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Case No: CH/2006/APP/0661

**IN THE HIGH COURT OF JUSTICE**  
**CHANCERY DIVISION**  
**PATENTS COURT**

Royal Courts of Justice  
Strand, London, WC2A 2LL

Date: 2<sup>nd</sup> May 2007

Before:

**MR CHRISTOPHER FLOYD QC**  
(Sitting as a Deputy Judge of the Patents Court)

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**IN THE MATTER OF THE PATENTS ACT 1977**

- and -

**IN THE MATTER OF United Kingdom Patent**  
**Application No. 0308259 in the name of**  
**ONEIDA INDIAN NATION**

- and -

**IN THE MATTER OF AN APPEAL from the**  
**decision of the Comptroller General of Patents**  
**dated 14<sup>th</sup> August 2006**

**Heard 1<sup>st</sup> February 2007**

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**Mr Nicholas Fox (Patent Attorney) (instructed by Beresford & Co) for the Appellant**  
**Mr Michael Tappin (instructed by The Treasury Solicitor) for the Respondent.**

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**APPROVED JUDGMENT**

I direct that pursuant to CPR PD 39A para 6.1 no official shorthand note shall be taken of this Judgment and that copies of this version as handed down may be treated as authentic.

## Christopher Floyd QC

### Introduction

1. Patent Application No. 308259 is entitled “System, method and article of manufacture for gaming from an off-site location”. It is applied for by Oneida Indian Nation, an Indian nation based in New York, USA. On 14<sup>th</sup> August 2006 Ms. S.E. Chalmers, Deputy Director acting for the Comptroller of Patents, refused the application. She considered that the application related to a method of doing business as such, and to a computer program as such, and accordingly that, pursuant to Section 1(2)(c) of the Patents Act 1977, implementing Article 52(2)(c) of the European Patent Convention, its subject matter was not an invention. From that decision, Oneida appeal.
2. Section 1(2) of the Patents Act 1977 provides, so far as material:

*“It is hereby declared that the following (amongst 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 purpose of this Act only to the extent that a patent or application for a patent relates to that thing as such.”*
3. Section 1(2) is (by virtue of s.130(7)) intended to have the same effect as the relevant corresponding provision of the European Patent Convention, namely Article 52. So it is to Article 52 that one should refer, even though the English draftsman has preferred words of his own. That Article in relevant part provides:

*“(1) European patents shall be granted for any inventions which are susceptible of industrial application, which are new and which involve an inventive step.*

*(2) The following in particular shall not be regarded as inventions within the meaning of paragraph 1:*

*(c) schemes, rules or methods for performing mental acts, playing games or doing business, and programs for computers;*

*(3) The provisions of paragraph 2 shall exclude patentability of the subject-matter or activities referred to in that provision only to the extent to which a European patent application or European patent relates to such subject-matter or activities as such.”*
4. At the date of Ms. Chalmers’ decision, the Court of Appeal had not yet given judgment in *Aerotel/Macrossan* [2006] EWCA Civ 1371. Her decision was therefore based on earlier guidance, in particular that contained in *CFPH LLC’s Applications* [2005] EWHC 1589, a decision of Peter Prescott QC

sitting as a deputy judge. Both advocates addressed their written and oral arguments in this appeal on the structured approach in *Aerotel*. It is that approach which I must follow now.

5. In *Aerotel* at [26] the Court of Appeal identified three basic approaches to excluded subject matter: the “contribution” approach, the “technical effect” approach and the “any hardware” approach. The “any hardware” approach (in each of three possible variants) was rejected and I need not consider it further. The contribution approach was said to be:

“Ask whether the inventive step resides only in the contribution of excluded matter – if yes, Art 52(2) applies”

The technical effect approach was said to be:

“Ask whether the invention as defined in the claim makes a technical contribution to the known art – if no, art 52(2) applies. A possible clarification (at least by way of exclusion) to this approach is to add the rider that novel or inventive purely excluded matter does not count as a technical contribution”

The Court of Appeal plainly thought that the contribution approach had much to be said for it: see [32] to [37]. Nevertheless, it was bound (by *Merrill Lynch* and subsequent cases) to apply the technical effect approach with the rider: see [38]. I explain a little more about *Merrill Lynch* below.

6. The structured approach put forward in *Aerotel* involves the following steps (see [42] – [46]):
- (1) construe the claim properly to determine what the monopoly is;
  - (2) identify the contribution;
  - (3) ask whether the contribution is solely of excluded matter;
  - (4) check whether the contribution is technical.

7. At [43] the Court of Appeal say this:

“The second step – identify the contribution – is said to be more problematical. How do you assess the contribution? Mr Birss [Counsel for the Comptroller] submits the test is workable – it is an exercise in judgment involving the problem said to be solved, how the invention works, what its advantages are. What the inventor has really added to human knowledge perhaps best sums up the exercise. The formulation involves looking at substance not form – which is surely what the legislator intended.”

Although part of this paragraph is put in terms of a submission by counsel, it appears that the Court accepted the submission that assessing the contribution involves looking at the problem solved and the advantages of the invention.

8. At the application stage the assessment includes the inventor's alleged contribution, "because the Office must generally perforce accept what the inventor says is his contribution" although that is not conclusive— see [44].
9. There was a difference between the parties as to what the function of the fourth test was. Mr Fox submitted that if the inventor had made a technical contribution, then he was no longer within the exception. Mr Tappin, who appeared on behalf of the Comptroller, submitted that the fourth step was not normally necessary as the third step should have covered it, as the Court of Appeal said at [46]. He suggested that it may have independent significance in cases where the subject matter does not fall within any of the categories specifically identified in the non-exhaustive lists in s.1(2) / Art. 52(2) (note the "amongst other things" and "in particular"). I think he is right about that – but the Court of Appeal held that it was a necessary check even where the issue was whether the case falls within the non-exhaustive list: they felt themselves bound to do so in the light of the decision in *Merrill Lynch* [1989] RPC 561. There, at page 569, Fox LJ said:

“...it cannot be permissible to patent an item excluded by section 1(2) under the guise of an article which contains that item – that is to say in the case of a computer program, the patenting of a conventional computer containing that program. Something further is necessary. The nature of the addition is, I think, to be found in the *Vicom* case, where it is stated: “Decisive is what technical contribution the invention makes to the known art”. There must, I think, be some technical advance in the form of a new result (e.g. a substantial increase in processing speed as in *Vicom*).”

10. Fox LJ went on to say that, even if there was a technical contribution, if the result was still within an exclusion then that is the end of it:

“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 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 *Aerotel* at [85], after citing these passages from *Merrill Lynch*, Jacob LJ said:

“So the technical contribution theory was adopted by this court but with the important rider that inventive excluded matter could not count as a technical contribution”

It is clear, therefore, that the critical question is that asked by the third step: does the contribution lie solely in excluded matter? If the invention fails to overcome that test, then it is excluded. Identification of some technical advance as compared with earlier methods does not bring back into contention inventions excluded at the third step. If the invention has been *excluded at step 3*, any technical contribution must have been one of purely excluded matter. Inventive excluded matter cannot, as a consequence of the *Merrill Lynch* rider, count as a technical advance. The fourth step is intended merely to make sure that inventions that have *passed at step 3* are technical in nature. So step 4 is exclusionary in nature.

11. Paragraph 10 of the Patent Office’s Guidance Note issued after *Aerotel* says

“If the invention passes the third step, one must then check whether the contribution is technical in nature. Of course it is not necessary to apply this fourth step if the invention has failed at the third.”

I agree, but on the basis that an invention will not pass the third test on the strength of technical advances which fall solely within one of the excluded categories.

12. It is clear, therefore that care is needed in applying the fourth question, as it is not every effect or advantage that qualifies as a “technical” contribution. So, for example, the contribution of a programmed computer might be held to lie exclusively in excluded matter, and therefore fail at step three. It might be argued that the contribution was nevertheless technical in some sense. In one sense computer programs are “technical” but they are also excluded from being inventions. As Pumfrey J said in *Shoppalotto’s Application* [2005] EWHC 2416 at [9]:

“Suppose a program written for a computer that enables an existing computer to process data in a new way and so to produce a beneficial effect, such as increased speed, or more rapid display of information. It is difficult to say these are not technical effects..... The real question is whether this is a relevant technical effect, or, more crudely, whether there is enough technical effect: is there a technical effect over and above the fact that it covers a programmed computer. If there is a contribution outside the list of excluded matter, then the invention is patentable, but if the only contribution to the art lies in excluded matter, it is not patentable.”

13. Very recently in *Capellini & Bloomberg’s Applications* [2007] EWHC 476 at [5], Pumfrey J said that he did not understand the Court of Appeal in *Aerotel* to have disapproved that statement. For my part, I believe it to be entirely consistent with the judgment in *Aerotel*.

The application in suit

14. As the title which I have already quoted suggests, the alleged invention described in the Oneida application is designed to facilitate gaming from an off-site location. Ms Chalmers described the invention thus:

“In the prior art, a wager is placed followed by the generation and display of results by the apparatus in one sequence of operations. In contrast, [in] the present invention, apparatus pre-generates and stores the results following the wager, but the player must make a separate request to display the results. The separate request may be made on- or off-site and may be time shifted from the time of the wager, e.g. to comply with local gaming laws.”

15. Claim 1 is in the following form:

*“A gaming apparatus comprising a server having stored thereon:*

*a wagering component operable to perform wagering operations each of which generates a corresponding item of result data;*

*a database configured to store:*

*a plurality of patron account files each said account file including a patron identifier; and*

*a plurality of results files, each said results file being associated with a respective patron identifier and being adapted for storing a sequence of said items of result data;*

*output means for outputting items of result data stored in said results files;*

*means responsive to receipt of a first wagering instruction including a patron identifier to perform:*

- (i) a checking operation in relation [to] the patron account file which includes the corresponding patron identifier;*
- (ii) dependent upon the result of said checking operation, to activate said wagering component to perform a plurality of said wagering operations, and*
- (iii) to store the plurality of items of result data generated by said plurality of wagering operations in the results files associated with the received patron identifier, and*

*means responsive to receipt of a second wagering instruction including a patron identifier*

- (i) to determine whether the results associated with the patron identifier received with the second wagering instruction includes any items of results data which have not previously been output and*

(ii) *if so to cause said output means to output the next item of results data [said] in the sequence."*

16. Oneida also relied on claim 2 which provides:

*"A gaming apparatus in accordance with claim 1 wherein said means responsive to receipt of a first wagering instruction is operable to:*

*determine the value of data to be associated with a received first wagering instruction;*

*wherein said checking operation comprises a checking operation utilising said determined data and said activation of said wagering component and storage of results data comprises:*

*causing said wagering component to generate an initial sequence of results data and wherein the number of items of results data included in said sequence is selected on the basis of said determined value data;*

*iteratively processing the items of results data newly added to a sequence to determine whether additional items of results data should be added to said sequence; and*

*when it is determined on the basis of processing the items of results data added during an iteration that no further items of results data are to be added to a sequence, storing said generated sequence as a results file in association with the patron identifier received with said wagering instruction."*

17. A separate point arises on claim 16, a claim to

*"a computer readable medium including program instructions for causing a programmable computer to become configured as a gaming apparatus in accordance with claims 1-9",*

which I return to at the end of this judgment.

18. What claim 1 requires is a two stage wagering operation. In the first stage, in response to a first instruction, a series of results is generated and stored. In the second stage, in response to a second instruction, the results are revealed to the patron.

19. The prior art system to which Ms Chalmers refers, and which both sides accepted was the closest prior art, was US 5674128 (Holch). In the Holch system results are not pre-generated and revealed in the way called for by claim 1 of the Oneida application.

20. The application makes it clear that the invention may be implemented by programming a general purpose computer. Thus at page 36-37 of the Application one finds this:

*"The above-noted features, other aspects, and principles of the present invention may be implemented in various system or network configurations to provide automated and computational tools to*

*provide a patron with the ability to play from an off-site location. Such configurations and applications may be specifically constructed for performing the various processes and operations of the invention or they may include a general purpose computer or computing platform selectively activated or reconfigured by program code to provide the necessary functionality. The processes disclosed herein are not inherently related to any particular computer or other apparatus, and may be implemented by a suitable combination of hardware, software, and/or firmware. For example, various general purpose machines may be used with programs written in accordance with teachings of the invention, or it may be more convenient to construct a specialized apparatus or system to perform the required methods or techniques.” (emphasis supplied).*

21. Moreover it is clear that the differences between the invention described and that in Holch are implemented by programming, not by arranging hardware in a new way:

*“In one embodiment the server 108 may be.... the central control network disclosed in .... the 128 patent” [i.e. in Holch].*

**The first step: construe the claim**

22. There is not much difficulty here. The claim is to a gaming apparatus arranged to perform the two stage gaming method which I have described. There was no real dispute about this.

**Identify the contribution**

23. For the Comptroller Mr Tappin argues that the applicant has contributed a computerised apparatus which operates a method of gaming where the patron executes a first instruction, which pre-generates a set of results and a second which reveals the results.

24. Mr Fox, for Oneida, argues that the invention, as compared with the closest art Holch, goes further and provides a number of advantages of which the principal ones are:

- (a) the number of processing steps per bet is reduced;
- (b) the number of data transmission steps is reduced;
- (c) the system dispenses with the need to make an account check for every bet;
- (d) as a result the system is more secure and robust.

25. It is fair to say, as Mr Tappin points out, that the way that Oneida describe their invention in the application is not the way in which they describe it on this appeal. The advantages relied on in this appeal are nowhere pointed out in the application. There is not said to be any problem with permitting any number of processing or data transmission steps, or allowing an account check on every transaction, or of a lack of security or robustness. Moreover in the application as filed the advantages are described purely in terms of the

advantages for gaming (see pages 1-2 and 8-10 of the application as filed), including advantages as to how the new method may avoid restrictions imposed by local gaming laws. But if I accept, as I must at this stage in the life of the application, that Oneida's suggested advantages exist, then it seems to me that the failure to describe them in terms in the specification cannot be fatal.

26. Accordingly I accept for present purposes that the contribution made by the application is a computerised two-stage gaming apparatus as claimed which provides the advantages relied upon by Oneida in this appeal.

**Ask whether the contribution lies solely in excluded matter**

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. Whether I adopt Oneida's formulation of the contribution, or the Comptroller's seems to me to make no difference. 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 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 effect. The hardware involved is standard and forms no part of the contribution.
29. That finding is enough to dispose of the appeal. I find more difficulty with the question of whether the contribution is solely a computer program. In the end I am satisfied that the technical advantages relied on are solely those which would result from placing the new business method program on a computer, and thus do not amount to a relevant technical effect. That is what the very experienced Hearing Officer found. But I prefer to rest my own decision on the business method exclusion.

**Check whether the contribution is technical**

30. This has been covered already. I have assumed in reaching my decision on business method that Oneida would be able to establish a technical effect along the lines advanced on this appeal. But this effect lies wholly within the excluded field of a business method as such.

**Other claims**

31. Mr Fox placed some reliance on claim 2, but I was not persuaded that the position as regards business method or computer program was any different.
32. Claim 16 is to a medium bearing a computer program for programming a computer. On the basis that the underlying business method is not patentable, the limitation in claim 16 to a computer medium for executing the method does not allow the invention to escape from the business method exclusion.

33. A more controversial question arises on the assumption that I am wrong about the business method exclusion: is a claim in the form of claim 16 allowable even where claim 1 is patentable? In my judgment it is not. The claim is to a computer program as such. Just as in *Gale's Application* [1991] RPC 191 mere inclusion of the computer program on a disk is not enough to circumvent the exclusion and see *Aerotel* at [92]. No technical problem is solved by doing so and no technical effect is produced.
34. The appeal is dismissed.