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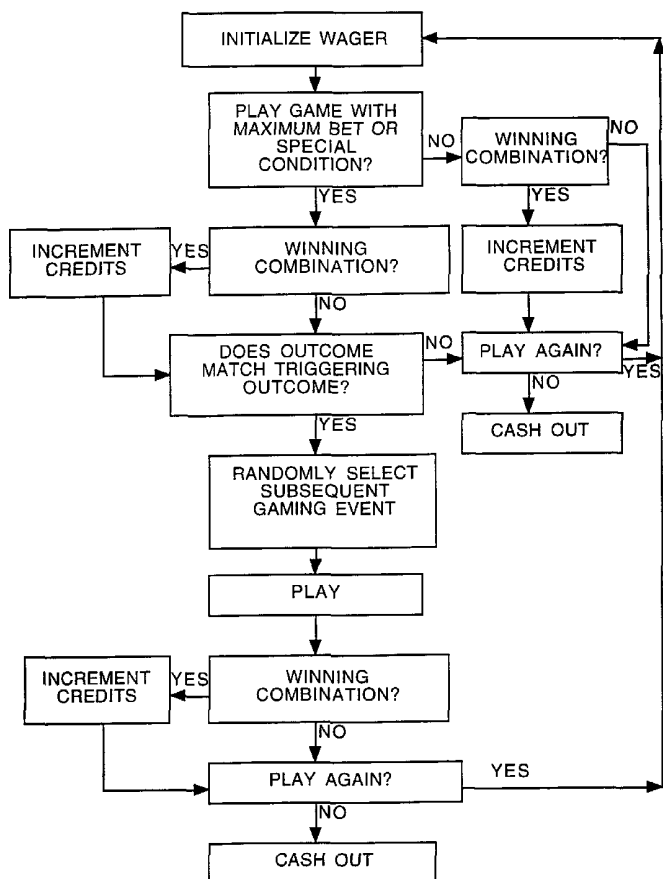
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[Continued on next page]

(54) Title: GAMING DEVICE AND METHOD



(57) Abstract: A method and apparatus (10) for a gaming device in which a player is awarded outright for a winning combination and may be eligible to engage in plural subsequent gaming propositions if a preset combination of symbols (28, 41) or other criteria is achieved.



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- with international search report
- with amended claims

*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.*

# Gaming Device and Method

## Technical Field

The following invention is generally related to instrumentalities and methodologies in gaming devices. More specifically, the instant invention is directed to a gaming device having a winning outcome where the player wins directly and a secondary outcome which allows the player to participate a randomly-selected subsequent gaming event.

## Background Art

Traditionally, gaming machines afford a player one gaming proposition per gaming session. A player inserts credits and is eligible to play one game on that particular device. Ultimately, the player loses interest in that particular game and stops gaming.

Devices in the prior art exist that allow a player to engage in a second gaming proposition during the same gaming session, but these are also limited. A particular gaming device of this type offers the same set of two gaming propositions, and thus suffers from the same problem as traditional gaming devices.

## Disclosure of Invention

The present invention is distinguishable over the prior art in a multiplicity of ways. For example, the instant invention provides a method to provide the player with a more enjoyable gaming experience by potentially allowing participation in more than one gaming proposition during a single gaming session.

In addition, this invention causes the subsequent gaming proposition to be selected from a plurality of propositions. A player may engage in many sessions on a single gaming device and experience several, very different, gaming propositions.

## Industrial Applicability

The industrial applicability of this invention shall be demonstrated through discussion of the following objects of the invention.

Accordingly, it is a primary object of the present invention to provide a new, novel, and useful method of gaming, in which a player has the opportunity to participate in a number of different gaming propositions in a single gaming session.

It is a further object of the present invention to provide a device as characterized above which provides gaming propositions which are intuitive to understand and easy to implement.

5 Viewed from a first vantage point, it is an object of the present invention to provide a gaming device, comprising, in combination: a display, and a processor operatively coupled to said display, said processor including a first random output means appearing on said display, resulting in one of plural outcomes, at least one said outcome triggering one of a plurality of second said random output means.

10 Viewed from a second vantage point, it is an object of the present invention to provide a method for gaming, the steps including: selecting a outcome that will trigger a subsequent gaming event, making a wager to enable a gaming device, evoking change means to trigger an outcome, determining whether the outcome matches the triggering outcome, and initiating a randomly-selected gaming event if the outcome matches the triggering outcome.

15 Viewed from a third vantage point, it is an object of the present invention to provide a device for gaming, comprising, in combination: wagering means to enable said device, means for displaying a plurality of outcomes, means for incrementing an award due in the presence of a winning outcome, and means for triggering a subsequent gaming event, selected from a plurality of such gaming events.

20 These and other objects will be made manifest when considering the following detailed specification when taken in conjunction with the appended drawing figures.

### **Brief Description of Drawings**

Figure 1 is a flowchart of the methodology according to the present invention.

Figure 2 is a depiction of the apparatus associated therewith.

25 Figure 3 is a depiction of the display screen shown in figure 2, depicting an RXC matrix, having N paylines.

Figure 4 is a depiction of a display screen shown in figure 2, depicting a matching game.

30 Figure 5 is a depiction of a display screen shown in figure 2, depicting a symbol aligning game.

### **Best Mode(s) of Carrying Out the Invention**

Considering the drawings, wherein like reference numerals denote like parts throughout the various drawing figures, reference numeral 10 as shown in figure 2 is directed to the device according to the present invention.

In its essence, the apparatus 10 includes a housing 16 which supports a visual display 2, preferably a video monitor, therewithin. Alternatively, the device may use a mechanical reel system. The display 2 may include a window 8 for special messages or for incrementing counting of credits accumulated by the player. The device also includes an LED or other readout 4 for prompting the player and can provide similar verbiage as the window 8 or in lieu thereof, to stimulate the player. The device includes an inlet 6 for the reception therein for coins, currency or the like to auger in the inception of play. A plurality of decision-making buttons 12 are located on the face of the apparatus 10, preferable below the display 2 and a pull handle 14 can be used to initiate play as an alternative to supplement the decision-making buttons 12. A coin hopper 18 or other payment methods, i.e., ticket printers, may be included to effectuate an output of an award due the player. The apparatus 10 may have a top portion 32 with a display thereon having a motif correlative with the game to be played and can include a paytable. A plurality of speakers 34 may be included on the device for aural interaction with the player. The apparatus also includes a processor P coordinating all functions and a random number generator G operatively coupled thereto for generating outcomes.

More specifically, and with reference to figure 3, greater details with respect to the video display 2 can be explored. The display 2 features a plurality of symbols 20 arranged in a row and column (RXC) matrix 21. Paylines 22 correspond to areas on the matrix in which winning combinations may be located. The preferred embodiment features a 3-by-5 matrix with either 9 or 15 paylines.

Referring to figure 1, the flow chart associated with the apparatus of figures 2 and 3 can be explored. Initially, the player plays the game with a maximum bet or less. Preferably, but optionally, a maximum bet or other special condition enables the features of the invention. Assume a maximum bet is required. If the player plays with less than a maximum bet, the outcome is determined by the symbols displayed according to the display in figure 3. If the player opts to play with a maximum bet, then after the initial outcome is displayed, the player is immediately rewarded if the initial outcome corresponds to a value on an associated paytable. If the initial outcome matches a preset triggering outcome, a preferably randomly-chosen second game is initiated, and the player has further opportunities to win. An example of a special condition which triggers the second game is the appearance of a special symbol on the initial game.

In the preferred embodiment, one of the randomly-chosen games is a matching game in which a player is given a symbol and a random number of spins to match the chosen symbol. For this game, the display 2 consists of symbols displayed in a row and column (RXC) matrix. At the beginning, the matrix contains no symbols. Each position  
5 in the matrix is then filled with a randomly-chosen symbol. Any symbol that matches the chosen symbol is then frozen in position, and the remaining positions are "re-spun," or again filled with randomly-chosen symbols. Again, the positions of any matching symbols are frozen and the positions are re-spun until the player has used all of the allotted spins. The player is awarded credits for each matching symbol.

10 Another of the randomly-chosen games may be a spatial relationship and cognate based game in which the display 2 consists of symbols displayed in a row and column (RXC) matrix, preferably a 3X3 matrix. A randomly-chosen symbol appears above the matrix, and the player indicates the column in which to place that symbol. The chosen symbol drops down the indicated column to the lowest available position  
15 (i.e., row). If the player lines up three symbols in a row, either vertically, horizontally, or diagonally, those three symbols disappear and all symbols drop down to the lowest available position. Alternatively, winning outcomes other than three symbols in a row may be used. For example, a single symbol may increment credits directly or a single symbol may be a "joker", "wild card", or "universal symbol" which assumes a value  
20 most helpful to the player. The player continues to play in this manner until the entire matrix has been filled without achieving the desired combination. The player is then awarded credits for each set of three symbols.

In the preferred embodiment, one of the randomly-chosen games is a matching game, shown in figure 4, in which a player is given a designated, chosen symbol  
25 and a random number of spins 26 to match the chosen symbol. For this game, the display 2 consists of symbols displayed in a row and column (RXC) matrix 27. At the beginning, the matrix 27 contains no symbols. Each position in the matrix is then filled with a randomly-chosen symbol 28. Any symbol that matches the chosen symbol is then frozen in position, and the remaining positions are "re-spun," or again filled with  
30 randomly-chosen symbols 28. Again, the positions of any matching symbols are frozen and the positions are re-spun until the player has used all of the allotted spins. The player is awarded credits for each matching symbol.

Another of the randomly-chosen games may be a symbol aligning game, depicted in FIG. 5, in which the display 2 consists of symbols displayed in a row and  
35 column (RXC) matrix, preferably a 3X3 matrix 40. A randomly-chosen symbol 41

appears above the matrix, and the player indicates the column 42 in which to place that symbol. The chosen symbol drops down the indicated column to the lowest available position. If the player lines up three symbols in a row, either vertically, horizontally, or diagonally, those three symbols disappear and all remaining symbols drop down to the lowest available position. Alternatively, winning combinations other than three symbols in a row, column or diagonal may be used. The player continues to play in this manner until the entire matrix 40 has been filled with symbols without achieving the desired combination. The player is then awarded credits for each set of three symbols achieved.

Moreover, having thus described the invention, it should be apparent that numerous structural modifications and adaptations may be resorted to without departing from the scope and fair meaning of the instant invention as set forth hereinabove and as described hereinbelow by the claims.

Claims

I Claim:

Claim 1 - A gaming device, comprising, in combination:

a display, and

5 a processor operatively coupled to said display, said processor including a first random output means appearing on said display, resulting in one of plural outcomes, at least one said outcome triggering one of a plurality of second said random output means.

10 Claim 2 - The device of claim 1 wherein one of said second random means comprising, in combination:

means for displaying a first symbol,

means for allocating a first position for said first symbol,

means for displaying subsequent symbols,

means for allocating a subsequent position for said subsequent symbols,

15 and

a rule set to determine when a plurality of symbols oriented in a series engenders a payout.

Claim 3 - The device of claim 2 wherein another of said second random means comprises, in combination:

20 means for displaying a first symbol,

means for displaying subsequent symbols,

means for determining whether said subsequent symbols match said first symbol,

25 random means for allocating a plurality of opportunities to match said first symbol, and

means for incrementing an award due each time said subsequent symbols match said first symbol.

Claim 4 - The device of claim 1 wherein one of said second random means comprises, in combination:

30 means for displaying a first symbol,

means for displaying subsequent symbols,

means for determining whether said subsequent symbols match said first symbol,

35 random means for allocating a plurality of opportunities to match said first symbol, and



means for incrementing an award due each time said subsequent symbols match said first symbol.

Claim 5 - A method for gaming, the steps including:

5           selecting a outcome that will trigger a subsequent gaming event,  
          making a wager to enable a gaming device,  
          evoking change means to trigger an outcome,  
          determining whether the outcome matches the triggering outcome, and  
          initiating a randomly-selected gaming event if the outcome matches the  
triggering outcome.

10          Claim 6 - A device for gaming, comprising, in combination:

          wagering means to enable said device,  
          means for displaying a plurality of outcomes,  
          means for incrementing an award due in the presence of a winning  
outcome, and  
15          means for triggering a subsequent gaming event, randomly selected from  
a plurality of such gaming events.

**AMENDED CLAIMS**

[received by the International Bureau on 21 January 2002 (21.01.02);  
original claims 1-6 cancelled; new claims 7-10 added (3 pages)]

Claim 7 - A gaming device, comprising, in combination:

a wager receiver;

a processor which is enabled upon receipt of a wager in said receiver;

5 a display;

a random generator interposed between said processor and said display to place symbols on said display;

a comparator which awards certain symbol orientations on said display;

10 wherein said display orientation comprises a row and column matrix to receive symbols at intersections of said rows and columns;

a device chosen symbol adjacent said matrix and to be matched by symbols displayed on said matrix, and means to substitute displayed symbols which do not match said chosen symbol with new symbols from said random generator, including a counter which decrements from an initial number randomly designated by said device and which controls how many spins are available to consecutively replace non matching symbols to match said chosen symbol;

15 whereby said comparator determines an award after a last spin based on an aggregation of matching symbols.

20 Claim 8 - A gaming device, comprising, in combination:

a wager receiver;

a processor which is enabled upon receipt of a wager in said receiver;

a display;

25 a random generator interposed between said processor and said display to place symbols on said display;

a comparator which awards certain symbol orientations on said display;

wherein said display orientation comprises a row and column matrix to receive symbols at intersections of said rows and columns;

a symbol randomly generated and located outside said matrix; and

means to allow a player to locate said symbol in one column of said matrix whereupon said symbol descends to a lowest unoccupied row in said column, and subsequent symbols similarly generated are located until a series of linearly matching symbols exist, whereupon they disappear and credits are awarded until said matrix is filled with nonmatching symbols.

Claim 9 - A gaming method, the steps including:

10 receiving a wager;  
displaying an unpopulated matrix to be populated with symbols;  
displaying a chosen target symbol outside the matrix;  
populating the matrix with symbols;  
retaining matrix symbols which match the chosen target symbol;  
15 substituting unmatching matrix symbols with new symbols;  
repeating the substituting step a number times as dictated by an indicator; and  
assessing an ultimate award as a function of matches.

Claim 10 - A gaming method, the steps including:

20 receiving a wager;  
displaying an unpopulated matrix to be populated with symbols;  
displaying a symbol outside the matrix;  
receiving instruction from a player as to relocating the symbol in one column of the matrix;  
25 placing the symbol in an unoccupied lowest row of the column;  
displaying further symbols outside the matrix and deploying each further symbol in a column designated by the player in an unoccupied lowest row of the column;  
removing a series of matching symbols from the array;

filling the matrix; and  
awarding the player based on removed series of matching  
symbols.

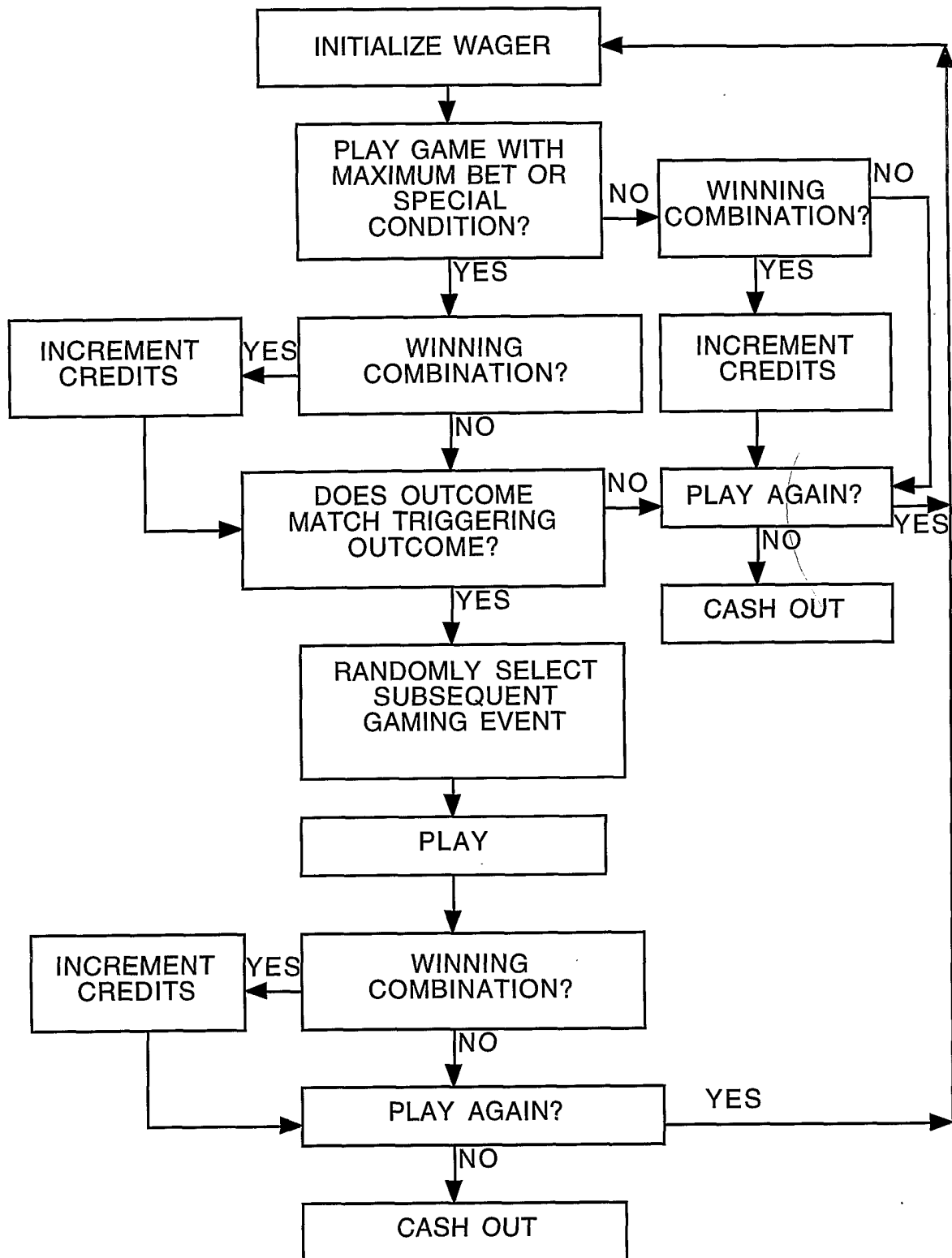


Figure 1

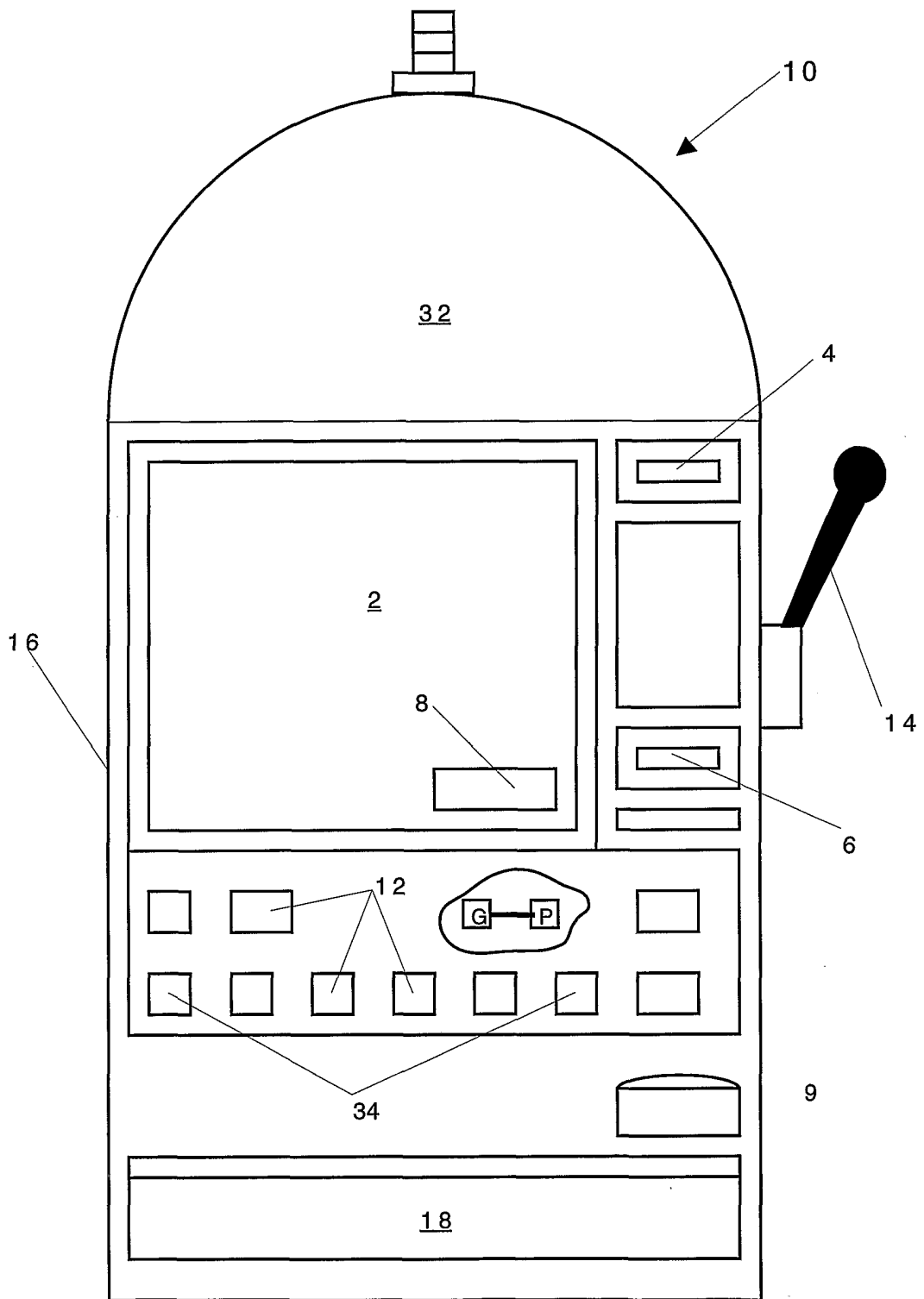


Figure 2

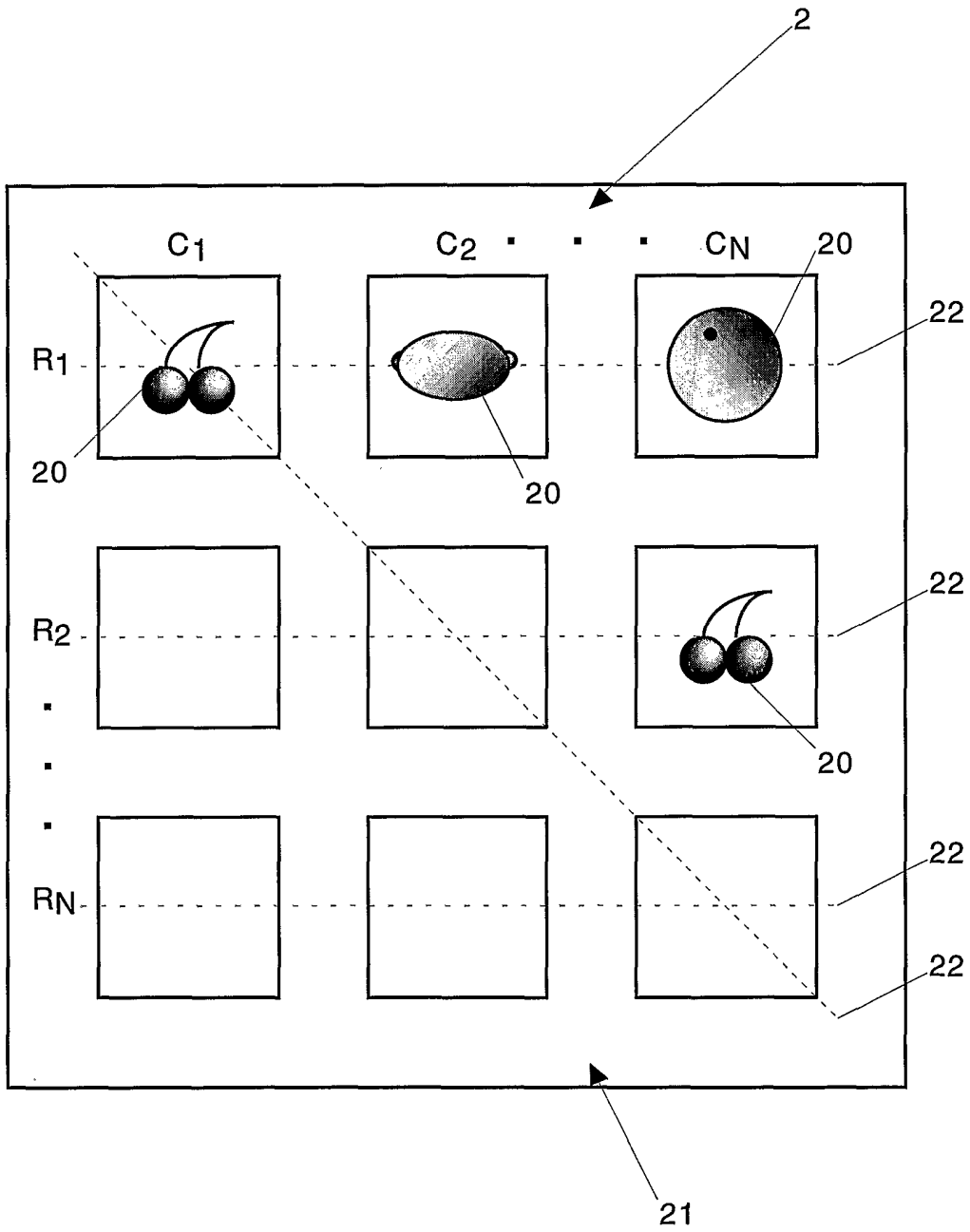


Figure 3

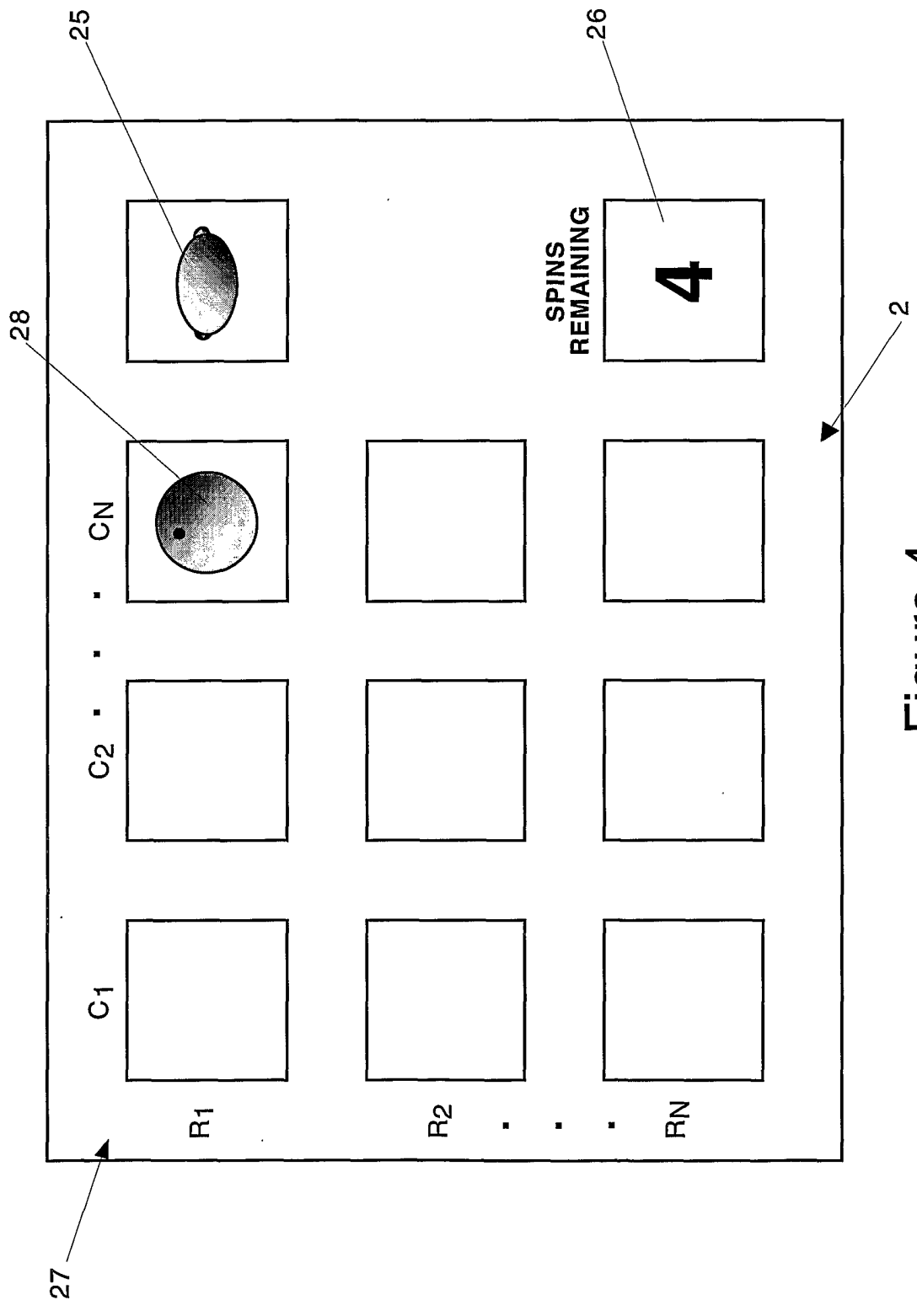


Figure 4



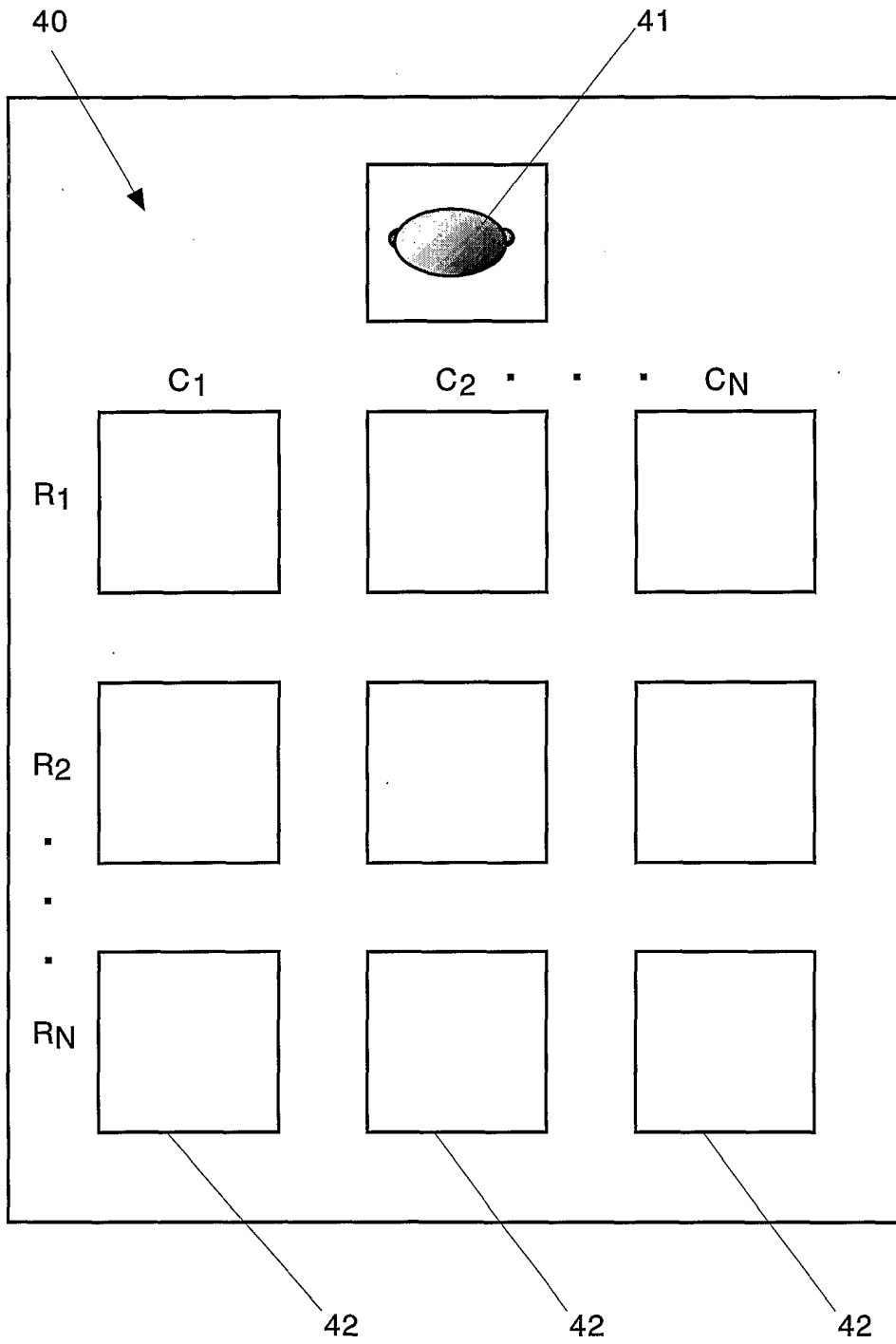


Figure 5

# INTERNATIONAL SEARCH REPORT

International application No.

PCT/US01/28498

**A. CLASSIFICATION OF SUBJECT MATTER**

IPC(7) : A63F 9/24, 13/00

US CL : 463/16, 20

According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 463/16, 17, 18, 19, 20

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 practicable, search terms used)

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 4,695,053 A (VAZQUEZ, JR. et al.) 22 September 1987 (22.09.1987), full text and drawings.	1-4
X	US 5,976,016 A (MOODY et al.) 02 November 1999 (02.11.1999), full text and drawings.	5 and 6
Y, P	US 6,120,378 A (MOODY et al.) 19 September 2000 (19.09.2000), full text and drawings.	1-4

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 invention
"A" document defining the general state of the art which is not considered to be of particular relevance	"X"	document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"E" earlier application or patent published on or after the international filing date	"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 art
"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)	"&"	document member of the same patent family
"O" document referring to an oral disclosure, use, exhibition or other means		
"P" document published prior to the international filing date but later than the priority date claimed		

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