



BL O/082/07

22 March 2007

PATENTS ACT 1977

APPLICANT	Cantor Index LLC
ISSUE	Whether patent application number GB 0320232.2 complies with sections 1(1) and (2)
HEARING OFFICER	R C Kennell

DECISION

- 1 This application is directed to a system for managing bets. It was filed on 29 August 2003, claiming priority from two US applications filed on 3 April and 3 June 2003, and was published under serial no. GB 2 400 202 A on 6 October 2004.
- 2 Despite amendment of the claims during substantive examination, the applicant has been unable to persuade the examiner that this is a patentable invention within the meaning of section 1(2) of the Act, or if it is, that it involves an inventive step as required by section 1(1)(b). These matters therefore came before me at a hearing on 7 March 2007. The applicant was represented by Toby Gosnall and Paul Matthews of the patent attorneys Barker Brettell, and the examiner, Ben Buchanan, attended by videolink.

The law and its interpretation

- 3 Section 1(1)(b) on inventive step is sufficiently explained above. On patentability, 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 –

 - (a) a ... mathematical method;
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 - (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.**”
- 4 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 (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.
- 5 In a notice published on 2 November 2006¹, the Patent Office stated that the new test would be applied by examiners with immediate effect. As appears from paragraphs 17 – 18, it is not expected that this will fundamentally change the boundary between what is and is not patentable in the UK, except possibly for the odd borderline case. Although the approach differs from that currently adopted by the European Patent Office in *Hitachi* (T 0258/03), it is expected that the result will be the same in nearly every case.
- 6 Of course, 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 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 the Boards’ decisions highlighted by the Court of Appeal in *Aerotel/Macrossan* and its express refusal to follow EPO practice.

The invention

- 7 The system of the invention is for betting on events with a number of participants, especially horse races. It stores two types of bet – a “win” bet (that a single participant will win) and a “group” bet (that one of a subset of more than one of the participants will win) - and determines payouts for these. The invention turns on the group bet. This allows a punter to bet against the favourite or any other particular participant, if he believes it will not win but is unsure on which other participant to bet, without having to place a series of individual bets on other participants. The system is particularly useful in “pari-mutuel” systems, where all bets on an event are pooled, the provider takes a commission and the remainder is distributed amongst the winning punters. As was explained in the correspondence and at the hearing, punters often place bets close to the start of a race: a series of individual bets placed in this way can create a logjam in the system, but a group bet has the advantage of reducing the traffic across the network at this critical time.
- 8 The manner in which the invention is claimed is of some significance. In their

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

latest form the independent claims comprise claim 1 to a gaming machine comprising user interfaces coupled by communication networks to a system platform comprising a memory operable to store the win and group bets and the identification of the winner, the processor being operable to

“... receive one or more group bets from the one or more user interfaces via the one or more communications networks;
determine an amount of a win bet payout for at least a portion of the win bets that comprise a bet on the winning participant; and
determine an amount of a group bet payout for at least one of the group bets based, at least in part, on the win bets.”

- 9 Clam 22 has a slightly different emphasis: it is to a system for displaying payout data which comprises at least one input device for placing win and group bets, a processor, a memory including databases for odds, stake and payout data for each participant, and a display: the processor

“... allocates portions of the stake placed on the one or more group bets to produce the stake data entries for each of the participants in the subset of participants forming the one or more group bets; the portions allocated to the stake data entries vary as odds are updated such that the payout for a group bet is the same irrespective of which of the subset of participants in the group bet wins the event.”

- 10 The argument before me was directed mainly to these claims, but the applicant also submitted three auxiliary requests for my consideration at the hearing, directed to further restriction of the claims if this proved necessary to distinguish the invention from the prior art. The claims as they stand also include a further independent claim 23 of the same scope as claim 1 which disclaims the machine insofar as it is solely comprised of the excluded matter from section 1(2) stated above.

Argument and analysis

- 11 In the correspondence leading up to the hearing, there was some dispute between the examiner and the applicant as to the extent to which it was necessary to consider novelty and inventive step before determining whether the invention was excluded from patentability under section 1(2). This I think arose from the test in *CFPH LLC's Application* [2005] EWHC 1589 (Pat), [2006] RPC 5 on which the Office's practice was based prior to *Aerotel/Macrossan*, which asked whether an invention was new and non-obvious under an excluded category. Even though that has now been superseded by *Aerotel/Macrossan* the applicant maintained that where a claim mentioned technical features it was still necessary to consider novelty and inventive step first because otherwise it would not be possible to determine whether those features were part of the contribution made by the invention.
- 12 Mr Gosnall and Mr Matthews did not press this argument at the hearing, and in any case I do not think it follows from *Aerotel/Macrossan*. Paragraph 43 states:

“How do you assess the contribution? Mr Birss submits the test is workable – it is an exercise in judgment probably involving the problem said to be solved, how the invention works, what its advantages are. What has the inventor 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.”

and I do not think this is necessarily the same thing as assessing novelty and/or inventive step in the light of the prior art. Nevertheless, it seems to me that in general some assessment of the invention against the prior art will often be necessary in order to decide what the contribution of the invention is. This is borne out by paragraph 44, where it is stated that although it may be necessary at the application stage to accept what the inventor alleges to be the contribution, the test must ultimately be what contribution has actually been made – and if it differs from the alleged contribution it will almost certainly be because relevant prior art has been unearthed.

- 13 However, as I explained at the hearing, I believe that I should consider exclusion under section 1(2) and inventive step as separate matters, and I now turn to this.

Exclusion under section 1(2)

- 14 As regards the first step in the *Aerotel/Macrossan* test, I do not think that (apart from claim 23, which I deal with below) the construction of the claims presents any difficulty. It has not been put in issue.
- 15 The second step of the test requires me to identify the contribution made by the invention. As I have explained above, I do not think this is necessarily the sum of the features which distinguish the invention from the nearest prior art for novelty and inventive step. Further, there was some discussion at the hearing about whether an invention could make more than one contribution (prompted by the slightly different contributions identified by the examiner in respect of claims 1 and 22). I do not think that is something I need to consider as a general point, although I would accept that more than one factor might go towards defining the contribution, and might if non-excluded serve to make an otherwise excluded contribution patentable.
- 16 It is clear from the specification that the group bet is crucial to the invention, and indeed from their own knowledge neither the examiner nor Mr Gosnall and Mr Matthews were aware of any nearer prior disclosures than the specification discussed below under “Inventive step” of systems including such a bet. The examiner saw the contribution as lying in the nature and construction of the group bet since the advantages of the invention flowed from that. However, Mr Gosnall and Mr Matthews argued that the contribution also extended to the processor since it was only by providing the processor functions that the advantage of reducing traffic in the system could be realised. As I understood it, they saw the contribution of the invention as a machine or communications system which allowed bets to be placed in a way which reduced traffic in the system.

- 17 In my view their argument is flawed insofar as it concentrates on the form of the claims rather than the substance of the contribution. Systems in which user interfaces are provided to allow bets to be communicated to a central platform where bets are stored and payouts are determined are well known, and, as the examiner has pointed out, the user interfaces, processor, memory and communications networks are conventional features. Whilst I do not think the group bet on its own, minus the context in which it operates, is a complete definition of the contribution, I agree with the examiner that it is the provision of the group bet in the system which makes the difference. In my view the contribution of the invention in both claims 1 and 22 is the provision of a group bet, its incorporation into a betting system and the calculation of payouts in dependence on it.
- 18 I must next determine in the third step whether this contribution lies solely in excluded areas. Although the examiner has maintained objection in his last report that the invention is excluded as doing business, a computer program, a mathematical method, playing a game and (possibly as regards claim 22) presentation of information, only the program and business categories were argued in any depth at the hearing. I do not in any case think that the contribution lies solely in any mathematical method or in the presentation of information even if these form part of it.
- 19 As to whether the contribution lies solely in a computer program, I am reminded by paragraph 22 of *Aerotel/Macrossan* that an invention is not to be excluded simply because it involves use of a computer program. I also note that the claims do not, at least as a matter of form, prescribe the use of a computer. Nevertheless I do not think that is the end of the matter. It seems to me that once the conventional “hardware” aspects of the claims have been stripped out the contribution of the invention lies solely in the instructions that are fed into the system to receive and store bets and allow it to calculate odds, payouts and profits. As is stated in the passage commencing at page 8 line 23, the processor may be one that executes a betting system software application or other computer instructions, and the memory may be a device suitable to facilitate execution of the computer instructions. This may be phrased in “optional” language, but no other way of operating the processor and memory is even mentioned, and I do not think it can ever have been envisaged that the invention would be implemented other than by computer. I therefore take the view that, as a matter of substance, the contribution resides solely in a computer program.
- 20 If I am wrong on that I will go on to consider the remaining exclusions – particularly the business method exclusion which I think the examiner regarded as the most relevant category. The Court of Appeal in *Aerotel/Macrossan* rejected the narrow interpretation of Mann J at first instance ([2006] EWHC 705 (Ch)), holding at paragraphs 63 – 71 that the exclusion was not restricted to abstract methods or to completed transactions, and that the fact that the invention provided a new “tool” did not solve the problem. In that particular case the Court held that the invention was for the “very business itself”. Whatever may be the scope of this phrase, it seems to me that the contribution of the invention is part of a system for placing and managing bets which results

in a completed transaction. Although Mr Gosnall and Mr Matthews suggested that the invention was more than this because it was about a new way of communication, I find it difficult to see the invention as anything other than the “very business” of placing and managing bets. In my view the contribution also resides solely in a scheme or method for doing business.

21 Having regard to the claiming of the invention as a gaming machine, I am aware that recent decisions of the comptroller have regarded some methods and systems for operating gaming machines as schemes, rules or methods for playing games, but I am rather doubtful that the placing and management of bets on participatory events is rightly regarded as playing a game. However I will make no finding on this.

22 I have therefore found the contribution of the invention to lie solely in excluded areas, and I do not think that I now need to consider whether it is technical. Paragraphs 41 and 45 – 47 of *Aerotel/Macrossan* make it clear that the new test is a re-formulation of that in *Merrill Lynch’s Application* [1989] RPC 561 in which it was emphasised that inventive excluded matter could not count as a technical contribution. 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 is solely of excluded matter – should have covered the point. It therefore seems to me that (notwithstanding the reference in *Merrill Lynch* to the EPO decision in *Vicom* (T 208/84) stressing the importance of a technical contribution) the presence of a technical contribution is now no more than a subsidiary factor, and need be considered as a fourth step only where the invention passes the first three *Aerotel/Macrossan* steps. This invention falls at the third step and that in my view is decisive.

23 Even if it is appropriate to go on to the fourth step, I do not think that the incorporation of particular types of bet into a betting system is technical in nature. Mr Gosnall and Mr Matthews sought to persuade me to the contrary, taking the view that the invention was a new way of communicating data - something that provided a “real world” effect (a measurable reduction in the number of transactions at critical times) in the technical field of communication. However, I think this viewpoint arises from an incorrect view of what the contribution of the invention actually is.

24 Putting this another way, I think the advantages of the invention stem from the way in which the system has been programmed. It may be a clever program, and it may indeed produce tangible benefits. However I do not think that automatically means that a technical effect is produced. In my view the benefits are those which would be expected to arise from the running of the program: the hardware in the system is not being caused to operate in any new way.

Inventive step

25 It is not disputed that the invention is novel, but the examiner has maintained that all claims lack inventive step in relation to specification WO 2003/022378

A1 (Ruiz Ocampo), an equivalent in the English language being available as EP 144273 A2. It is not disputed that this is the closest prior art, and it is concerned with enabling a punter to make, alter and register bets quickly in a pari-mutuel system by means of a portable keyboard apparatus. This is programmed to allow the punter to select the type of bet, select the competitors, and execute functions which allow different selections of competitors to be made and combined in various ways. The punter can therefore try out different possibilities before deciding what bet to make, and the machine can be provided with a communication port to allow the bet to be registered. As described the machine provides keys which amongst many other possibilities enable the punter to select a bet of "win" type (paragraph [0043]), select any of a number of competitors to finish in first place (paragraph [0052]), apparently by pressing individual keys for the selected competitors, and to select a function "ALL -" (paragraphs [0067] – [0068]) comprising all competitors except those specified, eg "ALL – 5,1" selects all except numbers 1 and 5. Some of the bets which can be placed are combinations of separate bets (see eg paragraph [0087])

- 26 Applying the *Windsurfing*² analysis, the examiner believes that, since win bets are well known as is the placement of multiple bets, the difference between the prior art and the invention lies in the explicit combination of a win bet with a group bet and the consequent calculation of odds and payouts. In his view it would be obvious to provide these features.
- 27 However, Mr Gosnall and Mr Matthews argued that there was no teaching of a group bet in Ruiz Ocampo, and that the selection in paragraph [0052] was instead a series of individual win bets. As they saw it, Ruiz Ocampo, although concerned like the invention to speed up the betting process, was not directed to the same problem as the present invention: it did not reduce the amount of traffic by replacing single bets by group bets, but merely facilitated the organization of a series of individual win bets. The skilled man reading it would have no incentive to provide an explicit combination of win bets and group bets and determine payouts for these.
- 28 As I read Ruiz Ocampo it is directed towards enabling a punter to quickly compare various options and place single bets which it seems to me can actually be a combination of separate bets in some cases. However, the system which is specifically described has 46 separate keyboard functions for working out the bets and embraces a wide variety of combinations, of which win bets are one of 16 types and the "ALL -" function allowing the deletion of unwanted competitors is one of four "execution" and 12 "movement" keys provided in order to group competitors. Although I am not entirely persuaded that Ruiz Ocampo (particularly the "ALL- " function) does not disclose a group bet, I do not think it clearly discloses or points to the placing of a group bet as a single transaction in conjunction with a win bet. I therefore conclude that all the claims (according to the main or any of the auxiliary requests) involve an inventive step over Ruiz Ocampo.

² *Windsurfing v Tabur Marine* [1985] RPC 59

Conclusion

- 29 I therefore find that the invention involves an inventive step in relation to the prior art cited by the examiner, but is excluded under section 1(2) because it relates to a program for a computer as such and to a scheme or method for doing business as such.
- 30 I do not think that this would be avoided by any of the auxiliary requests submitted by the applicant, or by inserting a disclaiming clause as in claim 23. As to the latter, the scope of such a disclaimer is completely uncertain. This is not a situation where it is possible to clearly identify an area of subject-matter which can be split out and disclaimed. I remain of the view, also stated in my decision in *Raytheon Co* (BL O/047/06), that such a disclaimer merely begs the question of whether the invention is in fact excluded under section 1(2).
- 31 I do not think that any saving amendment is possible which would avoid my finding, and I therefore refuse the application under section 18(3).

Appeal

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

R C KENNELL

Deputy Director acting for the Comptroller