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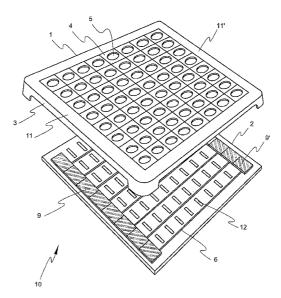
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For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: BOARD FOR A BOARD GAME TO BE PLAYED BY ONE PERSON



(57) Abstract: Board (10) for a board game to be played by one person, comprising a flat first panel (1), of which a surface intended as upper side is subdivided into squares (4) by rows and columns, wherein one square in each column can be marked as desired by means of at least one marking means (8, 8') coupled fixedly to the board, which board comprises a second panel (2) arranged against the underside of the first panel, wherein the at least one marking means comprises a plate-like marker element (9, 9') which, by means of an operating element (7, 7') extending through the second panel, is displaceable between a first position in which the marker element is not visible and a second position in which the marker element is visible on the upper side of the board behind a window (5) formed in the square.



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#### BOARD FOR A BOARD GAME TO BE PLAYED BY ONE PERSON

The invention relates to a board for a board game to be played by one person, comprising a flat first panel, of which a surface intended as upper side is subdivided into squares by rows and columns.

Examples of such a surface subdivided into squares are the chessboard and the draughtboard.

A known game that can be played by one person on a chessboard is the eight queens problem. The object of this game is to place eight queens on a chessboard in a manner such that the queens are not attacking each other. The object is, in other words, to place eight pieces on the board in a manner such that no two pieces stand on the same row, column or diagonal. It is known that the eight queens problem has twelve solutions, wherein identical solutions which are obtained by the mathematical operations of rotation and reflection are not counted. If the game is played with fewer than eight queens, or on more than 8x8 squares, the number of solutions increases. The number of solutions can be limited by a limitation self-imposed beforehand of not placing any pieces on squares on the same row, column or diagonal as one or more pre-marked squares. It is known for instance that when three squares are marked in this way on a chessboard, the problem of placing five queens which are not attacking each other has three mathematically different solutions.

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Although it is possible in principle to play the eight queens problem and variations thereof on a chessboard or draughtboard, these boards are in practice less suitable for this purpose, particularly when used during travelling. Known pocket-size chess and draughtboards make use of loose pieces which must be placed on the board in mechanical or magnetic manner.

Playing with loose pieces is perceived under some circumstances as a reason for not making use of such a game.

An inherent drawback of a chess or draughtboard in use as game board for a puzzle for one person is the absence of

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playing instructions.

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The object of the invention is to provide a board for a board game to be played by one person, which is free of loose components, is compact, can be provided with playing instructions in simple manner and can be manufactured at low cost.

This object is achieved with a board of the type stated in the preamble, wherein according to the invention one square in each column can be marked as desired by means of at least one marking means coupled fixedly to the board.

The ability to mark the squares by means of a marking means coupled to the board renders unnecessary the use of loose pieces, draughts, or a separate operating means, so that the board is always complete and ready to use. The eight queens problem is for instance played on such a board with 8x8 squares by marking a first square in a first column, marking a second square in a second column, wherein the first and the second square may not be situated in the same row or diagonal, and so forth.

In one embodiment the at least one square can be marked as desired by a first or a second marking means coupled fixedly to the board. According to such an embodiment the problem of the eight queens is for instance played on a board with 8x8 squares by marking a first square in a first column and a second square in a second column, each with a first marking means, wherein the first and the second square may not be situated in the same row or diagonal and the first marking means have the function of marking the first and second square, and subsequently marking a third square in a third column and a fourth square in a fourth column with a second marking means, wherein the first, second, third and fourth square may not be situated in the same row or diagonal, and so on.

In one embodiment the marking means is an electronic marking means, for instance a LED (light emitting diode) or LCD (liquid crystal display), the power supply and control circuit of which are integrated into the board.

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In a particularly advantageous embodiment the marking means is a mechanical marking means.

A board provided with a mechanical marking means according to the invention comprises for instance a second panel arranged against the underside of the first panel, wherein the at least one marking means comprises a plate-like marker element which, by means of an operating element extending through the second panel, is displaceable between a first position in which the marker element is not visible and a second position in which the marker element is visible on the upper side of the board behind a window formed in a square.

In such a board the second panel is preferably provided with longitudinal grooves extending parallel to the columns and corresponding with these columns for the purpose of receiving therein the operating element of the at least one plate-like marker element, and more preferably with second windows corresponding with each of the respective squares for the purpose of displaying on the underside of the board a marker element visible on the upper side of the board through a first window.

In another embodiment of a board according to the invention the side of this board intended as underside is provided with information symbols which serve for instance as playing instructions.

The squares ordered in rows and columns in a board according to the invention can in principle have any shape, but preferably have a square shape.

The number of rows and columns in a board according to the invention amounts to for instance at least 4 of each, and this number preferably amounts to 8 of each.

The invention will be elucidated hereinbelow on the basis of exemplary embodiments, with reference to the drawings.

In the drawings

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Fig. 1 shows an exploded view of an embodiment of a board according to the invention,

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Fig. 2 is a perspective view of a marker element for a board as shown in fig. 1,

Fig. 3 is a bottom view of the board shown in fig. 1, and

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Fig. 4 is a top view of the board shown in fig. 1.

Corresponding components are designated in the figures with the same reference numerals.

Fig. 1 shows a board 10 which is assembled from an upper panel 1 which is provided with a downward directed peripheral edge 3, in which edge a lower panel 2 is clamped in the ready-to-use state. The top side of upper panel 1 is subdivided by 8 rows and 8 columns into 64 squares 4, in each of which a window 5 is arranged. Lower panel 2 is provided with longitudinal grooves 6 which correspond with and extend parallel to the respective columns in upper panel 1. 15 Protruding through grooves 6 are operating tongues of respective tabs (shown in fig. 2), of which a plate-like part 9, 9' is received between lower plate 2 and upper plate 1. Displaceable along each groove 6 are two plates 9, 9', which in rest position are placed in the outer ends of grooves 6 20 and there concealed from view by respective edge zones 11, 11' of the first panel. The plates 9 at the one end of grooves 6 are of the same colour, but differ in colour from plates 9' at the other end of grooves 6, which are likewise of the same colour. The figure further shows windows 12 in 25 lower plate 2 under each of the squares 4 in upper plate 1.

Fig. 2 shows a tab 8, 8' with plate 9, 9' and an operating tongue 7, 7' extending transversely thereof.

Fig. 3 shows board 10 in bottom view, with lower panel 2 and grooves 6 through which protrude operating tongues 7, 7' of the respective tabs 8, 8'. The numbers 1 to 25 are arranged on the underside of board 10 at positions corresponding with the 64 squares on the upper side, wherein numbers 1-3 occur four times, numbers 4-11 three times and numbers 12-25 twice. These numbers correspond with game problems of increasing degree of difficulty, wherein a tab of a first colour has to be placed at the relevant square. In

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the shown example tabs are placed at the numbers 13, whereby plates 9' have become visible through windows 12 under these numbers.

Fig. 4 shows board 10 in top view in the situation

described in fig. 3, with upper panel 1, in two columns of which the plates 9' have become visible through windows 5.

The object of the game is to mark a square 4 in each of the other columns by sliding the tabs 8, wherein a plate 9 appears behind each window in each column, in a manner such that no squares are marked which are situated in the same row, column or diagonal as one or more pre-marked squares. In order to enhance convenience of use, it can be stated on the underside, adjacently of the problem numbers 1-25, in a different, for instance smaller, font how many different solutions the relevant problem has.

It is noted that games for two or more persons can also be played on the above described board game for one person.

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#### CLAIMS

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- 1. Board (10) for a board game to be played by one person, comprising a flat first panel (1), of which a surface intended as upper side is subdivided into squares (4) by rows and columns, characterized in that one square (4) in each column can be marked as desired by means of at least one marking means (8, 8') coupled fixedly to the board (10).
- 2. Board (10) as claimed in claim 1, <u>characterized in</u>
  that the at least one square (4) can be marked as desired by
  a first (8) or a second (8') marking means coupled fixedly to
  the board.
- 3. Board (10) as claimed in either of the claims 1-2, characterized in that the marking means is an electronic marking means.
- 4. Board (10) as claimed in either of the claims 1-2, characterized in that the marking means is a mechanical marking means (8, 8').
- 5. Board (10) as claimed in claim 4, characterized in that it comprises a second panel (2) arranged against the underside of the first panel (2), and the at least one marking means (8, 8') comprises a plate-like marker element (9, 9') which, by means of an operating element (7, 7') extending through the second panel (2), is displaceable between a first position (11, 11') in which the marker element (9, 9') is not visible and a second position (5) in which the marker element (9, 9') is visible on the upper side of the board (10) behind a window (5) formed in a square (4).
- 6. Board (10) as claimed in claim 5, characterized in that the second panel (2) is provided with respective longitudinal grooves (6) extending parallel to the columns and corresponding with these columns for the purpose of receiving therein the operating element (7, 7') of the at least one plate-like marker element (9, 9').
  - 7. Board (10) as claimed in claim 6, characterized in that the second panel (2) is provided with second windows

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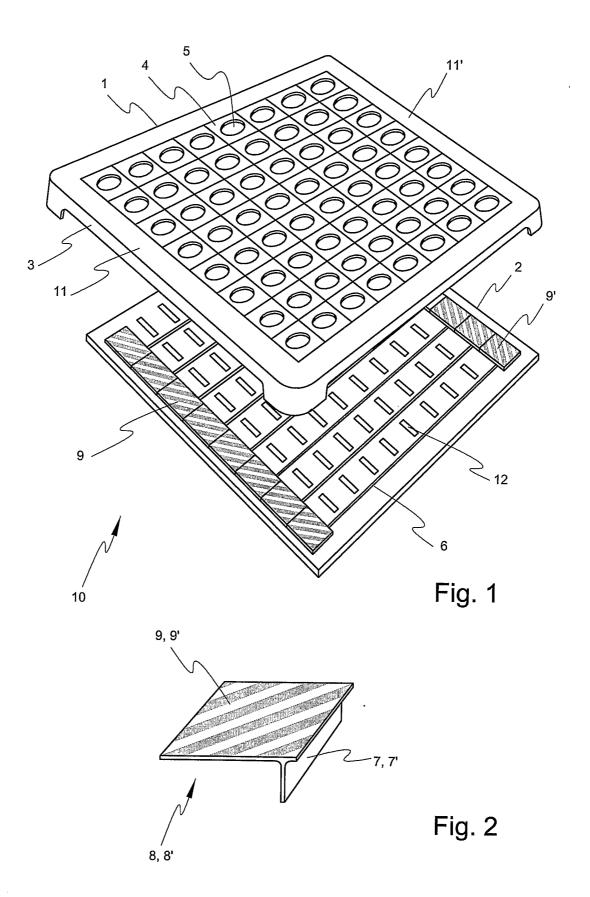
(12) corresponding with each of the respective squares (5) for the purpose of displaying on the underside of the board (10) a marker element (9, 9') visible on the upper side of the board through a first window (5).

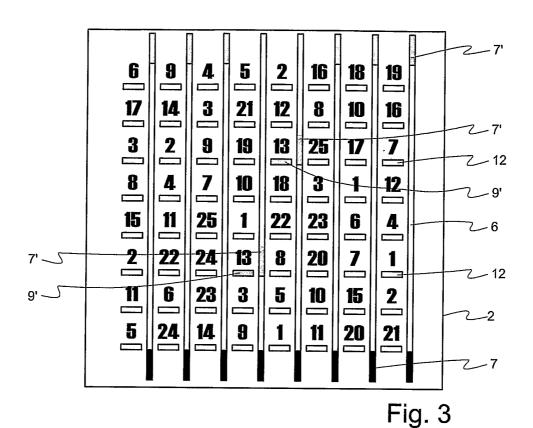
- 8. Board (10) as claimed in any of the claims 1-7, characterized in that the side thereof intended as underside is provided with information symbols.
- 9. Board (10) as claimed in any of the claims 1-8, characterized in that the squares have a square shape.

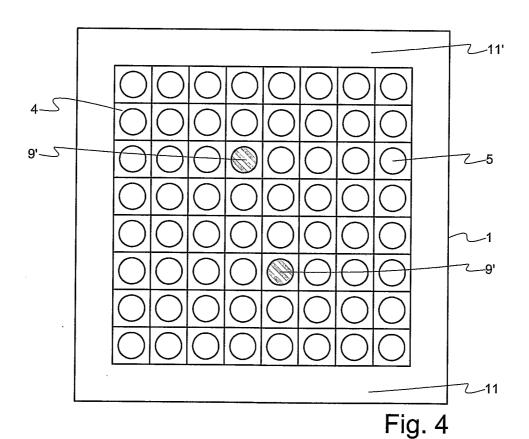
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- 10. Board (10) as claimed in any of the claims 1-9, characterized in that the number of rows and columns amounts to at least 4 of each.
- 11. Board (10) as claimed in claim 10, characterized in that the number of rows and columns amounts to 8 of each.







#### INTERNATIONAL SEARCH REPORT

International application No PCT/NL2006/000122

A. CLASSIFICATION OF SUBJECT MATTER INV. A63F3/02 According to International Patent Classification (IPC) or to both national classification and IPC Minimum documentation searched (classification system followed by classification symbols) A63F Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Electronic data base consulted during the international search (name of data base and, where practical, search terms used) EPO-Internal C. DOCUMENTS CONSIDERED TO BE RELEVANT Relevant to claim No. Category\* Citation of document, with indication, where appropriate, of the relevant passages χ 1-3, 10,US 2003/116913 A1 (HARPAZ YEHOUDA) 26 June 2003 (2003-06-26) paragraphs [0001], [0026], [0030], [0036]; figures 1-3 US 3 689 072 A (BEVERLY W. TAYLOR) 1,2,9 χ 5 September 1972 (1972-09-05) the whole document X US 5 683 089 A (CLARK ET AL) 1,2,4,10 4 November 1997 (1997-11-04) the whole document χ NL 1 001 773 C1 (JOHANNES ENGELBERT 1,4,9,10 SCHNEIDER; KAROLUS WALTER ROELEVELD) 30 May 1997 (1997-05-30) the whole document -/-χ Further documents are listed in the continuation of Box C. See patent family annex. Special categories of cited documents : "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the "A" document defining the general state of the art which is not considered to be of particular relevance invention "E" earlier document but published on or after the international "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to filing date "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) involve an inventive step when the document is taken alone "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the cat. "O" document referring to an oral disclosure, use, exhibition or document published prior to the international filing date but later than the priority date claimed in the art. "&" document member of the same patent family Date of the actual completion of the international search Date of mailing of the international search report 19 June 2006 27/06/2006 Name and mailing address of the ISA/ Authorized officer European Patent Office, P.B. 5818 Patentlaan 2 NL – 2280 HV Rijswijk Tel. (+31–70) 340–2040, Tx. 31 651 epo nl, Fax: (+31–70) 340–3016 Schut, T

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