

- 6 Game cards are purchased by, and may be exchanged or traded between, players. Each game card carries game information which determines how the player can interact with the game using that card. For example the card may relate to a character in the game. When a player wishes to play a game, they can experience a first game process which does not require registration of the game information via the network. This might, for example, be a simple game which allows a single player to visualise the character on a terminal using the game information acquired from a card.
- 7 A second game process requires successful registration of game information from a game card via the network. The second game process offers a different experience to the player. For example this might be a more sophisticated game, such as a battle or a race. In order to successfully register game information for the second game process, the player is required to register the game information and terminal information (on which the game is played) in conjunction with serial information from a display object. The serial information may be supplied with, but is distinct from, the game information.
- 8 In other words, the player can only play the second game if they possess a valid display object. Their interaction with the second game process is limited to a maximum allowable number of game card and terminal registrations, in conjunction with the display object.

The claims

- 9 Amendments to the claims were filed on 5 January 2015, the claims comprising two independent claims 1 and 6. No formal assessment has been made with regard to the plurality of these two claims. I have therefore set out the wording of both claims:

Claim 1

A network system comprising a game card, a display object, a server and a terminal, the server and the terminal exchanging data via a network,
the game card including game information, said game information being used for a first game and a second game process,
the display object including serial information,
the terminal including:
a storage section that stores an allowable registration count of game information;
an acquisition section that acquires the game information and the serial information;
a first game processing section that performs the first game process based on the acquired game information;
a registration section that registers the game information under a given condition upon reception of a game information registration request;
a second game processing section that performs the second game process based on the registered game information;
a communication control section that transmits terminal identification information of the terminal and the serial information to the server; and

an update section that updates the allowable registration count of the game information,
the server including:
a storage section that stores a registration limit count of the game information so that the registration limit count is linked to the terminal identification information of the terminal;
a communication control section that receives the terminal identification information of the terminal and the serial information from the terminal; and
an update section that determines whether or not the received serial information is valid, and updates the registration limit count corresponding to the terminal identification information based on an update allowable registration count corresponding to the serial information when the received serial information is valid,
the communication control section of the server transmitting the registration limit count corresponding to the terminal identification information of the terminal to the terminal in response to a request from the terminal,
the communication control section of the terminal receiving the registration limit count from the server,
the update section of the terminal updating the allowable registration count based on the registration limit count upon reception of the registration limit count from the server,
the registration section of the terminal registering the game information when the allowable registration count is equal to or larger than a given number, and not registering the game information when the allowable registration count is less than the given number, and
the update section of the terminal decrementing the allowable registration count when the game information has been registered to the terminal.

Claim 6

A method of managing registration of game information in a network system comprising a game card, a display object, a server and a terminal, the terminal performing a first game process that utilizes game information stored on the game card, and a second game process that utilizes registered game information among the stored game information, the method comprising:
storing terminal identification information of the terminal and an allowable registration count of the game information for the terminal in a linked manner;
receiving data that specifies an update allowable registration count and the terminal identification information of the terminal, the update allowable registration count being linked to a number of pieces of game information acquired through the terminal;
updating the allowable registration count that is stored while being linked to the terminal identification information corresponding to the received data that specifies the update allowable registration count;
transmitting a registration permission notification to the terminal upon reception of a game information registration request from the terminal when the allowable registration count corresponding to the terminal identification information of the terminal is equal to or larger than a given number, and transmitting a registration non-permission notification to the terminal upon reception of the game information registration request from the terminal when the allowable registration count

corresponding to the terminal identification information of the terminal is less than the given number; and
decrementing the allowable registration count when the registration permission notification has been transmitted to the terminal.

10 For the purposes of this decision both of these claims have been assessed together.

The law

11 The relevant provision of the Act in relation to excluded inventions is section 1(2), which reads:

1(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) 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**.*

12 In order to decide whether an invention relates to subject matter excluded from patentability under section 1(2), the Court of Appeal has said that the issue must be decided by answering the question of whether the invention reveals a technical contribution to the state of the art (from *Symbian*¹ and *Aerotel*²). The Court of Appeal in *Aerotel* set out the following four-step test to help decide the issue:

- 1) Properly construe the claim;*
- 2) identify the actual (or alleged) 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.*

13 Mr Emerson agreed that this was the correct approach to take.

Arguments and analysis

14 The first two steps of the above test are common when deciding whether the application relates to a program for a computer or a method for doing business.

¹ *Symbian Ltd. v Comptroller-General of Patents* [2008] EWCA Civ 1066

² *Aerotel Ltd v Telco Holdings Ltd and Macrossan's Application* [2006] EWCA Civ 1371

Step 1: Properly construe the claim

- 15 With regard to the first and second of the four steps, prior to the hearing, the Examiner and the Attorney, Mr Gilday, had appeared to agree that the claims be construed such that the contribution was considered to be the first game process in which game card information is limited to use with a pre-determined number of terminals.
- 16 However, during the hearing, Mr Emerson proposed an alternative construction of the claims to identify the inventive concept, this being:

A network system comprising a game card, a display object, a server and a terminal, the server and the terminal exchanging information via a network, the game card including game information and the display object including serial information, the serial information on the display object being used to limit the number of registered terminals to be used and to limit the number of game cards the purchaser can register.

This construction places emphasis on the way the system limits a user to a specific number of terminals and a specific number of game cards, per purchase. I am content that it is reasonable.

Step 2: Identify the actual (or alleged) contribution

- 17 Mr Emerson argued that in view of the above construction, the contribution is one of improved security as it prevents what the Applicant terms “illegal” or “unauthorised” access. This is because without the serial information of a valid display object, a user would be unable to register a game card or a terminal via the network. Also, once the user has used the predetermined allowable number of game card and terminal registrations then no further “unauthorised” registrations would be allowed, unless serial information from a new display object is used. He proposed that the contribution be considered as:

The provision and use of an external display object and means for using the information provided thereon to prevent the use of unauthorised game cards, or game card information.

- 18 I note that this is consistent with the “technical problem” summarised on page 1 of the description which states:

“The operator of such a card game earns profits by selling game information (e.g., a card that records game card information). However, a known game device may be configured to perform the game process without selecting game information obtained by reading a code (e.g. barcode or two-dimensional code) recorded on the card, for example. Therefore, a situation may occur in which the user illegally acquires the game information (e.g., a card that records game information) without purchasing a card (e.g., by borrowing a card from another person), and the operator may lose profits.”

In other words, the problem the invention seeks to overcome is to prevent the use of game information other than in accordance with the game operator's rules and business model. The contribution is to limit game information only to be used in conjunction with a display object a predetermined number of times.

- 19 Mr Emerson sought to persuade me that this was an improvement in "security". Whilst that is an attractive argument, I am not convinced by it. Improvements in authentication and access control, e.g. to buildings or encrypted communications, might be deemed to be contributions to "security", but that is not the same thing as limiting player interaction with a game and a business model. The application does not prevent "unauthorised" access since anyone with the serial information from a valid display object can use game card information for a second game process. The invention merely limits the number of uses of game information in conjunction with specific serial and terminal information. Upon exhausting the predetermined number of uses of game information, further serial information from a further display object would have to be obtained before further using the game information. I therefore consider the contribution to be:

Limiting the number of times game information can be registered and the number of terminals on which the game information can be used, in conjunction with serial information from a display object, whilst not inhibiting the free exchange of the game information.

- 20 The latter feature, underlined, reflects the clarification Mr Emerson provided in the hearing, that although the number of times game information can be used in conjunction with a display object is limited, further use of the game information is possible in conjunction with a further display object; thus exchanging and trading of game cards by users is not prevented. However a user will have to acquire a valid display object in order to use the game information on a game card.

Step 3 (i): Method for doing Business

- 21 Having construed the claims and identified the contribution, I will first consider whether this falls solely within the excluded subject matter of a method for doing business. I must also consider whether the contribution is technical in nature. Although this is set out as the fourth step of the *Aerotel* test, it may be considered at the same time as step three. This is the approach I will follow, consistent with the Applicant's argument.
- 22 I have carefully considered the arguments put before me at the hearing. The contribution ensures that game information can only be used within a second game process, in conjunction with a display object. This means that players must acquire a display object to play the game, and are limited to playing the game in accordance with the game operator's rules. These rules are designed to protect the game operator's business model and profitability. Mr Emerson sought to persuade me that the contribution was therefore to the field of "security" and so was not to a method for doing business as such.
- 23 He argued that the game provider's business model is unchanged and that the invention adds a layer of security by using the display object as a "key" to access the

second game process. He drew analogy with digital rights management (DRM) technology which uses a “key” to access, for example, e-books and alleged that DRM is not treated as a method for doing business.

- 24 Mr Emerson further argued that because the contribution relates to security it is technical in nature. In so doing he drew parallels with *Boeing*³. The *Boeing* application related to the use of a unique identifier for an aircraft part, which can be used to access data relating to that part for use in maintaining the aircraft and aircraft safety. The Hearing Officer found that the maintenance of an aircraft and its safety is inherently technical in nature and that the contribution was also therefore technical in nature. Paragraph 27 reads:

The examiner argued that the invention is no more than an administrative procedure, and as such, is a method for doing business. However, aircraft maintenance is an inherently technical process and an improved method of identifying potentially faulty components during aircraft maintenance is more than just an administrative procedure or a resource management activity, as it has real implications for improved aircraft safety. As such, the contribution made by the invention is considered to be more than a mere business method.

- 25 Mr Emerson maintained that if you swap the terms “security” with “aircraft safety” and “unauthorised game information” for “faulty components” in paragraph 27 of the Boeing decision you have a similar technical contribution.

- 26 I am reminded of the words of Pumfrey J in paragraph 186 of Research In Motion⁴ where he stated:

“The test is a case-by-case test, and little or no benefit is to be gained by drawing analogies with other cases decided on different facts in relation to different inventions.”

- 27 I do not think that the analogy of DRM or aircraft maintenance and safety systems is helpful here. Limiting the number of times a game card and terminal can be registered to play a game, in conjunction with serial information, is a way of limiting players’ interaction to comply with a business model (as the “problem” confirms). That is not the same as protecting encrypted content by means of a decryption key (whether or not that is, in fact, solely an excluded thing as such, which is not considered here).

- 28 Mr Emerson admitted that in the present application, the serial code (for example embodied as a 2D bar code or “QR code”) is conventional. Likewise, the network, server and terminal are conventional. The claimed invention relies for its implementation on the registration of game card information, subject to an allowable registration count (i.e. a limit). This is implemented in software. Imposing compliance with a business model in the manner of the present application is tantamount to a method for doing business as such.

³ The Boeing Company BL O/312/15

⁴ Research In Motion UK Ltd. v Inpro Licensing SARL [2006] EWHC 70 (Pat)

29 Aircraft maintenance and safety is totally different to player interaction with a game via a network. Even if I considered the present application to relate to security, which as reasoned above I do not, it would not be analogous with the contribution in *Boeing*.

30 The problem addressed by the application is a business problem. The contribution provided by the claimed invention falls wholly within the field of a method for doing business as such. I consider therefore that the contribution is not technical in nature.

Step 3 (ii): Program for a computer

31 I will now consider whether the contribution falls solely within the excluded subject matter of a program for a computer. The claimed invention undoubtedly uses a computer program for its implementation, although it is not the form of any claim per se.

32 Where a claim involves the use of a computer program, it does not naturally follow that the claim must be excluded. Instead, the contribution of a claim to a computer program must be assessed by reference to the process the program will cause a computer to perform, because, as stated in *Astron Clinica*⁵, the assessment is based on the substance of the invention. In the case of *Halliburton Energy Services' Applications*⁶, HHJ Birss QC, as he then was, emphasised that “[a] computer programmed to perform a task which makes a contribution to the art which is technical in nature is a patentable invention and may be claimed as such.” Therefore, a computer program that provides a technical contribution will not fall under the exclusion because it is more than a computer program as such. The crux of the matter therefore lies in determining whether the claimed invention makes a technical contribution.

33 It is helpful when identifying whether an application makes a “technical contribution” to use the signposts set out by Lewison J (as he then was) in *AT&T/CVON*⁷ and subsequently reconsidered by Lewison LJ in *HTC v Apple*⁸. In considering the signposts in *AT&T/CVON*, it should be appreciated that these do not provide a definitive account of what is and what isn't technical, but they do provide useful guidance of where the Courts have determined a technical contribution may exist. The signposts are as follows:

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;

⁵ *Astron Clinica Ltd & Ors v The Comptroller General of Patents, Designs and Trade Marks* [2008] RPC 14

⁶ *Halliburton Energy Services Inc's Applications* [2012] RPC 129

⁷ *AT&T Knowledge Ventures/CVON Innovations v Comptroller of Patents* [2009] EWHC 343 (Pat)

⁸ *HTC v Apple* [2013] EWCA Civ 451

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

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

34 The application does not operate at the level of the architecture of the computer, does not result in the computer being made to operate in a new way and does not increase the speed or reliability of the computer. Consequently signposts (ii), (iii) and (iv) have not been met. The Applicant has presented no arguments in respect of these signposts.

35 With regard to signpost (i) Mr. Emerson argued that there is a technical contribution because the display object is a physical real world object such as a printed card. The “security process” is therefore carried on (at least in part) outside the computer. For a number of reasons I do not accept this argument.

36 Firstly, it is not the display object itself which is used in limiting the use of game information, but the serial information provided thereon. The process of registering the serial information and the game and terminal information and limiting the player’s interaction with the game accordingly, is carried on entirely inside the computer.

37 Secondly, the effect outside of the computer is to limit the process of interaction of a player with the game on the basis of the display object and game information in their possession. As I have explained above, this is not a technical effect outside the computer, but a method for doing business.

38 Thirdly, the fact that the display object is physical in nature is incidental to the use of the serial information in limiting the use of game information. Mr Emerson acknowledged that the term “external” does not appear in claim 1 but maintained that because the terminal acquires the serial information on the display object it must be external. However, it is considered that while it is external to the terminal, the display object together with serial information is a component of the “network system” claimed. It has no effect on a technical process carried on outside the computer nor does how the serial information is obtained have any effect on the registration process itself. It is therefore considered that signpost (i) has not been met.

39 In respect of signpost (v), Mr Emerson commented that the problem set out in the application, namely preventing players “using information they are not entitled to use since they did not pay” is squarely overcome by the claimed invention. I agree, but I consider the problem to be a business problem, not a technical one. The signpost then is not helpful, because although the perceived problem has not been circumvented it is a *business* problem and its solution does not point towards a *technical* contribution.

40 On the basis of the above, I have been unable to identify a technical contribution and therefore I must conclude that the claimed invention falls wholly within the field of a program for a computer as such.

Other excluded things

- 41 The Examiner had raised no objection in respect of the presentation of information, or a scheme, rule or method for playing a game. Because the invention relies upon the processing of information (and its provision on cards), and enables a player to play a game dependent thereon, I offered the Applicant's representatives the opportunity to voluntarily comment in respect of these things. Mr Emerson succinctly observed that the contribution is reliant upon the processing of information, not its presentation, and that the system is "game agnostic"; the actual game played is not changed as a result of the invention. I agree, and I confirm that there is no objection to be answered in relation to either of these things.

Conclusion

- 42 I find that the claimed invention is excluded under section 1(2)(c) because it relates solely to a method for doing business and a program for a computer as such. I therefore refuse the application under section 18(3).

Appeal

- 43 Any appeal must be lodged within 28 days after the date of this decision.

Ben Buchanan

Deputy Director, acting for the Comptroller