Intellectual Property Office

BL O/326/15

13 July 2015

PATENTS ACT 1977

APPLICANT Novomatic AG

ISSUE Whether patent application number GB1116561.0 complies with Section 1(2)(c)

HEARING OFFICER Phil Thorpe

DECISION

1 This decision concerns whether the invention set out in patent application GB1116561.0 relates to excluded matter. The examiner has maintained throughout the examination of this application that the claimed invention is excluded from patentability under section 1(2)(c) of the Patents Act 1977 as a program for a computer, a scheme, rule or method for playing a game and a scheme, rule or method for doing business. The applicant has not been able to overcome the objections, despite amendments to the application.

2 The matter therefore came before me at a hearing on 26th May 2015, at which Dr Elliot Davies of Wynne-Jones IP appeared on behalf of the applicant.

The Patent Application

3 GB1116561.0 is entitled “Gaming Devices and Methods of Operating Them”. It was filed on 29th September 2011 and published on 3rd April 2013 as GB 2495085 A.

4 The invention relates to a group of associated gaming devices such as slot machines. In order to encourage machine usage it is known to have a significant event, for example a payout, occur simultaneously on a group of associated machines. According to the application, the simplest way of achieving this is using a central controller to generate an appropriate signal that is simultaneously fed to each of the machines in the group. In reality it is often difficult to hard wire all such machines to a server, particularly if the server is to be kept in a secure location.

5 Accordingly, in many venues, at least some of the links to such gaming devices are wireless and are based on mobile telephone technology. The application suggests that it has been found that in many instances there are variations in signal strength over time, with the result that a particular gaming device may not receive its "random" win signal at all or may receive the signal an interval after other machines in the group. This can lead to a significant loss of visual and/or aural impact and so there is a need to overcome the problems arising from the unreliability of the mobile signal strength.

6 In order to overcome these problems, the invention proposes a group of gaming devices which can operate in a seemingly networked manner even though they are not necessarily networked or communicatively coupled. This is done by having each machine synchronised so that at a predetermined time they can generate a signal simultaneously across each device as though they were networked.

7 More specifically and with reference to figures 1 and figure 4 of the application, the group of gaming devices are each provided with a lottery drawer 25 including a memory for storing a database 18 having a plurality of entries each containing one or more winning numbers. Each machine also includes a pseudo random number generator 20 for generating numbers from a seed supplied by the database 18, a clock 19 for extracting the winning number or numbers from an entry of the database 18 for the time interval indicated by the clock 19 and a comparator 22. The comparator 22 generates a win signal when the winning number and the generated number match. All of the associated gaming devices include identical databases and pseudo random number generators whereby win signals are generated simultaneously. The simultaneous generation of win signals on a number of machines can be indicated by each machine displaying a win, for example by a special illuminated display 11 on each machine or alternatively by a separate shared display. In a further feature of the invention only gaming machines that are “active” are eligible to be part of the group machines sharing the simultaneous event. A machine can become active for example simply by being played, or as a result of a certain stake having already been put in.

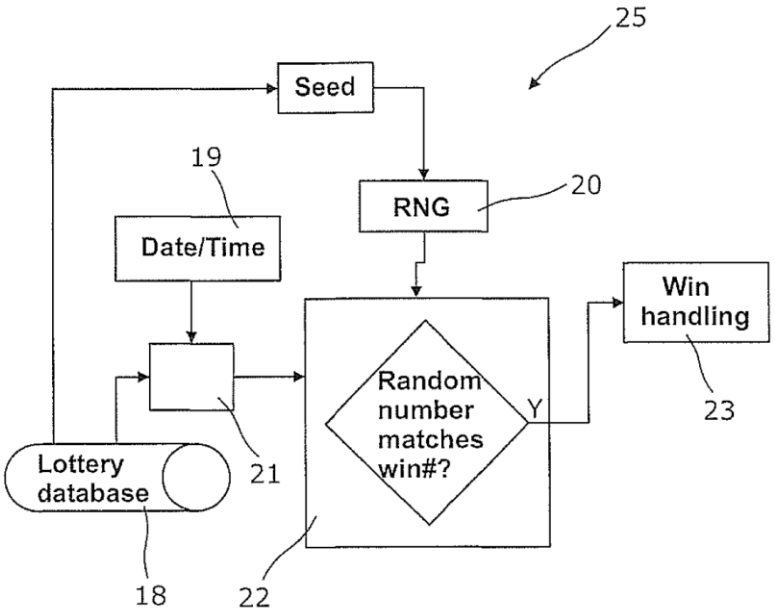

Fig. 4

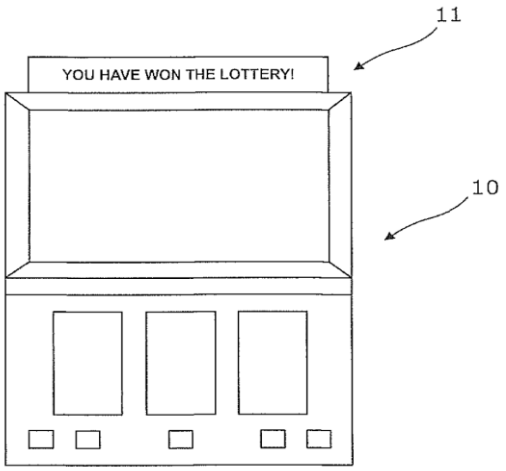

Fig. 1

8 The latest set of amended claims was filed on 23rd November 2012. Claim 1 reads as follows:

> *A group of associated gaming devices each having a lottery drawer (25) including a memory (16) for storing a database (18) having a plurality of entries (30) each containing one or more winning numbers (35) associated with a predetermined time interval, a pseudo random number generator (20) for generating numbers from a seed supplied by the database (18), a clock (19) for extracting the winning number or numbers from an entry of the database (18) for the time interval indicated by the clock (19), a comparator (22) for at least one receiving of the extracted winning number or numbers and at least one*

number generated by the pseudo random generator (20), wherein the comparator (22) is adapted for generating a win signal when the winning number and the generated number match; and wherein all of the associated gaming devices include identical databases and pseudo random number generators whereby win signals are generated simultaneously in each of the active devices.

9 There is also an independent claim directed to a method of operating a group of associated gaming devices (claim 7). I consider the independent claim to include the same or corresponding special technical features and that if claim 1 was excluded then independent claim 7 would also be excluded.

The law

10 The examiner has raised an objection under section 1(2) of the Patents Act 1977 that the invention is not patentable because it relates inter-alia to one or more categories of excluded matter. The relevant provisions of this section of the Act are shown in bold below:

1(2) It is hereby declared that the following (amongst other things) are not inventions for the purpose of the 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 provisions shall prevent anything from being treated as an invention for the purposes of the Act only to the extent that a patent or application for a patent relates to that thing as such.

11 As explained in the notice published by the UK Intellectual Property Office on 8th December 2008[1], the starting point for determining whether an invention falls within the exclusions of section 1(2) is the judgment of the Court of Appeal in *Aerotel/Macrossan*[2].

12 The interpretation of section 1(2) has been considered by the Court of Appeal in *Symbian*[3]. *Symbian* arose under the computer program exclusion, but as with its previous decision in *Aerotel/Macrossan*, the Court gave general guidance on section 1(2). Although the Court approached the question of excluded matter primarily on the basis of whether there was a technical contribution, it nevertheless (at paragraph 59) considered its conclusion in the light of the *Aerotel/Macrossan* approach. The Court

[1] http://www.ipo.gov.uk/pro-types/pro-patent/p-law/p-pn/p-pn-computer.htm
[2] *Aerotel Ltd v Telco Holdings Ltd and Macrossan's Application* [2006] EWCA Civ 1371; [2007] RPC 7
[3] *Symbian Ltd v Comptroller-General of Patents*, [2009] RPC 1

was quite clear (see paragraphs 8-15) that the structured four-step approach to the question in *Aerotel/Macrossan* was never intended to be a new departure in domestic law; that it remained bound by its previous decisions, particularly *Merrill Lynch*[4] which rested on whether the contribution was technical; and that any differences in the two approaches should affect neither the applicable principles nor the outcome in any particular case.

13 Subject to the clarification provided by *Symbian*, it is therefore appropriate to proceed on the basis of the four-step approach explained at paragraphs 40-48 of *Aerotel/Macrossan* namely:

> *(1) Properly construe the claim.*
>
> *(2) Identify the actual contribution (although at the application stage this might have to be the alleged contribution).*
>
> *(3) Ask whether it falls solely within the excluded matter.*
>
> *(4) If the third step has not covered it, check whether the actual or alleged contribution is actually technical.*

14 Dr Davies accepted that this is the correct approach to follow.

Step 1 – Properly construe the claim

15 At the hearing Dr Davies explained that a lottery drawer is a database where each entry corresponds to a particular day and each entry of that day would have a number of win numbers. On a particular day a random number generator will generate a number which will be compared to the win numbers in the database and if they match a win will be generated. Dr Davies also clarified that a seed is an input number entered into the random number generator to generate the random numbers.

16 I construe “active” in its broadest sense to mean that the device is eligible for the lottery. Dr Davies further noted that the claim should be construed as relating to “at least two active gaming devices”. He accepted that this feature was not explicitly brought out in the current wording of the claim though it was in effect implicit in that in order to generate a simultaneous win event one would need at least two active gaming devices.

17 Other than that the construction of the claim is clear.

Step 2 – Identify the actual contribution

18 Dr Davies defined the contribution as a group of devices operating synchronously with the same set of characteristics. The group of devices requires more than one machine, each machine having a synchronised timer running the same program in such a way that it triggers a random win event on each machine at the same time.

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[4] *Merrill Lynch's Appn*. [1989] RPC 561

19 Dr Davies however accepted that the hardware used to implement the invention is entirely conventional. A number of the prior art documents found during the search conducted by the examiner also appear to show that the contribution as defined by Dr Davies is known. For example GB 2449235 discloses a group of gaming machines each having synchronised timers such that a win event can be made to occur on each device at the same time. The group of gaming machines use the same event list or schedule of events and the machines have clocks to enable the machines to detect when the time of an event has been reached so as to produce a multiple gaming machine event without a network signal triggering the event.

20 Therefore I consider the actual contribution to lie in how the random win event is generated in each machine simultaneously. This leads me to the contribution defined by the examiner in his latest report which reads as follows:

> *"In a gaming device, providing a database having a number of data entries, a clock, a pseudo random number generator and a comparator, and operating these such that when a specific time and date is detected by the clock, the corresponding data entry is retrieved from the database, the data entry including a seed for the random number generator and at least one winning number, the winning number being compared in the comparator to a pseudo random number generated by the random number generator using the seed with win signals being generated if there is a match and the gaming device is active; the result of operating a group of gaming devices operated as the above with the same database and same pseudo random number generator being that the in use machines of the group will issue simultaneous win signals without requiring a network connection."*

21 I consider this definition to more accurately define the contribution made by the invention.

22 I would add that I did consider whether it was appropriate to allow Dr Davies to make further submissions on the relevance of GB 2449235 to the question of the contribution. On reflection and given the relatively straightforward disclosure in this document, its citation at the search stage and that Dr Davies seemed comfortable with its contents at the hearing I have decided that further submissions on this point are not necessary.

Steps 3 & 4 - Does the contribution fall solely within excluded matter and is it actually technical in nature

23 The examiner has objected that the contribution falls solely within the categories of a program for a computer, a scheme, rule or method for playing a game and a scheme, rule or method for doing business.

24 Dr Davies sought to argue that the invention was not excluded as a program for a computer exclusion using the five "signposts" identified by Lewison J in *AT&T/CVON*[5]*.* The signposts, as modified in *HTC v Apple*[6], are as follows:

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

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 the program make the computer a better computer in the sense of running more efficiently and effectively as a computer;

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

25 Dr Davies addressed each signpost in turn. Firstly he argued that the invention has a technical effect on a process which is carried on outside of the computer. This he contends is the provision of a group of devices operating in a way that enables the generation of a win signal even when there is no connection between devices. The generation of a synchronised signal across a number of devices is he argues a technical effect.

26 I am not persuaded. Firstly there is the question of whether the generation of a synchronised signal in each of the machines is a "process which is carried on outside of the computer". It is arguable that the group of gaming devices is the computer so far as signposts are concerned and that the generation of the synchronised signals takes place within the "computer". If however I accept that the displays to which the signals are sent are outside of the "computer" then having each of these light up at the same time could be considered a technical effect. Furthermore it is an effect resulting from operation of the invention. But it is not in any way a new or improved technical effect outside of the computer. Rather the manner by which the display on each machine, or in the alternative a single display for all the machines, is activated is entirely conventional as are the displays themselves. Hence I can see nothing that would provide the sort of relevant technical effect required of signpost 1.

27 Dr Davies arguments in respect of the second signpost were even less persuasive. He sought to argue that the synchronised signals are produced irrespective of the data being processed or the applications being run. He went on to suggest for example that different seed numbers or databases could be used. I do not doubt that is the case but altering certain inputs to the program or tweaking different parts of the application does not elevate that application to the architecture level of the computer. Rather the effect produced here is clearly dependent on the particular application being run and any database associated with it.

28 Dr Davies argued that the third signpost was also satisfied if the computer is considered to be the group of devices rather than any one individual device. In that

[6] HTC v Apple [2013] EWCA Civ 451

sense the group of devices, and hence the “computer”, is operating in a new way. Again I can see nothing other than the sort of effect that any computer would have if programmed differently.

29 Dr Davies’ argument in respect of the fourth and fifth signposts focused on the perceived problem of the lack of, or unreliability of network connectivity. He contends that the arrangement according to the invention is more reliable because it does not rely on a network connection between the machines. He notes further that there is a general prejudice towards linking gaming machines together. Even if that was true, then it would not alter the fact that the invention does not actually solve any issues regarding connecting to a network. Rather it circumvents the problem.

30 Dr Davies also argued that the claimed gaming devices would use less power than networked devices as they didn’t need to power a wireless network. I do not find this argument persuasive. Firstly I would note that the application as filed makes no reference to saving energy or power. More crucially the contribution made by the invention is not the concept of having gaming devices operating synchronously without being networked as that is part of the prior art. Rather as discussed above it lies in how the particular win signal is generated. That contribution does not result in any obvious power saving.

31 Hence I can see nothing in the signposts that would suggest the invention here does not relate to a program for a computer program. Further taking a step back I have come to the conclusion that the invention taken as a whole does not provide any form of technical contribution.

32 I will for completeness go on to consider whether the invention is also excluded as a scheme, rule or method for playing a game and a scheme, rule or method for doing business.

Method of playing a game

33 Dr Davies argued that the contribution did not lie solely within the method of playing a game exclusion. Rather the method of generating the synchronised random lottery win signals is independent of the normal game being played on the respective machines. I do not doubt that the lottery game is separate to the normal game being played on the machine. However what the invention here contributes is still a way of operating a game. More precisely the invention contributes a particular computer implemented method of generating a signal whose sole purpose is to trigger a payout on a group of gaming machines. The contribution is part of the game play – it is how the lottery game works. As such the contribution falls also within the method of playing a game exclusion.

Method of doing business

34 Dr Davies explained that the contribution is not excluded as a method of doing business as the contribution lies in how the random win signal is generated. I agree. Furthermore even though the purpose of the random win signal is to produce a synchronised win event across a group of gaming devices in order to attract attention and ultimately more custom to the group of devices I am satisfied that the actual contribution is not in itself a method of doing business as such.

Possible amendments

35 Dr Davies discussed two possible amendments that in his opinion could save the application. The first was the inclusion of the feature of at least one device in the group including an enabler for enabling the lottery drawer of that device when a set of predetermined conditions apply. Having read the application it would appear that this is done purely in software and would not serve to save the contribution from falling into excluded matter.

36 The second was as additional method step that when the end of the database is reached, the database will wrap round to the beginning and its length is selected so as to avoid the same number being drawn either on the same day or the same date for the likely life of the device at a venue. This avoided somebody making use of the pattern. Again this extra method step would not appear to save the application in my opinion as it would form part of the computer program for the generation of the random win signal.

Decision

37 I have found that the contribution made by the invention defined by the claims falls solely in matter excluded from patentability by virtue of section 1(2)(c) of the Act, namely a program for a computer and a scheme, rule or method for playing a game. 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

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

Phil Thorpe
Deputy Director, acting for the Comptroller