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Datasheet for the decision of 13 December 2007

Case Number: T 1644/06 - 3.2.04
Application Number: 02731961.5
Publication Number: 1414533
IPC: A63F 13/00
Language of the proceedings: EN

Title of invention:
Security System for bingo-type games

Applicant:
Multimedia Games Inc.

Headword:
-

Relevant legal provisions:
-

Relevant legal provisions (EPC 1973):
EPC Art. 52(1), 56

Keyword:
"Inventive step (yes)"

Decisions cited:
-

Catchword:
-
Case Number: T 1644/06 - 3.2.04

DECISION
of the Technical Board of Appeal 3.2.04
of 13 December 2007

Appellant: Multimedia Games Inc.
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Decision under appeal: Decision of the Examining Division of the European Patent Office posted 12 June 2006 refusing European application No. 02731961.5 pursuant to Article 97(1) EPC.

Composition of the Board:
Chairman: M. Ceyte
Members: A. de Vries
T. Bokor
Summary of Facts and Submissions

I. The Appellant lodged an appeal, received at the EPO on 10 August 2006, against the decision of the Examining Division posted 12 June 2006, refusing the European patent application no. 02 731 961.5 and simultaneously paid the required appeal fee. The grounds of appeal were received 18 October 2006.

II. In its decision the Examining Division held that the application did not meet the requirements of Articles 52(1) and 56 EPC as the claimed solution fell mainly within the domain of subject-matter excluded under Article 52(2)(c) EPC which cannot therefore support inventive step, or, alternatively, represented the application of well-known techniques.

III. After a first communication issued 29 March 2007 by the Board and in response to a note of a telephone attendance on 27 July 2007 with the Board the Appellant, with letter of 27 July 2007, submitted amended claims and description pages forming a new sole request. Consequently he requests that the decision under appeal be set aside and a patent be granted based on the following documents:

Claims
No.: 1 to 13 filed with letter of 27 July 2007

Description
Pages: 1 to 8 filed with letter of 27 July 2007

Figures
Drawings, sheet 1/2 as published and sheet 2/2 as filed with letter of 23 December 2003
IV. The wording of the independent claims of the sole request is as follows:

1. "A method of operating a system for bingo-type games including a computer (20) into which physical designations (16) are input by an operator after being generated in a game draw for the play of an instance of the bingo-type game, comprising the steps of:
   (a) generating the physical designation (16) in a process of generating various physical designations for the play of the bingo-type game;
   (b) inputting the physical designation (16) by an operator into the computer (20) after being generated for the play of the bingo-type game;
   (c) after the physical designation (16) is generated for the play of the game and inputted by the operator, the computer substantially randomly mapping a physical designation (16) to a virtual designation (32) and converting the physical designation (16) to the virtual designation (32) to which the physical designation (16) is mapped, and communicating the virtual designation (32) to a player terminal (21) in lieu of the physical designation (16)".

8. "A security system for bingo-type games including a computer (20) into which physical designations (16) are input by an operator, in which the computer comprises:
   (a) a mapping processing device (23) for substantially randomly mapping a physical designation (16) to a virtual designation (32) to create a mapped relationship between the physical designation (16) and the virtual designation (32);
(b) a physical designation input device (22) for enabling an operator to input the physical designation (16) after the physical designation (16) has been drawn for the play of a bingo-type game; and
(c) a conversion processing device (23) for receiving the physical designation (16) input by the operator, for converting the physical designation (16) to the virtual designation (32) to which the physical designation (16) is mapped by said mapping processing device (23), and for communicating the virtual designation (32) to a player terminal (21) in lieu of the physical designation (16)").

Reasons for the Decision

1. The appeal complies with Articles 106 to 108 and Rule 64 EPC and is therefore admissible.

2. Background of the invention

The invention concerns computer based bingo-type gaming systems which, due for example to state regulations, require an operator to input draw results into the system computer. To foil any attempts at fraud by a player communicating his desired results to a colluding operator, the invention - as claimed in method claim 1 and system claim 8 - maps the input draw results ("physical designation" in the wording of the claim) onto other results ("virtual designations") in a substantially random manner; these are then communicated to the players.
3. Allowability of amendments under Article 123(2) EPC

3.1 Claims 1 and 8 are based on the like numbered originally filed claims which are amended to include features essential to the solution of the underlying problem of fraud addressed by the invention, see description page 2, lines 5 to 12. That problem is specific to a bingo-system including a computer into which an operator inputs drawn results as apparent from the bridging paragraph of description pages 1 and 2. The solution itself resides in the particular mapping carried out by the computer after input and described on description page 7, lines 11 to 19, such that it "randomly generates the virtual designations", though generation "need not be purely random", interpreted by the Board as meaning that the mapping is substantially random.

3.2 Method claim 1 is thus reworded as directed to a method for operating the above system (see opening lines of the claim). It also now includes as step (b) the explicit step of the operator inputting drawn results into the computer. Final step (c) incorporates the mapping step, specifying that it is performed after input by the computer and substantially randomly. It also now indicates, more precisely, communicating the mapped designations to a player (rather than simply "using" them in game play), see description page 4, lines 7 to 8, which must be read outside a player terminal context, see page 6, lines 11 to 14.

3.3 Similar changes have been made to claim 8 which is now directed at a security system for bingo type games (see also description page 1, lines 2 to 3) with computer
and operator input. The mapping processing device now refers to substantially random mapping, a suitably reworded physical designation input device has been incorporated from original claim 9, and the conversion processing device is for communicating the virtual designations to the player terminals, see page 4, lines 7 to 8. Finally, the functional interrelationship between these various components as e.g. apparent from figure 1 is clarified.

3.4 In conclusion, the Board is satisfied that claims 1 and 8 have a clear basis in the originally filed application documents and thus meet the requirements of Article 123(2) EPC.

4. Novelty

4.1 Automated bingo systems in which an operator inputs drawn results into a system computer for communication to players are well known, see for example US-A-5 951 396 (hereinafter D1) or WO-A-00/69535 (hereinafter D2) both cited in the supplementary European Search Report. Vis-à-vis this prior art the method and system of claims 1 and 8 respectively differ in the substantially random mapping of physical designations (drawn results) onto virtual designations which are then communicated to a player in lieu of the physical designations, as expressed in step(c) of claim 1, respectively features (a) and (c) of claim 8.

4.2 The Board concludes that the subject-matter of claims 1 and 8 is novel over the prior art as required by Article 52(1) in combination with Article 54 EPC.
5. **Inventive Step**

5.1 Starting from the prior art mentioned above the central differences reside in the substantially random mapping of the drawn results to virtual results and the communication of the latter instead of the former to the player as detailed previously. These measures have the effect of permanently scrambling the relationship between the initially drawn results and the results communicated by the computer to the player in a manner that renders knowledge of the former useless to an operator. In this manner they successfully address the problem of fraud between a player and operator in a bingo system using a computer to communicate drawn results between operator and player.

5.2 Such a solution is not apparent from the prior art cited either in the International Search Report or the Supplementary European Search Report. The Board adds that in this regard the search may be regarded as complete. In view of the Guidelines for Examination in the EPO, B-III, 3.1 and 3.2, it may be taken to have had due regard to the description and to have considered all features essential to the solution to the main technical problem of fraud identified as such on page 2, lines 15-17 ("summary of the invention"). This is evident in particular from the exhaustive list of citations illustrating various forms of mapping in computer implemented games, but also including D1 and D2 pertinent to automated bingo with operator input.

5.3 Nor does the Board believe that it may be considered to belong to the common general knowledge of the skilled
person - in this case a software engineer specialized in gaming design. In particular, and contrary to one line of reasoning in the decision under appeal, the Board considers random mapping and communication of the mapped instead of the drawn results to the player to be fundamentally distinct from encryption/decryption techniques used for secure data transmission, both as regards execution and purpose. The latter techniques encode input data upon transmission, but, by decoding at the receiving end restore it to its original form and content. The input data, in particular its information content, is thus protected against unauthorized third party scrutiny during transmission, so establishing secure communication between sender and receiver.

In the present invention the random mapping of data once input may be considered as analogous to encryption. However, it is not followed by decryption at the player end. As a result the data at output, i.e. at the player end, is permanently scrambled with respect to that input at the operator end. This renders knowledge of the output useless to an operator, thus shielding game play against fraud in the form of illicit feedback between a player and operator.

5.4 In contrast to a further line of reasoning in the appealed decision, the Board also holds both the underlying problem as well as its claimed solution to be technical in nature. Both must be seen within the specific technical context of a bingo system where a computer communicates draw results to a player input by an operator. Within that context the problem of preventing fraud between player and operator at input
and output ends respectively of the computer acquires technical character.

Likewise, the solution, which relates to the manner in which random numbers are generated by manipulating data input into the computer, is undoubtedly technical. Forms of mapping may be conceivable which could be carried out in a traditional (non-computer based) bingo scheme, and which might therefore arguably lie within the domain of game rules. However, the Board is convinced that the substantially random mapping carried out by a computer for the purposes of a bingo-type game as claimed cannot be so seen as a game rule, but is rather a solidly technical measure contributing to the solution of the above technical problem.

It is important to note that game rules refer to a regulatory framework determining the course and the outcome of the game as agreed between or with players, and meaningful to them only in that context. In the present invention game rules bear on the fact that random designations are generated from an agreed set (and any action the player is allowed to take in response thereto). However, the particular manner in which the designations are randomly generated is of no import to the player - whether this be by such technical means as necessary for drawing printed balls or for using an electronic random number generator - and he may in fact be unaware of how they are generated. The means of generation as claimed thus lies squarely in the technical domain.

5.5 In the light of the above the Board concludes that the claimed solution to the problem of fraud prevention,
both of which are technical in the given specific context, is neither known nor obvious from the prior art, even when taking account of the skilled person's common general knowledge, and thus meets the requirements of Article 52(1) with Article 56 EPC.

6. In conclusion the Board finds that the invention as claimed in claims 1 and 8 meets all the requirements of Article 52(1) EPC.

Order

For these reasons it is decided that:

1. The decision under appeal is set aside.

2. The case is remitted to the department of first instance with the order to grant a patent on the basis of the documents indicated under section III.

The Registrar

G. Magouliotis

The Chairman

M. Ceyte