

4 July 2007

## PATENTS ACT 1977

APPLICANT

IGT

ISSUE

Whether patent application nos GB  
0321493.9, 0502683.6 and 0512009.2  
comply with section 1(2)

HEARING OFFICER

R C Kennell

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## DECISION

### Introduction

- 1 These applications (hereinafter “0321”, “0502” and “0512”) all relate to controlling play on gaming machines. In each case, despite amendment of the claims, the applicant has been unable to persuade the examiner that the invention is patentable within the meaning of section 1(2) of the Act. A hearing was arranged to consider all three applications, but the applicant has since indicated that it wished to be heard only on 0502.
- 2 In a number of recent decisions in the name of either IGT or Acres Gaming Inc. (BL nos. O/112/06, O/211/06, O/293/06, O/054/07 and O/077/07) on applications relating to gaming machines in which a processor controlled the gameplay, the comptroller has found the invention(s) in each case to be excluded under section 1(2) (recited below) as relating to a computer program and/or a scheme, rule or method for playing a game as such. A letter from the Office dated 29 March 2007 explained that I would wish to be addressed on how, if at all, the present applications differed in essence and why a similar result should not follow.
- 3 As foreshadowed only the 0502 application came before me at the hearing, which took place on 17 April 2007. The applicant was represented by Mr David Slattery, assisted by Mr Barry Quest, both of the patent attorneys Wilson Gunn, and the examiner, Mr Andrew Hole, assisted via videolink. For the other applications, the letter of 29 March explained that I would decide the outstanding matters on the basis of the papers on file unless the applications were withdrawn.
- 4 Since the hearing, the applicant has been given an opportunity to comment on the judgments of the Patents Court in *Oneida Indian Nation’s Application* [2007] EWHC 0954 (Pat) excluding certain to gaming apparatus as a method for doing business and *IGT’s Applications* [2007] EWHC 1341 (Ch) dismissing the

applicant's appeal against decision O/211/06 mentioned above (hereinafter "Oneida" and "IGT"). The applicant has commented on *Oneida* but no comments had been received on *IGT* by the deadline of 26 June 2007 set by the Office.

## The law and its interpretation

5 The relevant parts of section 1(2) read (emphasis added):

"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 –

....

(c) a scheme, rule or method for performing a mental act, **playing a game or doing business, or a program for a computer;**

....;

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.**"

6 On 27 October 2006, the Court of Appeal delivered its judgment in the matters of *Aerotel Ltd v Telco Holdings Ltd* and *Macrossan's Application* [2006] EWCA Civ 1371, [2007] RPC 7 (hereinafter "*Aerotel/Macrossan*"). In this case 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 (although at the application stage this might have to be the alleged contribution)
- 3) Ask whether it falls solely within the excluded matter
- 4) Check whether the actual or alleged contribution is actually technical in nature.

7 In a notice published on 2 November 2006<sup>1</sup>, the Office stated that this test would be applied by examiners with immediate effect. It did not expect that this would fundamentally change the boundary between what was and was not patentable in the UK, except possibly for the odd borderline case. Although the approach differed from that currently adopted by the European Patent Office in *Hitachi* (T 0258/03), it was expected that the result would be the same in nearly every case.

## The 0502 application

### *The invention*

8 This application was filed as an international application on 28 July 2003, claiming a priority of 30 August 2002 from an earlier US application. It was published as WO 2004/021241 A2 on 11 March 2004, and was re-published

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<sup>1</sup> <http://www.patent.gov.uk/patent/p-decisionmaking/p-law/p-law-notice/p-law-notice-subjectmatter.htm>

under serial no. GB 2407522 A on entry to the national phase.

- 9 The invention provides two or more independently operable primary or base games each of which provides a bonus to a player upon the occurrence of triggering events as is normal, but also provides a “multi-trigger” bonus upon the independent occurrence of a triggering event in the same play, whether simultaneous or consecutive, of at least two of the primary games. This is reflected in the independent claims as amended, which comprise claims 1, 7, 17 and 20 to gaming devices and claim 30 to a method for playing a gaming device; I do not think it is necessary for me to recite these in full.
- 10 Figure 2 of the specification shows a general electronic configuration of a gaming device which includes a processor connected to input and display devices and to a memory device for storing program code or other data. The gaming device can also be implemented as a program code stored in a detachable cartridge for a video game device, or on a disk or other memory device for use in a personal computer. As an alternative to a processor and memory device, the specification mentions (see page 7 lines 15-25) that the invention can be implemented via application-specific integrated circuits, hard-wired devices or mechanical devices, but there is no specific description of such alternatives.

### **Arguments**

- 11 The construction of the claims, which is the first step of the *Aerotel/Macrossan* test, was not in issue. The dispute centred on the second and third steps – what the contribution of the invention was and whether it related solely to excluded matter, specifically a program for a computer, or a scheme, rule or method for playing a game. The examiner took the view that the contribution was the simultaneous detection of two triggering events in two different games to initiate an additional bonus game, and was excluded because it lay within a programmed processor and did nothing more than affect the course of games played on the gaming device. However, at the hearing Mr Slattery developed an argument that the invention was analogous to the *Aerotel* appeal which was allowed in *Aerotel/Macrossan* (see paragraphs 50 – 57 of the judgment).
- 12 The claims in the *Aerotel* patent (GB 2171877) were to a method and system for making telephone calls. *Aerotel*'s invention avoided the need to pre-pay for telephone calls (eg in a call box) by providing a “special exchange” as an extra piece of equipment in the routing of the call via a number public exchanges, as illustrated in a sketch by *Aerotel*'s counsel which is reproduced in paragraph 51 of the judgment. The caller had a coded account with this exchange for the deposition of credit. To make a call he entered the number of the exchange and his code, and then the callee's number: so long as there was sufficient credit in his account the call would be put through. The Court of Appeal held that, even though the system could be implemented using conventional computers the contribution of the invention was a “new physical combination of hardware” which could not be excluded solely as a method of doing business. The computer program exclusion was not specifically in issue in the *Aerotel* appeal.
- 13 Mr Slattery argued that the contribution of the present invention lay in the

provision of a “coupling means” between independent games provided on a gaming machine that was operable to monitor the games for triggering events and to initiate an additional bonus game following the detection of triggering events in multiple games. He considered the coupling means to be analogous to Aerotel’s special exchange and illustrated this by a similar block diagram which he handed up at the hearing: this represents the invention as pathways between two “primary games” and their associated “bonus opportunities”, with an alternative pathway from each primary game to the coupling means and thence to a “multi-trigger bonus opportunity”.

- 14 Mr Slattery did not think that the contribution lay solely in a computer program because the coupling means provided a new functionality by reacting with the other elements of the gaming machine. He thought there was a consistent position from *Merrill Lynch*<sup>2</sup> through to *Aerotel/Macrossan* that an invention implemented on computer hardware might be patentable so long as the functionality it provided was not excluded from patentability. Thus the functionality provided by the coupling means of the present invention (monitoring games for triggering events and initiating an additional bonus game) had the effect of operating a tool and therefore went beyond excluded matter - unlike the situation in the *Macrossan* appeal where the only contribution lay in the software and the business model.
- 15 Nor did Mr Slattery think the contribution lay solely in a scheme, rule or method for playing a game. As he saw it, the coupling means was essentially a new piece of equipment and the invention was more to do with how the gaming machine operated rather than what the player did. Also, he did not accept the examiner’s view that the contribution fell under the games exclusion because it did nothing more than affect the course of a game played on the machine. He thought that if this assertion was correct, then no patent could be granted for any article used in any sport or game, which was clearly not the case.
- 16 Applying the fourth step of *Aerotel/Macrossan* as a cross-check, Mr Slattery considered the coupling means to be an additional technical feature of the gaming machine which changed the functionality of other technical features such as display and input controls. He drew support from the decision in *Konami* (T 0928/03) at paragraph 4.1.1. The EPO Technical Board held that making a possibly concealed indicator clearly visible on a display screen to the user of an interactive video game contributed an “objective technical function” to the display, which was not cancelled by the fact that the visualized information would enter into the decisions of the user interacting with the video game. The point that Mr Slattery took from this was that because a feature might be used in playing a game or in a program system did not mean that it could not be technical.

## ***Analysis***

### The contribution of the invention

- 17 As paragraph 43 of *Aerotel/Macrossan* explains, this is to be assessed by what it

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<sup>2</sup> Merrill Lynch’s Application [1989] RPC 561

is as a matter of substance - not form - that the inventor has added to human knowledge. On this basis, whether the invention is claimed as a gaming device or a method for playing it, I think that the contribution is the provision of means for monitoring two or more independent primary games provided on a gaming machine and for initiating an additional bonus game following the detection of triggering events in the same play of at least two such games. I do not think this is essentially different from the particular formulations provided by either the examiner or the applicant except that for reasons explained below I think that it is potentially misleading to refer to the "means" as "coupling means".

Does the contribution lie solely in excluded matter?

- 18 Before deciding this point, I think it worth emphasising that paragraphs 41 and 45-47 of *Aerotel/Macrossan* clarify that the new test is a re-formulation of that in *Merrill Lynch*, and (see paragraph 47) that "a contribution which consists solely of excluded matter will not count as a technical contribution". In the Court of Appeal's view, the fourth step of checking whether the contribution was technical, although necessary if *Merrill Lynch* was to be followed, might not need to be carried out because the third step - asking whether the contribution was solely of excluded matter - should have covered the point. Therefore, as confirmed in both *Oneida* (at paragraphs 9 -13) and *IGT* (at paragraph 39), if I find that the contribution lies solely in excluded matter, then identifying a technical advance will not bring the invention back from the dead. This is not disputed by the applicant, as is clear from the submissions of 1 June 2007 on *Oneida*.
- 19 Moving then to the question of whether the contribution passes the third step, I am not convinced that the present invention is on all fours with *Aerotel* even if it can superficially be represented by a block diagram in similar fashion. Mr Slattery thought that *Aerotel* was not specifically about new hardware but about a new physical combination of hardware which could be generated by programming existing hardware. However, I think this misses the thrust of the Court of Appeal's judgment, which turned on the finding that *Aerotel*'s special exchange was a distinct item of equipment whose inclusion meant that there was a new physical combination of hardware. In my view, the present invention - at least for those embodiments involving a processor and memory device, or where the gaming device is implemented as a stored program code - is all to do with software and I do not think that the present "coupling means" is actually an additional piece of hardware analogous to *Aerotel*'s special exchange.
- 20 Mr Slattery thought that even if the invention did depend on software, the contribution was still a program in combination with the computer as a platform for carrying out a new functionality. The example of a washing machine with a new program which causes the machine to work differently or more effectively was quoted by Mr Slattery. It may well be that in such instances the contribution of the invention, considered in the broad sense of paragraph 43 of *Aerotel/Macrossan* and not simply as the inventive step or the characterising feature, might be something more than the program. However, I think that I should treat this argument with considerable caution. It seems to me that if the contribution does not go beyond a program "up and running" (see *Aerotel/Macrossan* at paragraph 73), then it can be of no relevance that the

program has some new functionality – after all any new program is going to do something different to previous programs and can therefore be said to have a new functionality.

- 21 I think it is arguable that, in those cases where the invention is implemented by way of a processor and memory or as a stored program code, the contribution is in substance nothing more than set of procedures and instructions to be carried out on conventional computer hardware. However, I have some doubt about whether the contribution relates solely to a computer program.
- 22 Thus, noting the brief mention at page 7 (not backed up by any specific disclosure) of implementation by other means including mechanical devices, it is perhaps conceivable that a mechanical or electronic switch which initiated the multi-trigger bonus on the detection of the two primary triggering events could form part of the contribution so that it did not relate solely to a computer program. (This differs from the situation in my earlier decision in *IGT* (BL O/077/07) where the specification contained identical wording.)
- 23 More to the point, turning to the recent court judgments mentioned above, the Deputy Judge in *Oneida* felt some difficulty (see paragraph 29 of the judgment) with the question of whether the contribution in that case was solely a computer program even though the technical advantages relied on were simply those resulting from placing a new business method on a computer. He preferred to rest his decision on the business method exclusion (which I deal with in more detail below). In *IGT* the question of whether the inventions in each of the four applications in suit related to a computer program as such was not before the court, that head of objection having been raised in only two of the applications and rejected by the hearing officer.
- 24 I do not however think that I need to decide whether the contribution relates solely to a computer program. It seems to me that whether or not it is implemented in software, the contribution (even if a mechanical switch were to activate the multi-trigger bonus) is all to do with the gameplay on the machine and is on all fours with those in the applications under consideration in *IGT*. It therefore lies wholly within the excluded area of playing games for the reasons which are thoroughly explained by Warren J in *IGT*, and I do not think that I need to refer to the detail of his judgment.
- 25 The business method exclusion was not raised by the examiner and was not considered at the hearing. However, the subsequent judgment in *Oneida* turned on this exclusion. The gaming apparatus in *Oneida* pre-generated and stored the results of a wager but - unlike the prior art - required the player to make a separate request to display the results; this facilitated offshore gaming because the request could be made on- or off-site and could be time-shifted from that of the wager to comply with local gaming laws. The Deputy Judge stated at paragraphs 27-28 of the judgment:

“27. There is no dispute between the parties that gaming is a business and that therefore a “gaming apparatus” is an apparatus for performing the specific business of gaming.

28. I take first the question of whether the contribution lies solely in a method of doing business. It seems to me that it does. .... The applicant has contributed an apparatus for performing a new method of conducting business (gaming) transactions. The advantages relied on by Oneida seem to me to fall within the rider in *Merrill Lynch*. They are the advantages of the new method of doing business and so fall wholly within the exclusion. Although they can be described as “technical”, they do not count as such: they are not a relevant technical effect. They are merely the consequence of putting the new business method into operation.”

26 In response to this the applicant argued that the statement in paragraph 27 was little more than a statement of semantics. The applicant thought that *Oneida* depended on a specific finding of fact that the invention contributed nothing more than an improved business method, whereas (see above at paragraphs 13-16) the present invention contributed a coupling means analogous to the special exchange in *Aerotel*.

27 I accept the applicant’s view of what *Oneida* teaches. However, the advantage of the present invention is stated in the introductory part of the specification as the maintenance of player interest through the opportunity to win an increased amount by means of the secondary bonus. I consider the Deputy Judge’s reasoning to be equally applicable to the present invention, whether considered as playing a game or doing business. For the reasons explained above I am not persuaded that the “coupling means” introduces a new apparatus feature capable of conferring patentability.

28 Although in my view the contribution of the invention could indeed be regarded as a new method for doing business (ie conducting a gaming transaction) by analogy with *Oneida*, I think that it is more naturally regarded as a new method for playing a game, particularly in the light of *IGT*. I do not therefore propose to base my decision on the business method exclusion.

#### Technical contribution

29 As I have explained above, having found the contribution to lie solely in the excluded area of playing a game, it is not necessary for me to go on to the fourth *Aerotel/Macrossan* step and consider whether the contribution is technical in nature. I do not therefore think that the point made in *Konami* is now of any relevance whatsoever to the matters that I have to decide. In any case, the decisions of the Boards of Appeal of the EPO under Article 52 of the EPC do not bind me, and their persuasive effect must now be limited in view of the contradictions in these decisions highlighted by the Court of Appeal in *Aerotel/Macrossan* and the Court’s express refusal (see paragraph 29) to follow EPO practice.

### **The 0321 and 0512 applications**

#### ***The inventions and the arguments***

30 The 0321 application, which relates to a multi-characteristic matching game, was

filed on 12 September 2003 claiming a priority of 13 September 2002 from an earlier US application, and was published under serial no. GB 2396566 A on 30 June 2004.

- 31 As now defined in the amended claims, which relate to a gaming device and a method of operating it, the game has a number of rounds in which a base and a plurality of selections (to be picked by the player) have a plurality of characteristics. The characteristics are stored in a memory device, which is accessed by a processor to generate the base and selections by assigning characteristics to them; the number of stored characteristics is less than the number of combinations that can be formed and assigned to the base and the selections. In each round the player picks selections until none of the characteristics of the unpicked selections matches one of the characteristics of the base. The processor determines an award based on the number of picked selections having at least one characteristic matching one of the base characteristics.
- 32 The applicant considers the contribution of the invention to be the provision of a machine operation which functions with a display device to display a number of combinations of characteristics which are created on demand from a number of characteristics stored in a memory device, rather than being stored as predetermined selections. It argues that this provides a technical effect by reducing the amount of data to be stored, thus reducing the amount of memory required to provide a large quantity and variety of options and increasing the data processing speed and efficiency. The examiner however took the view that the methodology of the invention - the storage, in order to generate game results - of less data items than the number of possible combinations was known in the light of the prior art, and that the contribution lay in the type of game that was being played and was therefore excluded.
- 33 The 0512 application was filed as an international application on 11 December 2003, claiming a priority of 20 December 2002 from an earlier US application; it was published as WO 2004/060512 A1 on 22 July 2004, and was re-published under serial no. GB 2411364 A on entry to the national phase.
- 34 The amended independent claims all relate to a gaming device in which an award distributor, generally a wheel which is spun by the player, associates awards with particular symbols, and an independent sequence is provided for the modification of the initial award (eg by a multiplier). The applicant explains that in known games of this type the modifier is player-selected in that it is determined by the number of occurrences of a player-selected letter in a word or phrase, whereas in the invention the player selects a group, the processor randomly selects an element in the group, and the modifier is determined based on the number of related elements in the sequence.
- 35 The applicant argues that this provides a technical contribution because it is a technical solution to the technical problem of how to allow dual control over the determination of a modifier so as to allow stage-specific recognition of different objects (sequence, groups and elements) in a way not otherwise possible. However, the examiner believes that in the light of the prior art, the contribution



lies in the operation of the processor and how it relates to the modifier, and is therefore wholly within the excluded areas of a computer program or a scheme, rule or method for playing a game.

- 36 The aforesaid letter of 29 March gave the applicant the opportunity, before I decided the matter on the papers, to submit comments as to how the applications were distinguished from the earlier Office decisions which I mentioned. The applicant has made no reply.

### ***Analysis***

- 37 In my view, following the judgment in *IGT* and my reasoning above in relation to the 0502 application, the contributions in the 0321 and the 0512 applications, however it is defined, relate solely to a scheme, rule or method for playing a game. I do not think that I need to decide whether they are excluded on any other grounds. Even if I were to accept that the applicant's argument that the contributions are technical in nature, this is now of no relevance for the reasons explained above.

- 38 I do not in any case accept that the contributions are technical in nature. It seems to me that the applicant's arguments amount to little more than highlighting a difference from the prior art and describing it as "technical" simply because it is in some way advantageous.

### **Conclusion**

- 39 I therefore conclude that the invention of each of the three applications in suit is excluded under section 1(2) because it relates to a scheme, rule or method for playing a game. Having read the specifications I do not think any saving amendments are possible.

- 40 I therefore refuse applications 0321493.9, 0502683.6 and 0512009.2 under section 18(3).

### **Appeal**

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

**R C KENNEL**

Deputy Director acting for the Comptroller