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PATENTS ACT 1977

APPLICANT NDS Limited

ISSUE Whether patent application number GB 0224930.8 complies with section 1

HEARING OFFICER A Bartlett

DECISION

1 This decision concerns the issue of whether patent application number GB0224930.8 relates to subject matter that is excluded under section 1(2)(c).

2 The application is entitled "Voting system and method" and began life as PCT application PCT/IL01/00345 in the name of NDS Limited. It was published as WO 02/084606 on 24 October 2002. The application entered the national phase in the UK as patent application number GB0224930.8 and was republished as GB2379067 on 26 February 2003.

3 The examiner objected initially that the application related to a method for doing business, a method of performing a mental act and/or a program for a computer and also that the application lacked novelty and an inventive step.

4 Whilst amendments apparently resolved the novelty and inventive step issues to the examiner's satisfaction, it was not found possible to reach agreement as regards excluded matter. The matter therefore came before me at a hearing on 31 January 2006 where the Applicants were represented by Mr Duncan White of Marks & Clerk.

5 At the time of the hearing it was Office practice to assess whether an invention was excluded by following the approach adopted by Peter Prescott QC sitting as Deputy judge in *CFPH*[1]. However, in its judgment in *Aerotel/Macrossan*[2], handed down on 27 October 2006, the Court of Appeal approved a different approach which the Office announced in its subsequent Practice Notice[3] that it would follow with immediate effect. As a result the Applicants were invited to submit further

[1] CFPH LLC's Application [2006] RPC 5
[2] Aerotel Ltd vs Telco Holdings Ltd & Macrossan's Patent Application [2007] RPC 7
[3] Patents Act 1977: Patentable subject matter [2007] RPC 8

observations in light of that change of approach which they duly filed via their Attorney's letter dated 5 January 2007.

6 I confirm that in deciding whether the present invention is patentable I will follow the *Aerotel/Macrossan* approach but as well as the submissions made relating to that approach I will also take due account of submissions made in the correspondence and at the hearing relating to the previous approach where they are relevant.

The Application

7 The application relates to a voting system and method and is particularly concerned with a system which examines whether a user is entitled to vote so as to determine the outcome of a competition in an electronically distributed event whose audience is widely spread geographically. As described the event is a broadcast television programme of the type where viewers can vote for a preferred performer in a talent show, although the scope of the claims is such that the event could be anything that is electronically distributed including audio programs and the transmission medium could be television, internet or radio signals. For the sake of convenience I have referred to "viewers" in the remainder of this decision as shorthand for people experiencing the broadcast event.

8 The application as amended has 18 claims but there is only one independent claim which reads as follows:-

> "1. A device for use in a system for receiving an electronically-distributed voting event and a broadcast media content, the device comprising means for receiving information about an electronically-distributed voting event, means for receiving data representing one or more votes for use in one or more electronically-distributed voting events, means for associating said data representing one or more votes with said electronically-distributed voting event, means for receiving data from a user indicating a vote request to vote in said electronically-distributed voting event associated with said broadcast media content, means for determining the availability of a vote represented by said information representing one or more votes for use in said electronically-distributed voting event based on the information about the electronically-distributed voting event and based on the data representing one or more votes, the device including means for communicating data representing one or more votes to a central authority."

9 This form of wording resulted from a good deal of discussion at the hearing as to the meaning of the claims and was filed with the Agent's letter dated 1 February 2006. For the purpose of my decision I will focus on this claim.

The Law and its interpretation

10 Section 1(2) of the Patents Act 1977 identifies certain types of subject matter for which patent protection is not available. The relevant parts of this section 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) ....
(b) ....
(c) a scheme, rule or method for performing a mental act, playing a game or doing business, or a program for a computer;
(d)…..

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."

11 These provisions are designated in section 130(7) as being so framed as to have, as nearly as practicable, the same effect as the corresponding provisions of the European Patent Convention (EPC), i.e. Article 52. However, the decisions of the Boards of Appeal of the European Patent Office 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.

12 The test for assessing patentability approved by the Court of Appeal in *Aerotel/Macrossan* comprises the following four steps:

> (1) properly construe the claim
>
> (2) identify the actual contribution;
>
> (3) ask whether it falls solely within the excluded subject matter;
>
> (4) check whether the actual or alleged contribution is actually technical in nature.

13 However, as stated in paragraphs 45 – 47 of the judgment, reconciling the new test with the earlier judgments of the Court of Appeal in *Merrill Lynch*[4] and *Fujitsu*[5], the fourth step of checking whether the contribution is technical may not be necessary because the third step – asking whether the contribution is solely of excluded matter – should have covered that point.

Applying the test

14 The end result of various amendment rounds is a claim whose meaning is not immediately evident and I think it would aid understanding if I quickly describe what the various elements of the claim mean.

15 The specification as originally filed referred consistently to voting "tokens" which the voter used to place votes. In contrast, the claims no longer refer to "tokens"; instead they refer to "data representing one or more votes". The purpose of this

[4] Merrill Lynch [1989] RPC 561
[5] Fujitsu [1997] RPC 608

change appears to be to stress the technical nature of the invention but whatever the reason for the change of terminology I take "data representing one or more votes" to be the voting tokens of the original specification, there being no support for it to be anything else. That data representing the votes (ie the tokens) is different from the "information about an electronically distributed voting event" which (according to the description) can include data on the rules of voting, data about the candidates to be voted for, the time when votes can be cast and the like. This can be obtained from a range of sources including from an Electronic Programme Guide which is conventionally transmitted along with a programme signal.

16 Those two aspects of the claim are relatively easy to construe. More problematic in my view is what is meant by "associating" and "associated" as used in claim 1. This is significant because the Applicants have argued that one (if not *the*) contribution that the invention makes is in the linking of the vote to the voting event.

17 The act of "associating" is referred to a number of times in the description as originally filed. However quite what that act involves or how it is carried out is never really explained. For example, on page 4 the token is said to be associated with the electronically distributed voting event simply by being used to select a choice from within the electronically distributed event. Then on page 12 it is stated that "the vote thus consists of associating a token with broadcast media content through end user device 12".

18 At the hearing, Mr White acknowledged that "means for associating" as used in claim 1 did not have any particularly restrictive meaning. He said the means was just the voting module which "recognizes that certain data is associated with the voting event rather than performing any particular association". That leads me to conclude that "associating" and "associated" as used in claim 1 mean nothing more than tying a particular token to a particular voting event and that the voting event is tied to a particular broadcast event. In the absence of any indication to the contrary there is no justification for reading more into "associating" than this. Thus when a user wants to cast a vote for example for his or her favorite act when watching a particular edition of a talent show programme, their vote carries an indication of the programme and the act the voter selects along the lines of "This vote relates to Stars In Your Eyes Christmas Special and I vote for Act B".

19 That interpretation is I think entirely borne out by the Applicants' description of an exemplary embodiment of the invention on page 17 where the invention is described in the following terms:

> "As shown, the audience member or voter first receives a voting token which is associated with an electronically-distributed event. The voting token and the electronically-distributed event may optionally be distributed through the same medium, or alternatively may be distributed through different media. In either case, both the voting token and the electronically-distributed event are preferably received by one or more end user devices. Next, the voting token is associated with a choice, which is itself associated with the electronically distributed event and which is then expressed as the vote of the audience member.

> Once the token has been associated with a choice, such that the token is associated with the vote of the audience member, the voting token is transmitted to a central authority, such as a voting center for example."

20 As a final point on construction, in their Attorney's letter of 5 January 2007 the Applicants argued that the skilled man would construe claim 1 to be limited to a device used in broadcast media systems of the type where a user can interact by taking part in a voting process within the system. The system in which the device was used was not, they argued, a mere voting system but also required the ability to receive the broadcast media content. I agree with them on that point. I note however that it is the system that has that capability, not the device. Whilst the device might also receive the broadcast event (eg where the voting function is provided in a set-top box) the claim is not so limited and the device need only be for use in a system where the media content is received.

21 Thus the device of claim 1 operates by receiving information about a voting event tied to received media content, receiving one or more tokens to be used in the voting event, tying the token to the voting event, receiving a request from a user to vote in a particular voting event associated with the received media content, determining the availability of a vote on that event from the tokens and the information on the voting event and sending the used tokens to a central authority.

22 The second step in the new approach is to identify the actual contribution made by the invention. In paragraph 43 of the *Aerotel/Macrossan* judgment the Court said that "What has the inventor really added to human knowledge perhaps best sums up this exercise" having apparently accepted the submission of Comptroller's Counsel that "it is an exercise in judgment probably involving the problem said to be solved, how the invention works, what its advantages are".

23 In that paragraph the Court also restated its previous findings that in identifying the actual contribution it is substance that matters rather than the form of claim. The present claims are drafted in terms of "A device for use in a system" rather than the "voting method" formulation originally employed. The specification however includes very little in the way of description as to the way this device works. In the main embodiment, the invention is described as a voting software module which can be operated by an interactive television. There is no suggestion anywhere in the specification that any of the hardware – either the interactive television system or the voting module - is anything other than conventional. There is even less description provided on how the device would operate where the device for "displaying" the media content is a computer or a radio as per page 4 of the description. Rather the device is defined solely in terms of the functionality it provides. On page 6 of the description the Applicants envisage providing that functionality in software, firmware or hardware. I will revisit the software issue when I come to step 3 but in the absence of any specific disclosure as to how this functionality would be provided in hardware or firmware I fail to see how the contribution could reside anywhere other than in the functionality that the hardware is programmed to provide irrespective of the fact that the claim is drafted in terms of "a device".

24 So what is the actual contribution made by the invention? I have to say this is not

easy to identify in the present case. In his final written submission, Mr White identified the contribution as being :

> A device for use in a broadcast media system which provides means of linking a "vote" with a voting event, whereby a user can use that "vote" at a time when the user personally experiences the voting event".

25 The section preceeded by "whereby" in this formulation is in effect a statement of the advantages Mr White suggests the invention provides. His submissions suggest there are two elements to this. The first is that in contrast to prior art systems which restrict the time at which viewers can vote, the present system allows voting when the programme is watched. Expanding that slightly, Mr White has suggested that the invention seeks to overcome the problem in the prior art that a viewer who watches a programme sometime after its initial broadcast is precluded from voting. He says that this time sensitivity results from the inability to link the vote to a voting event in the prior art. It is not, he said, a consequence of a rule of the voting event.

26 From my understanding of the application, I do not agree that the invention provides a solution to that problem. It seems to me that whilst a viewer using a conventional system to watch a programme after its initial broadcast may be precluded from voting, that is purely a consequence of the rules of the particular voting event. Thus for example if the poll closes at 10pm and he watches the programme at 11pm, he will not be able to vote. However, it seems to me that the present system is subject to precisely the same limitation – the viewer will still not be able to vote when he experiences the programme if that is after the poll has closed. Thus any ability to vote when he actually experiences the broadcast using the present system will still be dependent upon the rules of the voting event.

27 I am also not wholly persuaded by the second element underpinning Mr White's identification of the contribution which relates to the equipment required to implement the process of voting. This is again discussed in relation to the prior art. In his submissions, Mr White suggests that prior art systems suffer from the fact that the process of voting is divorced from the process of actually watching the broadcast because of the need to use a separate piece of equipment such as a telephone to register the vote. This he suggests is avoided in the present system.

28 I see a number of flaws in that particular argument. Whilst the most familiar viewer participation programmes do require a viewer to use a telephone, the prior art identified by the examiner and discussions at the hearing showed that not to be the entire picture. For example, EP1001386 ('386 hereafter and cited by the examiner) discloses a tele-voting system where, as an alternative to casting votes using a telephone, users can also submit votes via e-mail or as HTML pages over the internet. Additionally, EP0711075 ('075 hereafter and also cited by the examiner) discloses a tele-voting system including a set-top box and associated televoting terminal where votes are submitted via telephone lines but without actually using a telephone handset. Thus at the priority date of the invention it was known to use means other than a conventional telephone handset to vote on broadcast media events and, particularly in the case of '075,

that would have the effect of linking the voting and viewing processes more closely.

29 Thus I have serious reservations as to whether the invention does actually provide the contribution identified by Mr White. I will proceed on the basis that it does however, because in the out turn I do not think it makes any difference.

30 In addition it seems to me that the only other possible source of the required contribution is that the invention provides local verification of the entitlement to vote where as in '386 the verification is carried out centrally (and not at all in '075). Mr White sought to rely on this at the hearing but not in his submissions on the *Aerotel/Macrossan* approach. I will also consider that contribution when applying step 3.

31 The third step in the test is to ask whether the contribution falls solely within the excluded subject matter as a program for a computer and/or a method for doing business or performing a mental act.

32 Taking the computer program exclusion first, I have already said that the hardware used to implement the invention is entirely conventional. Thus the fact that the invention of claim 1 is claimed as a "device" does not mean the contribution falls outside the computer program exclusion. Neither is that exclusion avoided merely because as stated at page 6 of the description "the invention could be implemented as software, firmware or hardware, or as a combination thereof." The claims clearly encompass implementation via software and a claim which covers something that is excluded is of course a bad claim.

33 In my view even if the contribution does, as Mr White suggests, include advantages resulting from linking the process of voting more closely to the experience of the event, the contribution made by the software implementation resides solely in the program being run on conventional hardware to implement a particular voting method. I fail to see how that can provide a contribution outside the excluded subject matter. As for the contribution coming from local verification of the eligibility to vote, as discussed at the hearing, such local verification has long been a feature of voting systems, for example the check carried out against the electoral register when a voter presents his or her polling card at a polling station. Programming the system to provide that functionality does not in my view provide any contribution outside excluded matter.

34 It seems to me that whatever the precise contribution made by the present invention is, it must reside in the way the various elements are programmed to provide a particular method of voting, Whilst much has been made of the association/associating features I can see nothing in those beyond specifying the voting event that a token can be used for and the tying of the voting event to a particular broadcast event. It seems to me that those are no more than features of the program and cannot make a contribution outside excluded matter. Thus in so far as the claim covers the implementation of those instructions as software then any contribution must to my mind reside solely within excluded matter as a program for a computer.

35 Having found any contribution made by the invention of claim 1 to fall within

excluded matter as a program for a computer it is not necessary for me to address step 4 of the *Aerotel/Macrossan* test.

36 Nor is it strictly necessary for me to consider whether it is also excluded under any of the other categories reported by the examiner, namely the business method and mental act exclusions. However, on that latter point I note that although strictly *obiter dicta,* the Court's comments in paragraph 62 of the *Aerotel/Macrossan* judgment suggest that the mental act exclusion does not extend to electronically implemented methods. Thus the judgment suggests that the present invention is not excluded under that category.

37 At the hearing I asked Mr White if he wished to make submissions on any of the dependent claims. In response he referred me to claims 3 and 5 which concern invalidating the vote and the reception or storage of the voting tokens respectively. I can see nothing in these or any of the other claims that could be said to provide a contribution in a non excluded field. They are again features that the equipment is programmed to provide and any contribution they make falls within the computer program exclusion.

38 My conclusions above relate to the software implementation of the invention. I do not consider it necessary to decide whether a claim to the hardware or firmware implementation would be patentable as there is no enabling disclosure of such implementation.

Decision

39 I have found that in so far as the claims cover implementation via a computer program, any contribution made by the invention defined falls solely within excluded matter as a program for a computer as such. I therefore refuse the patent application under section 18(3) for failing to comply with section 1(2)(c) of the Act.

Appeal

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

A BARTLETT
Deputy Director acting for the Comptroller