from a first system and controls the use of the access controlled data. The permission data also originates from a first system. The permission data is used by the second system to obtain authorisation from the first system to access the digital content at the second system and the permission data is provided for initiating payment by the user "*.

Step 3: Ask whether it falls solely within the excluded matter

Business Method

- 20 In assessing this exclusion, I look to *Merrill Lynch's Application*. (*Merrill Lynch's Application [1989] RPC 561*). As pointed out by Lord Justice Fox (p.569 lines 12-27), the method of doing business exclusion is generic not qualitative:

"Now let it be supposed that claim 1 can be regarded as producing a new result in the form of a technical contribution to the prior art. That result, whatever the technical advance may be, is simply the production of a trading system. It is a data-processing system for doing a specific business, that is to say, making a trading market in securities. The end result, therefore, is simply "a method . . . of doing business", and is excluded by section 1(2)(c). The fact that the method of doing business may be an improvement on previous methods of doing business does not seem to me to be material. The prohibition in section 1(2)(c) is generic; qualitative considerations do not enter into the matter. The section draws no distinction between the method by which the mode of doing business is achieved. If what is produced in the end is itself an item excluded from patentability by section 1(2), the matter can go no further. Claim 1, after all, is directed to "a data processing system for making a trading market". That is simply a method of doing business. A data processing system operating to produce a novel technical result would normally be patentable. But it cannot, it seems to me, be patentable if the result itself is a prohibited item under section 1(2). In the present case it is such a prohibited item." [Emphasis added]

Following the teaching of *Merrill Lynch*, since I have found that part of the contribution resides in that "the permission data is provided for initiating payment by the user", (which in my view is a business method step), I must find that the contribution relates solely to a method of doing business.

Although I have found that the contribution relates to a business method and is thus excluded from patentability, I will nevertheless go on to consider the computer program exclusion.

Computer Program

- 21 From carefully considering the application, I believe the invention is embodied by a computer program and therefore at least initially I must consider that the contribution falls within the computer program exclusion. It is however necessary for me to consider whether that contribution involves anything technical within the meaning of the exclusion or, to put it another way, whether the invention has a technical effect. To do that I will now apply the five "signposts" set out by Mr Justice Lewison in *AT&T/CVON* as referred to earlier.
- i) *whether the claimed technical effect has a technical effect on a process which is carried on outside the computer;*
- 22 Mr Curley accepted at the hearing that it would not be right to interpret this signpost such that any invention in general which runs on a network would have a contribution outside the computer. However his view was that a network solution could be patentable in certain circumstances such as those in *PKTwo [Protecting Kids the*

World over (PKTWO) limited, [2011] EWHC 2720 (Pat). However I understand that PKTtwo was considered patentable because it has the technical effect of providing an alert (see paragraph 34 of the judgment) and/or that it has improved monitoring. Making a comparison with the application in suit, I cannot see anything analogous.

23 The examiner made reference to the following passage from *AT&T/CVON [AT&T knowledge ventures LP and CVON Innovations Limited [2009] EWHC 343 (Pat)]* where, although J Lewison is taking the words of the hearing officer, he does not demur from the hearing officer's conclusion that the contribution cannot have a technical effect outside the computer simply because the invention is carried out on a network:

44. He then considered whether this inventive contribution lay outside the area of excluded matter, and concluded that it did not. He said:

*"I do not think that the contribution does in fact produce any relevant technical effect which would take it outside the computer program exclusion. It seems to me that in essence what the invention does is to provide, in a network-based system for supplying digital content, a more comprehensive list of information about the devices which the user owns, so that the supplier can avoid the risk of supplying digital content which cannot be used. Even if this is not simply the computerisation of a known process as was arguably the case in *Macrossan and Fujitsu*, I do not think that the contribution embodies any process for supplying content which exists outside a computer, or causes a computer to operate in any new way technically when processing information about the devices. Indeed, it seems to me that there is some similarity with *Gale* in that the invention provides a better way of carrying out something that a computer (or networked computer system) does, but not in a way which exists outside the computer or computer system. In my view there is ultimately no technical effect over and above the mere running of a program; the invention may well solve a problem but I do not think it is a technical one."* [Emphasis added]

24 This, I believe, brings me to the nub of how the computer program exclusion applies to this application. Does the use of permission data and control data within the header of the package of access control data distributed over a peer-to-peer network involve a contribution which has a technical effect on a process which is carried on outside the computer or computer network? I believe it does not. In my view, allowing access to the access controlled data is not enough to give a relevant technical effect.

25 I therefore conclude that there is no claimed technical effect outside the computer or computer network.

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;

26 I do not think the claimed technical effect could be considered to operate at the level of architecture of the computer because the data is digital content such as music or video, which is clearly not on the architectural level of the computer on which it is played. Mr Curley suggested in his letter of 10th December 2012 that the invention could operate on any data, but in my view it is clear that the data will be some sort of media file which is clearly not at the architectural level of any computer or computer network.

iii) *whether the claimed technical effect results in the computer being made to operate in a new way;*

27 I cannot see that the computer or computer network itself is made to operate in a new way. It is the software which operates in a new way on a peer to peer network. There is no indication that the network itself operates in a new or better way.

iv) *whether there is an increase in the speed or reliability of the computer;*

28 Again, the computer itself is not faster or more reliable; this is simply that the software gives a better experience in the sense of avoiding unnecessarily downloading of content.

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

29 The problem of avoiding repetitive downloads of the same digital content is indeed circumvented by the use of a peer to peer network as opposed to a client/server arrangement.

30 Having considered each of the five signposts, I cannot see that there is a positive answer to any of them. In my view there is no relevant technical effect and it is therefore my opinion that the contribution relates to a computer program.

Step 4: Is the contribution actually technical in nature?

31 I have concluded from my above analysis of the five signposts that the contribution relates to a computer program and is therefore not technical in nature. I do not therefore need to consider step 4 any further.

32 At the hearing, there was some discussion around whether there could be any amendments, in particular as regards the feature in claim 1 of the permission data being data provided by the first system for initiating payment by the user of second system for access to the digital content. At the hearing Mr Curley thought that deletion of this feature could lead to other legal problems. I have now given this further consideration and in my opinion, there would appear to be no suitable amendments to avoid the business method and computer program exclusions.

Conclusion

33 I conclude that the application relates to matter excluded from patentability by section 1(2)(c) of the Patents Act as both a computer program and a business method as such

34 I therefore refuse the application for failing to comply with section 18(3).

Appeal

35 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