UK Intellectual Property Office □□□□

For Creativity and Innovation

BL O/097/07

10th April 2007

PATENTS ACT 1977

APPLICANT	IGT
ISSUE	Whether patent application number GB0404737.9 relates to a patentable invention
HEARING OFFICER	P R Slater

DECISION

Introduction

1 Patent application GB0404737.9 entitled "Gaming device having award modification options for player selectable award digits" was filed on the 7 August 2002 and is derived from international application PCT/US2002/025038 which was published by WIPO as WO03/015881 and claims priority from an earlier US application 09/933,843, filed on 20 August 2001. The application entered the national phase and was re-published as GB2395667 on 2 June 2004.

2 Since the first examination report was issued on 21 July 2004, there have been a number of additional rounds of correspondence throughout which the examiner has maintained an objection that the invention was excluded from patentability under section 1(2) of the Act as being a scheme, rule or method for playing a game and/or a program for a computer as such. Other objections were also raised, on the grounds that the claims lacked clarity, novelty and/or inventive step.

3 Having been unable to resolve the issue through either amendment or argument, the matter came before me to decide at a hearing on 9 March 2006 at which the applicant was represented by Mr. David Slattery and Mr. Barry Quest of Wilson Gunn. The examiner Mr. Andrew Hole also attended.

4 The hearing focused on the issue of patentability and for the purpose of my decision, the outstanding inventive step objection has been put to one side in view of the potentially fatal objection that the application does not relate to a patentable invention.

5 Following the hearing, the agent filed an additional set of written submissions on the 27 October 2006 drawing my attention to the decision of the Boards of Appeal of the European Patent Office in *Konami*[1].

6 The agent's argument at the hearing was based on the law as it then stood following the judgment laid down in *CFPH LLC's Application*[2]. However on 27 October 2006, before I had issued my decision, the Court of Appeal handed down its judgment in the matters of *Aerotel Ltd v Telco Holdings Ltd* and *Macrossan's Application* (*Aerotel/Macrossan*)[3] which approved a new test for assessing patentability under Section 1(2). The examiner therefore issued a further letter on the 19 January 2007, re-assessing the application in light of this new test, maintaining his earlier objection that the invention was excluded from patentability under Section 1(2) and giving the applicant an opportunity to make further submissions. The agent replied in a letter dated 2 February 2007.

The application

7 This application relates to an electronic gaming machine such as a "slot machine" wherein players receive monetary awards which are displayed, for example, in the form of a three digit number. The player can then choose whether to keep the original award or to modify or gamble, the award. A number of methods are provided for modifying the award, one of which is to re-arrange or scramble the original three digits to form a new number e.g. the digits 416 may be scrambled to become 614, 164 etc. Alternatively, the machine may modify the original award by regeneration i.e. generating a complete new set of digits, by adding or subtracting a digit, or by applying a predetermined multiplier.

8 The most recent set of claims were filed on 9 December 2005. Claim 1 is the only independent claim which reads as follows:

"1. A player operable gaming device actuable for the play of a game comprising: a display device, said display device operable to display an original award obtained by the playing of a game, the original award having a plurality of digits, each digit having a value, the values of the digits indicating the amount of the award; and means operable in the gaming machine to determine whether the original award is to be modified and, if so, operable to: select one award modification method from a plurality of award modification methods by which the original award may be modified; calculate the value of each digit of the modified award; cause the display device to display the modified award; and provide the modified award to the player, wherein at least one said award modification method involves regenerating the original award from the values of the individual digits of the original award by exchanging the values of at least some of the digits in the original award, wherein the regenerated digits indicate an amount of a modified award."

9 At the hearing I was handed an amended version of claim 1 and was asked to consider this as a possible alternative to that currently on file. The amended

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[1] T 0928/03 Konami
[2] [2005] EWHC 1589 (Pat); [2006] RPC 5
[3] [2006] EWHA Civ 1371

claim 1 reads as follows:

"1. A player operable gaming device actuable for the play of a game comprising: a display device, said display device operable to display an original award obtained by the playing of a game, the original award having a plurality of digits, each digit having a value, the values of the digits indicatiing the amount of the award; and means operable in the gaming machine to determine whether the original award is to be modified and, if so, operable to: select one award modification method from a plurality of award modification methods by which the original award may be modified; calculate the value of each digit of the modified award; cause the display device to display the modified award; and provide the modified award to the player, wherein at least one said award modification method involves regenerating the original award from the values of the individual digits of the original award by selecting a changed order of at least some of the digits, from a range of said changed orders thereby to scramble the digits, wherein the scrambled digits indicate an amount of a modified award."

The Law and its interpretation

10 The examiner has reported that the application is excluded from patentability under section 1(2) of the Act, as relating to a scheme, rule or method for playing a game and/or a program for a computer as such. The relevant parts of section 1(2) read:

> *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;*

11 As regards the interpretation of section 1(2), my approach will be governed by the judgment of the Court of Appeal in *Aerotel/Macrossan* and the Practice Notice issued by the Patent Office on 2 November 2006. In Aerotel/Macrossan the court reviewed the case law on the interpretation of section 1(2) and approved a new four-step test for the assessment of patentability, namely:

1) Properly construe the claim

2) Identify the actual contribution

3) Ask whether it falls solely within the excluded matter

4) Check whether the actual contribution is technical in nature.

12 However, the fourth step of checking whether the contribution is technical in nature may not be necessary because the third step – asking whether the contribution is solely of excluded matter – should have covered that point (see paragraphs 45 – 47 of the judgment).

13 Finally, I note that by virtue of section 130(7) of the Act section 1(2) is so framed as to have, as nearly as practicable, the same effects as the corresponding provisions of the European Patent Convention. However, the reliance that I can place on decisions of the Boards of Appeal of the European Patent Office under the corresponding Article 52 of the EPC must now be limited in view of the contradictions in these noted by the Court of Appeal in *Aerotel/Macrossan* and its express refusal to follow EPO practice.

Arguments and analysis

14 Much of the agent's argument at the hearing was directed to establishing that the invention made a technical contribution. On the basis of the law as it then stood, I would agree that if I had been able to identify a contribution to the art which was technical in nature, then that would have been a pointer to it lying outside the excluded area as such. However, that is not the approach adopted in *Aerotel/Macrossan* where the presence or otherwise of a technical effect need only be considered where the invention passes the first three steps. Accordingly, the agent in his letter dated 2 February 2007 kindly reframed his arguments in light of the judgment in *Aerotel/Macrossan* addressing the four steps in turn and it is on the basis of that letter that I will begin my discussion, returning to the issue of technical contribution later as a matter of completeness.

15 Having regard to the first step of the *Aerotel/Macrossan* test, there is only one independent claim, albeit there are two slightly different versions for me to consider. However, the construction of the claim (in both versions) is clear and undisputed.

16 The second step requires me to identify the contribution; paragraph 43 of the judgement suggests that I need to identify what the inventor has added as a matter of substance to human knowledge. The examiner, in his letter dated 19 January 2007, considered the contribution to lie in "the provision of a plurality of award modification methods wherein one of the modification methods includes exchanging the digits of the original award to form a new award value".

17 The agent's letter of 2 February 2007 is somewhat confusing as in it, he seems to be using the words "contribution" and "advance" interchangeably. Indeed, in the second paragraph of that letter, the agent begins by stating that the contribution made by the invention "relates to an adaptation of the award mechanism which selects from a plurality of scrambled awards, providing the selected scrambled award to the player and a associated structured display providing the player with information as to the selection and award calculation", he then states that the advance relates to "a new and non-obvious controller mechanism and associated player interface for a player operable gaming device and resides in the performance and display of the unique scramble operation". However, the agent then goes on to summarise his reasoning in terms the Aerotel/Macrossan test arguing that the player operable gaming device as claimed is new in the sense

that none of the prior art discloses the particular arrangement of features that comprise the mechanism and the structured display, that this is new in itself not merely because it is used for a new game, and that the contribution therefore lies in a “new player operable gaming device”

18 In deciding what I believe to be the contribution, It makes sense for me to begin by considering the current state-of-the-art. Gaming machines which simulate, for example, traditional slot machines are well known. Players having inserted an appropriate amount of money, begin the game by pulling an arm or pushing a button which in turn rotates a series of reels or an equivalent video representation thereof, if when the reels stop, a winning arrangement of symbols is displayed, the player receives a monetary award, the value of which appears on a display. It is common for players in receipt of an award to be given the opportunity to modify or gamble that award, and various methods are known for determining the outcome of the modification or gambling operation. The agent argues that the particular arrangement of hardware, “the mechanism and the structured display” is in itself new and thus constitutes the contribution. However, I am not convinced by his arguments, and do not consider the gaming device as claimed to be made up of anything other than conventional components, that the display is entirely conventional, and that the “mechanism” as such is merely a computer processor executing an appropriately configured piece of software. Therefore, the contribution, as I see it, as a matter of substance, lies in the particular method selected and used to modify the award, and in particular the operation of regenerating or scrambling the digits to produce a new award.

19 The third step requires me to consider whether the contribution lies solely in excluded matter. The examiner considers the contribution to be excluded as it relates solely to a scheme, rule or method for playing a game as such.

20 The agent would have me believe that the claims do not relate to the rules for playing a game as such. He argues that they are directed to a gaming machine having particular features or components that interact in a defined manner to provide new and inventive functionality enabling the gaming machine to be used for playing a particular game and not to the game per se. Claim 1 specifically relates to a gambling device (a physical entity) and the contribution involves controlling the operation of such a device, and this, the agent argues, amounts to more than a mere scheme, rule or method of playing a game.

21 At the hearing, the agent made a further point regarding the rules of the game exclusion, that the invention was not about the rules for playing a game, as these were an abstract entity, things that were “in the mind of the player”. However, I note that the Hearing Officers in *Acres Gaming incorporated*[4] and *IGT*[5] considered this very point and came to the conclusion that the exclusion was not limited in any way to what a human being (in the shape of the player) has to do to play a game but encompassed other methods of playing a game, even if the way in which the game is played is determined by someone other than the player. In my opinion, the invention influences the way in which the player plays the game, whether he chooses to modify the award or not, and governs the amount of

[4] BL O/112/06
[5] BL O/211/06

award he receives. This would therefore seem to constitute a scheme, rule or method of playing a game and I would agree with the Hearing Officer that the concept is not limited to what the human player has to do.

22 Furthermore, the agent argues that following the reasoning expressed at paragraph 62 of Aerotel/Macrossan, the invention as claimed provides an electronic means of implementing a functionality that could otherwise have been done mentally, something which was considered, in the Court of Appeal to lie outside the exclusions from patentability. However, I don't think that this is quite what the Court meant. Whilst I agree, that they questioned whether a method implemented by a computer fell within the mental act exclusion, that Is not to say that it escaped the exclusions per se.

23 I have to say, I am not entirely convinced by the agent's arguments. It is clear in my mind that the gaming device as claimed is implemented from entirely conventional hardware. Any contribution that the invention makes results from what the hardware is programmed to do. To my mind, that is a new method of modifying or gambling an award at the end of a conventional game. The purpose of which, is to make the game more attractive to the player and influences the way in which the player plays the game, and governs the amount of award he receives. I therefore consider that the contribution lies firmly in the excluded field of a scheme, rule, or method for playing a game irrespective of the fact that the invention is claimed in terms of hardware, again it is the substance of the invention which matters.

24 Whilst the examiner in his letter of 2 February 2007 did not press an earlier objection that the contribution related solely to a computer program, I feel that for completeness I should address the issue. It seems to me that, once the conventional "hardware" elements are stripped from the claim, all that is left is a set of procedures to be implemented on a computer in order to determine and display the modified award. The invention is ultimately about programming a computer to pay out awards in a particular way. Therefore, I think it follows that the contribution of the invention also lies in a computer program as such and is thereby excluded.

25 Furthermore, the agent goes on to draw an analogy between the invention and that which was the basis of the Hearing Officer's decision in *Sony*[6]. However, in that case the invention related to a communications network and a novel data structure for exchanging metadata between devices, a technical field far removed from that of gaming machines, and therefore, I think that his analogy is a poor one, and the fact that the Hearing Officer found the invention in *Sony* to be patentable is of little bearing here.

26 Having decided that the contribution relates solely to excluded matter, it is not strictly necessary for me to proceed to the fourth step of considering whether or not the contribution is technical in nature. However, given that the majority of the arguments raised throughout the correspondence and at the hearing focussed on establishing that the invention made a technical contribution, I feel for completeness, I should address this issue albeit briefly.

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[6] BL O/010/07

27 The agent's arguments, in so far as they relate to a technical contribution, may be summarized as follows. The invention as claimed relates to a gaming machine having particular features or components that interact in a defined manner to provide new and inventive functionality. The claims are in fact defined in terms of technical features interacting with one another in a technical manner. For instance, claim 1, with its combination of a display device, means operable to determine whether an original award is to be modified, means for selecting which award modification to apply and means for calculating the modified award provides a new and inventive technical advance or contribution to the art and as such does not fall within the definition of excluded subject matter set out in section 1(2) of the Act or Article 52 EPC. Furthermore, he considers the invention to provide "a technical solution (the scramble and display mechanism) to the technical problem of how to provide a structured opportunity for award change which can give wide ranging options within a simple, easily appreciated stricture e.g. the player can "juggle" the displayed award digits by means of a novel mechanism." The agent refers to the EPO decisions in *Hitachi*[7], *IBM*[8] and *Konami* in support of his arguments which he alleges show that user interfaces and displays are clearly technical in nature and that structured display features may be considered to provide a technical solution to a technical problem.

28 Again, I am not convinced by the agent's arguments in this respect. I accept that new displays and user interfaces may be technical in nature. However, what we are dealing with here is enhancing the "playing experience" or as the agent perceives it improving the "interface" between the player and the game not a new display as such. Ultimately, the problem to be solved by the invention is one of how to make the game more appealing or entertaining to the player. This is achieved not by any technical means as such but by changing the rules of the game which govern the payment of awards to the player. In my view, I do not think there is anything technical in either the problem or the solution.

Conclusion

29 I have found that the invention relates to a scheme, rule or method for playing a game and a program for a computer as such and is therefore not patentable. I have read the specification in its entirety and cannot identify anything that could form the basis of a patentable invention. I therefore refuse the application under section 18 as failing to meet the patentability requirements of section 1.

Appeal

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

P R SLATER
Deputy Director acting for the Comptroller

[7] T 0258/03 Hitachi
[8] T 0115/85 IBM