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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:
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Relevant legal provisions:
–

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

Keyword:
"Inventive step (yes)"

Decisions cited:
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Catchword:
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Boards of Appeal

Chambres de recours

Case Number: T 1644/06 - 3.2.04

D E C I S I O N
of the Technical Board of Appeal 3.2.04
of 13 December 2007

Appellant:	Multimedia Games Inc. 206 S. Wild Basin Road, Building B, 4th Floor Austin, TX 78746 (US)
Representative:	Eder, Christian Eder & Schieschke Patentanwälte Elisabethstraße 34/II D-80796 München (DE)
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   The Chairman

G. Magouliotis   M. Ceyte

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