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(54) METHOD OF GENERATING OUTCOMES  
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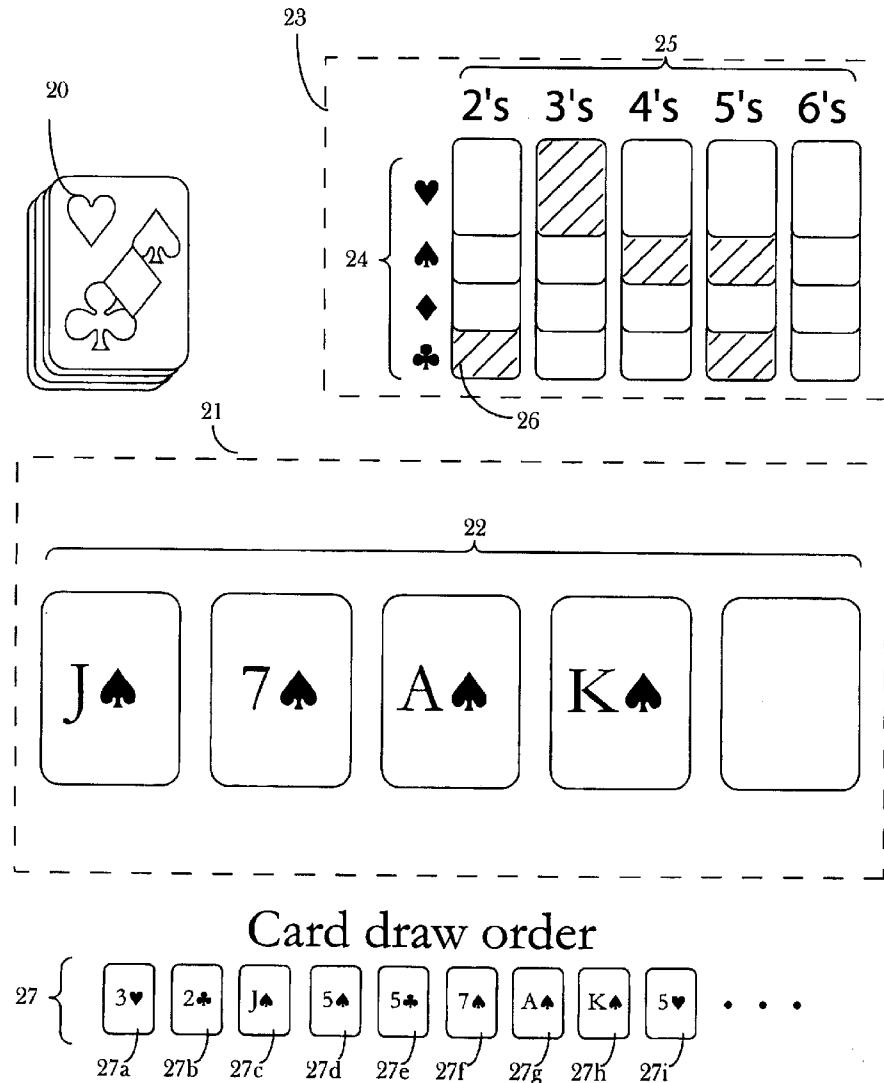
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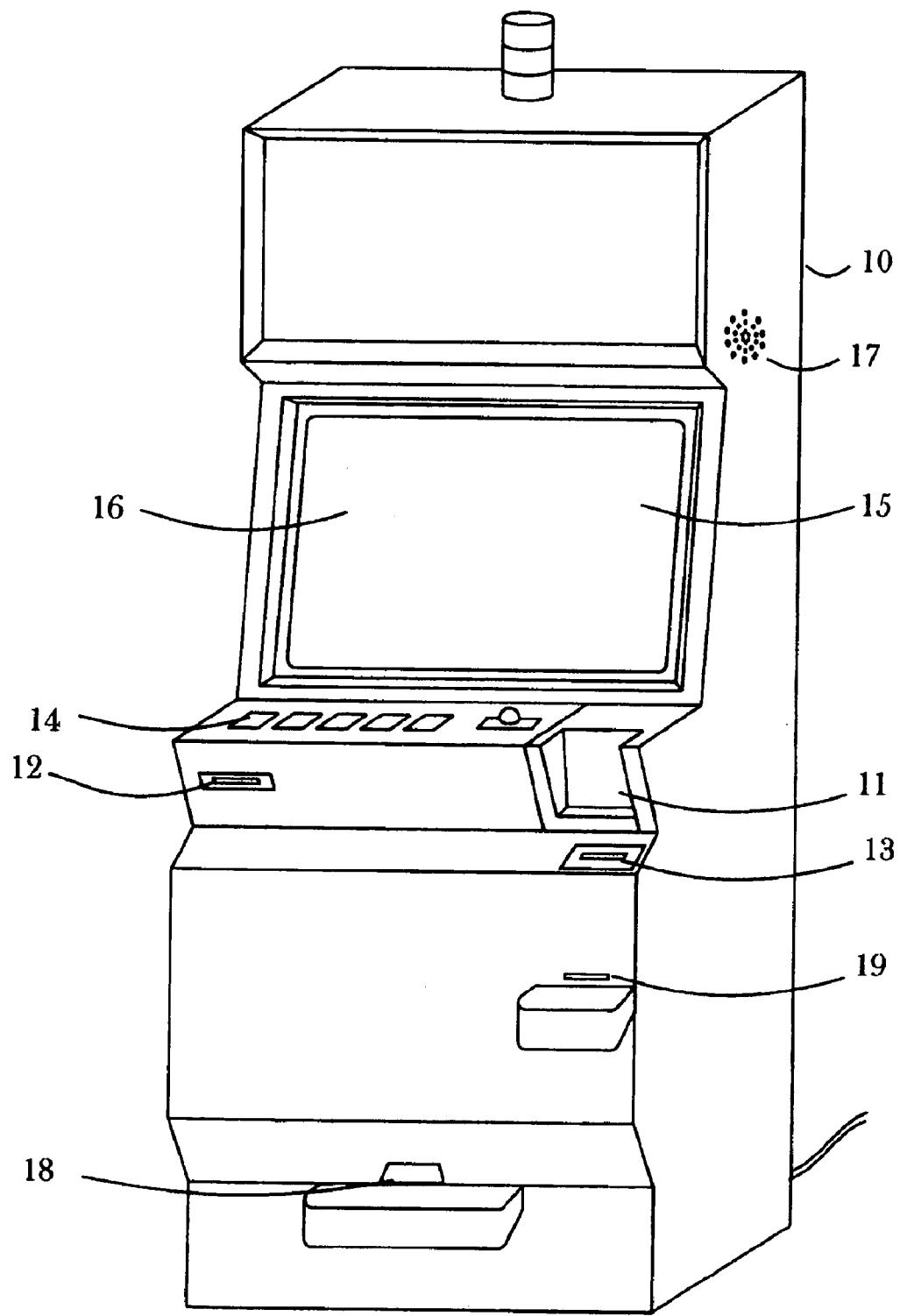
(52) U.S. Cl. ..... 463/13

## (57) ABSTRACT

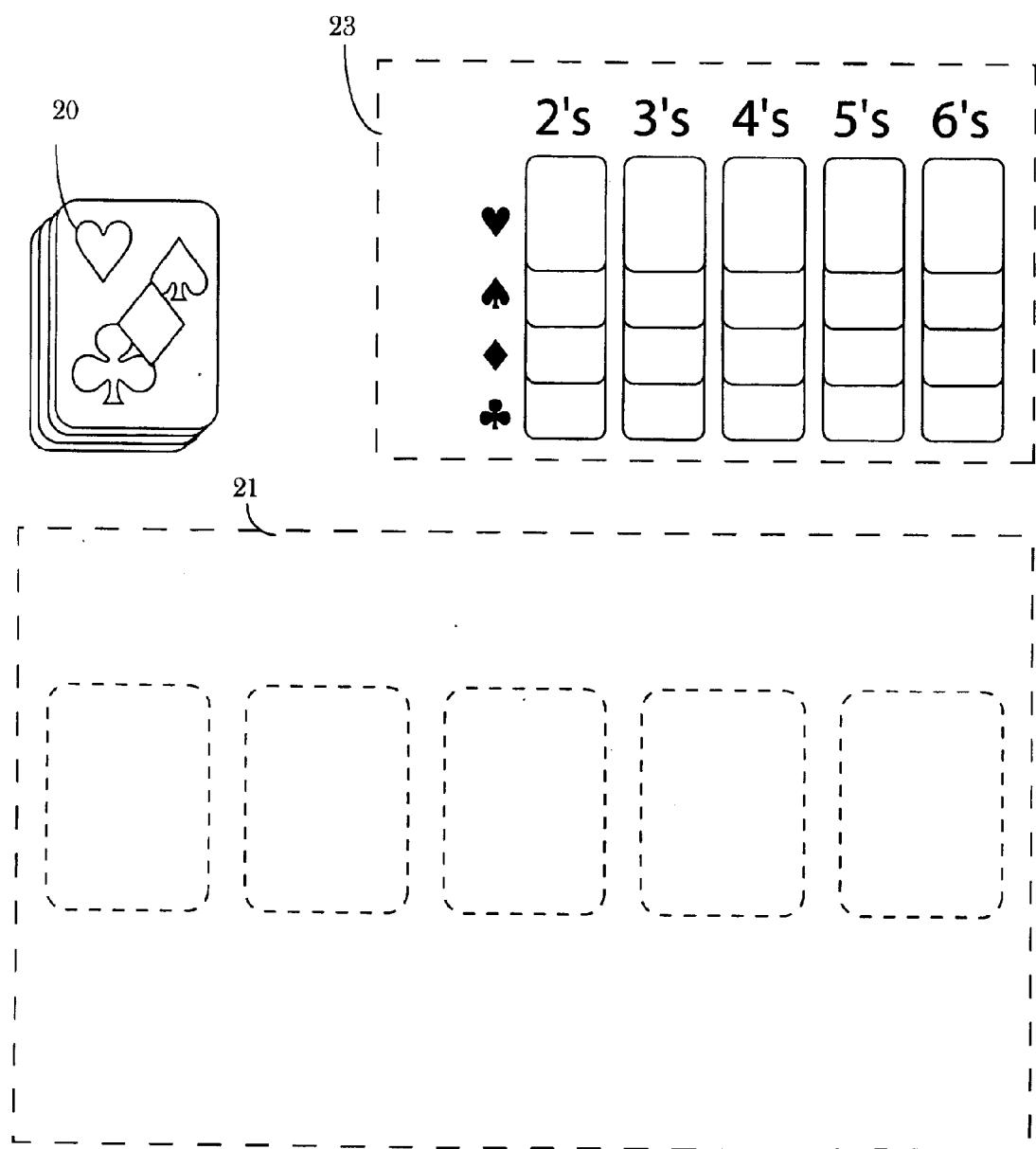
A method for establishing a combination of a primary outcome and a secondary outcome in a casino-style game. To generate such outcomes, a population of game indicia comprising mixed primary and secondary game indicia is used. Game indicia are drawn from the population one at a time until the primary game outcome is fully raised. It results in a primary game outcome of a predetermined quantity of game indicia and in a secondary game outcome having a quantity of game indicia depending on the order of game indicia drawn. Both outcomes are evaluated; the primary, to establish a prize, and the secondary, a feature. The secondary outcome feature may take many forms: prizes, bonus, participations in another game, etc.



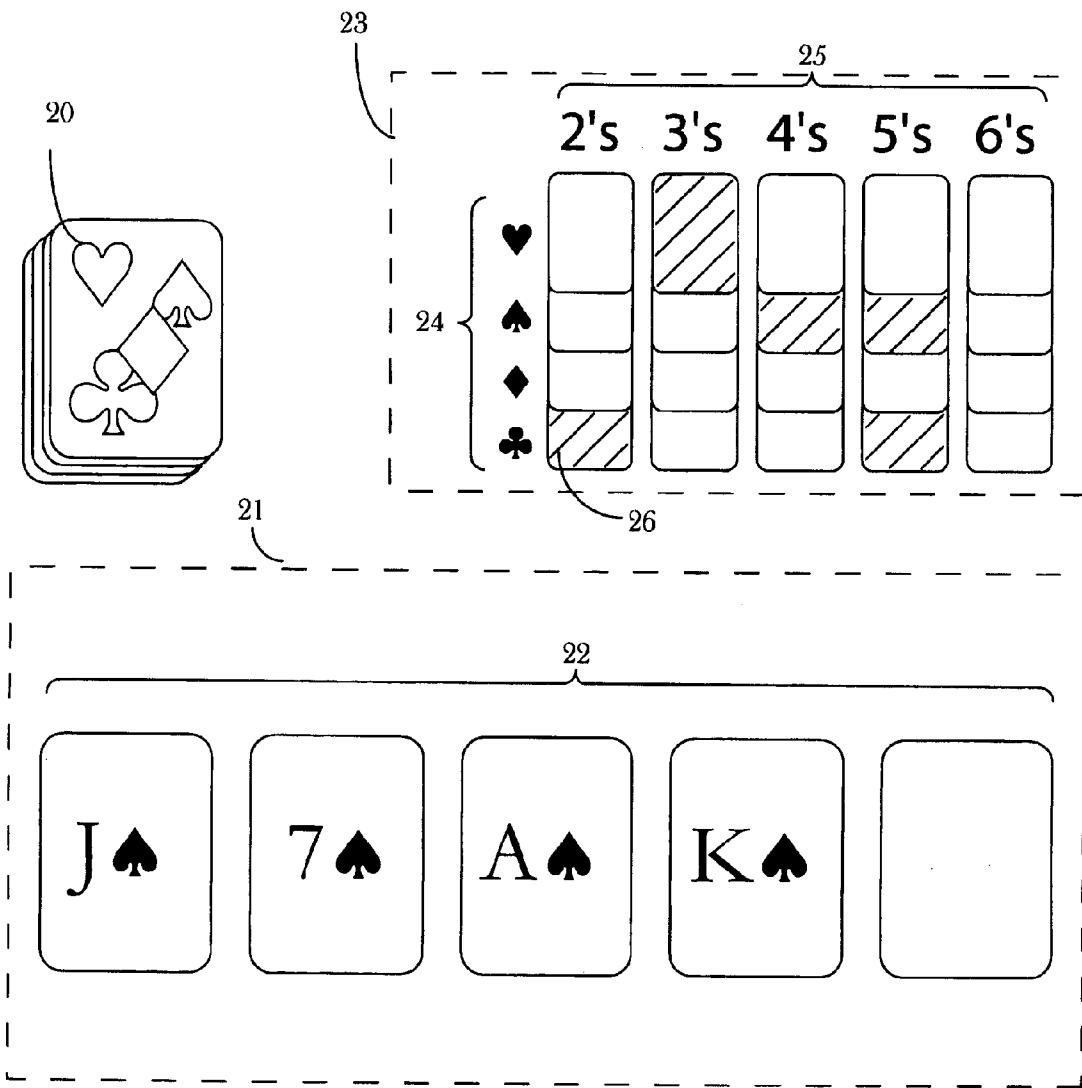
# Figure 1



# Figure 2



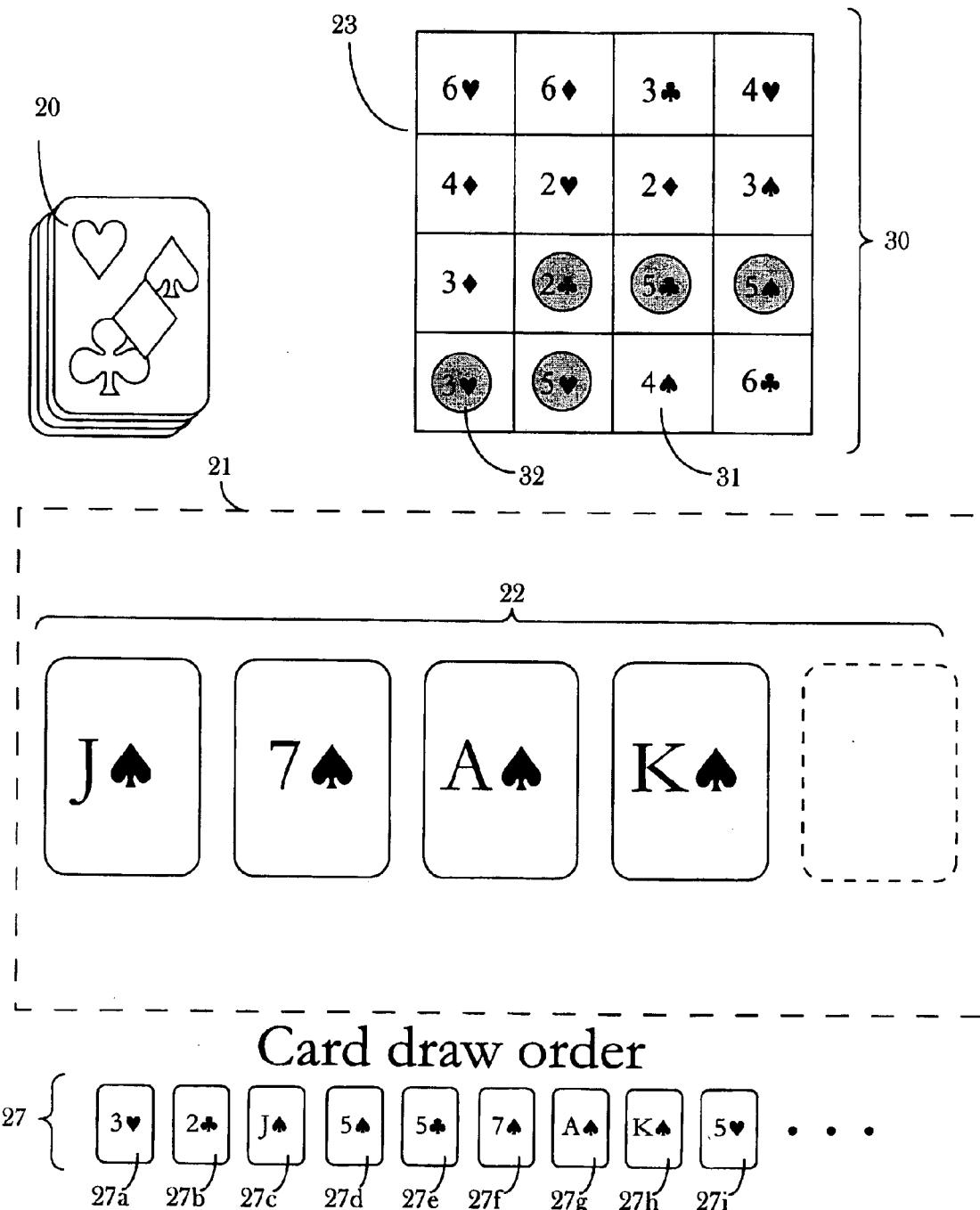
# Figure 3



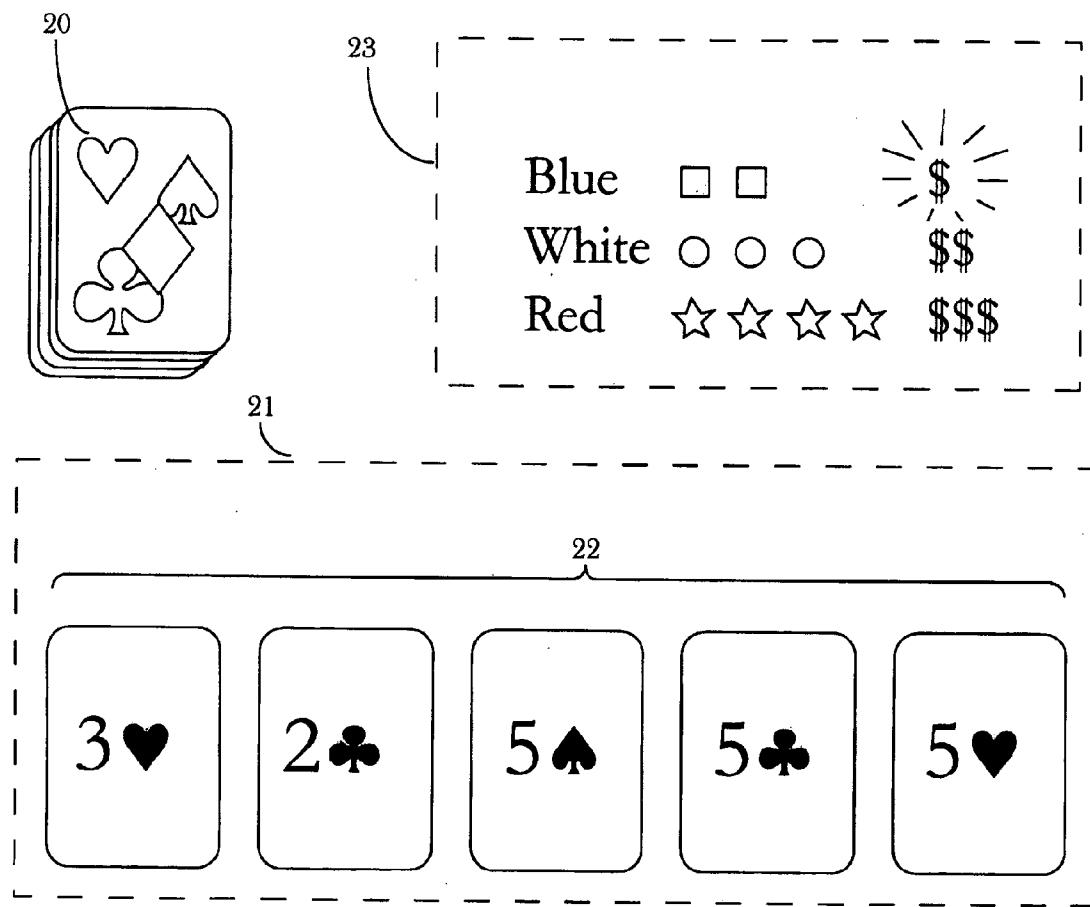
## Card draw order

- 27 {    3♥    2♣    J♠    5♠    5♣    7♠    A♣    K♣    5♥    . . .
- 27a    27b    27c    27d    27e    27f    27g    27h    27i

# Figure 4



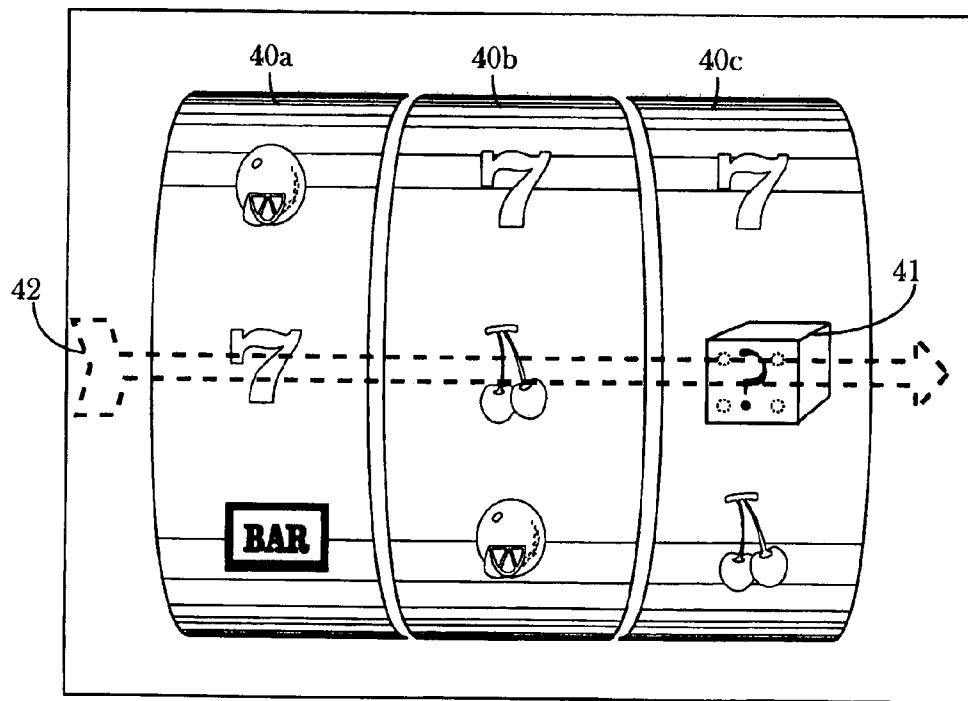
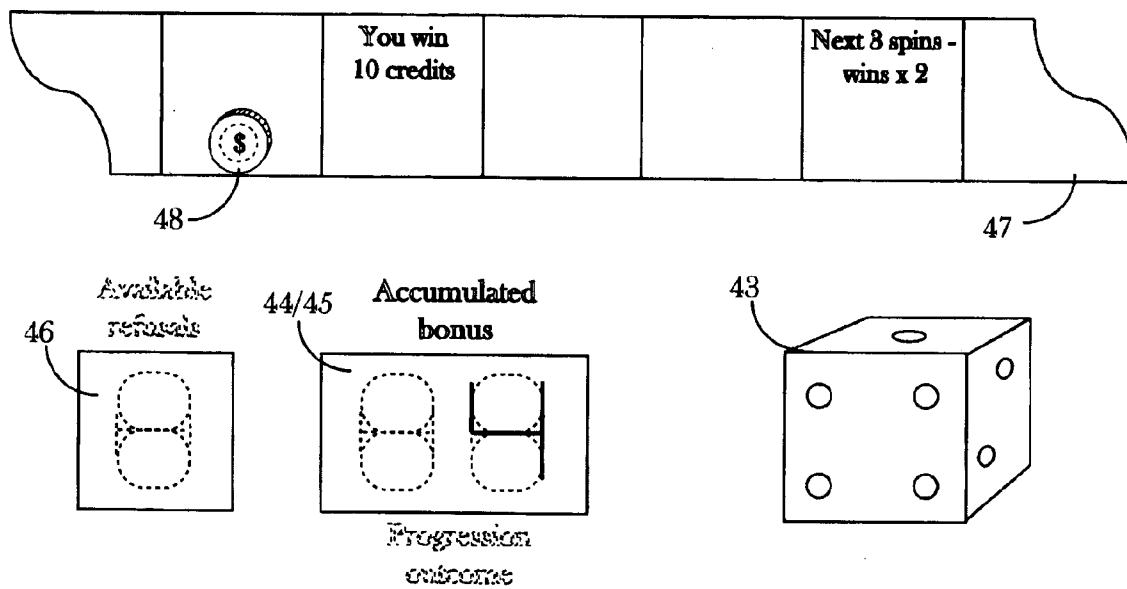
# Figure 5



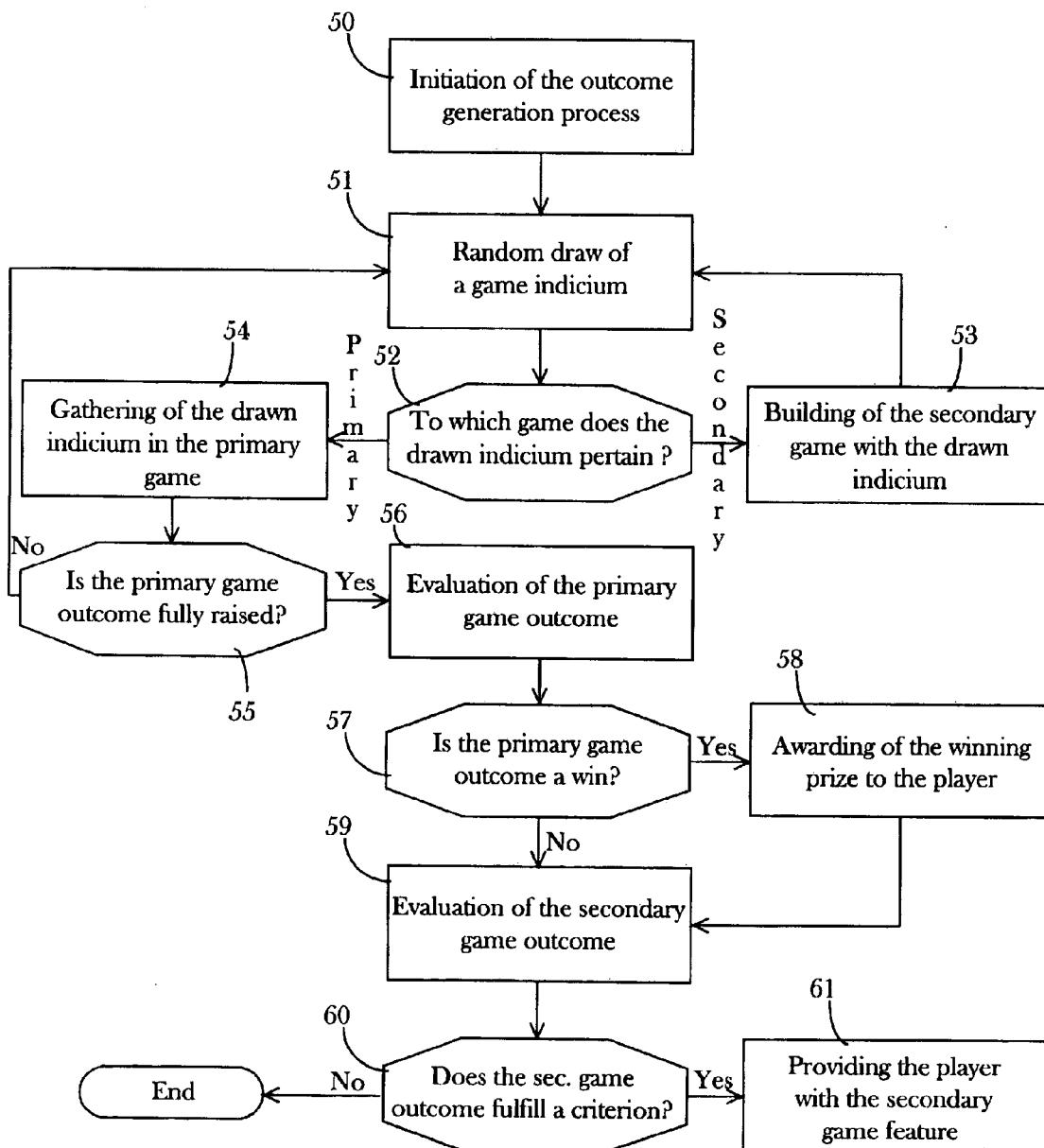
## Card draw order

27 {    3♥    2♣    5♦    5♣    5♦    5♣    5♥    . . .

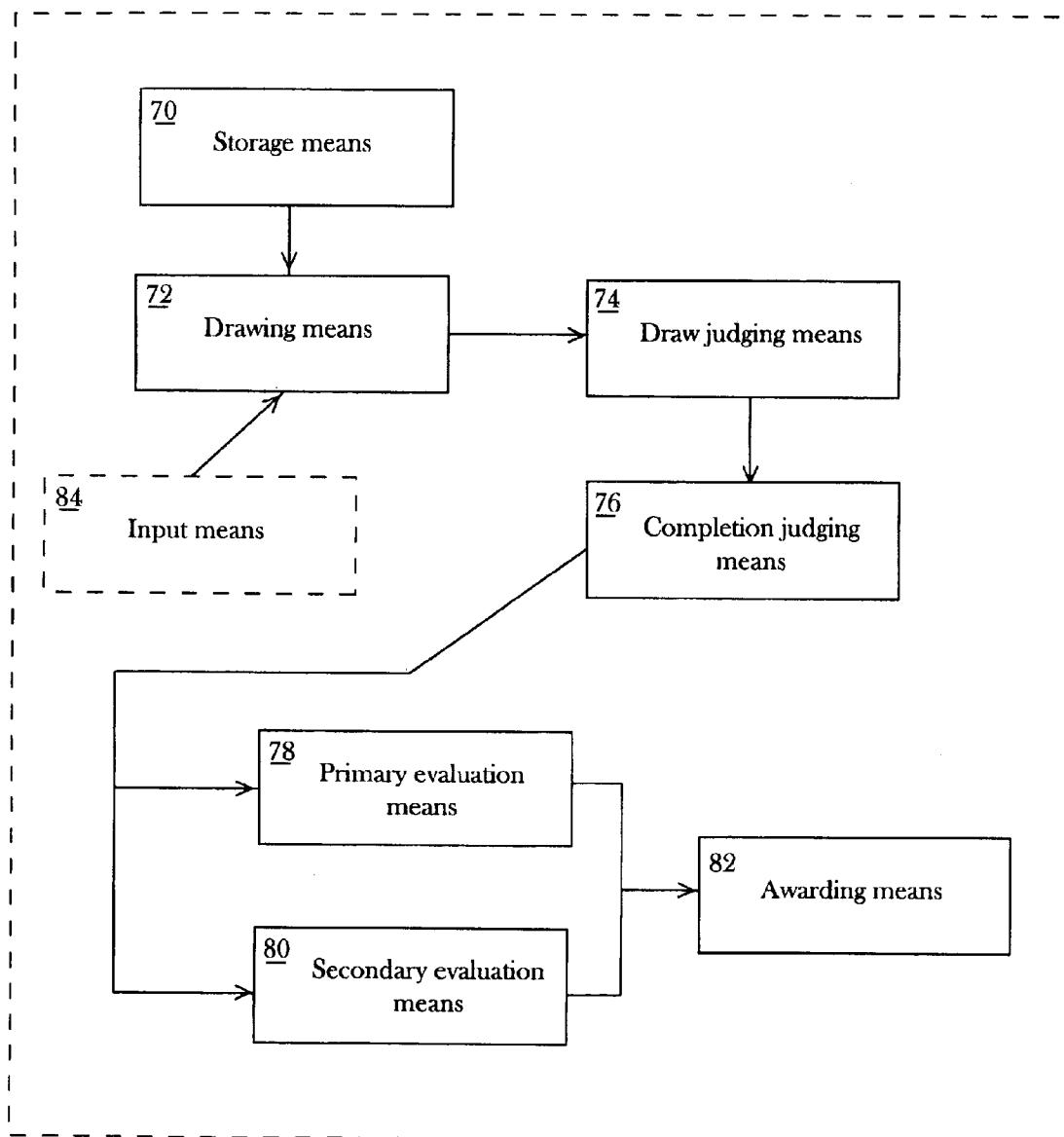
# Figure 6



# Figure 7



# Figure 8



**METHOD OF GENERATING OUTCOMES USING A COMMON DRAW PROCESS****CROSS-REFERENCE TO RELATED APPLICATIONS**

[0001] This application claims priority under 35 USC §119(e) of U.S. provisional patent application 60/465,675 filed Apr. 28, 2003, and entitled Poker game: Lucky 7, the specification of which is hereby incorporated by reference.

**TECHNICAL FIELD**

[0002] The present invention relates to the gambling industry, more specifically to a method of establishing a plurality of independently evaluated outcomes in a single game play.

**BACKGROUND OF THE INVENTION**

[0003] The gaming industry is a very dynamic field nowadays. Each company in this field is always searching for features that will incite players to choose its games.

[0004] Accordingly, many solutions are currently used: second-screen bonuses, board games associated with gambling games, additional payout animations, additional game indicia triggering extra features in reel games, etc. Most of them interfere with the primary game, for instance, by diluting regular game indicia with feature-triggering game indicia. Therefore, improvements in this field are desired.

**OBJECTS OF THE INVENTION**

[0005] Accordingly, there is a need for a method of producing an outcome that may trigger a feature which does not influence the primary game play. Furthermore, this method must increase players' excitement and be intuitive without requiring extra equipment, such as a second gaming machine.

**SUMMARY OF THE INVENTION**

[0006] The invention consists in a method of establishing primary and secondary game outcomes; the latter providing an additional feature to the players.

[0007] The method includes drawing primary and secondary outcome components (hereinafter called game indicia) from a mixed population of game indicia. It also includes monitoring the draw of these game indicia until the completion of a primary outcome, which ends the draw. Thereby, the number of drawn game indicia participating in the secondary outcome varies widely depending on the draw order of the game indicia.

[0008] The method also comprises evaluating the generated primary outcome. If the primary game outcome is a win, the player is awarded a payout. The secondary outcome is also evaluated to determine whether an additional feature has been triggered, in which case this additional feature is awarded to the player.

[0009] Accordingly, the method allows a primary game to be played without any interference. Furthermore, it allows the secondary outcome to be gradually generated, the number of secondary outcome game indicia increasing as the draw progresses. Finally, it allows the evaluation of a highly volatile secondary outcome in order to trigger a variety of

features, such as additional payouts, bonus screens, particular features, or game modifications lasting over a plurality of plays.

[0010] In the specification, the term "primary game" is intended to mean the format and other information relevant to the play of the main attraction game. The term "secondary game" is intended to mean the format and other information relevant to the play of an appended feature. The term "outcome" is intended to mean the result of a play of one of the games, the outcome being evaluated at the end of the play. The term "feature" is intended to mean any special attraction. Finally, the term "game indicia" is intended to mean all types of symbols or other things that are suitable for the determination of a game outcome; such game indicia may take the form of card values, ball values, die outcomes, numbers, reel game indicia, etc.

[0011] In an embodiment, the present invention provides a method of generating a combination of game outcomes, comprising: drawing primary game indicia and secondary game indicia from a population of indicia for a primary game and a secondary game until a predetermined criterion is fulfilled in the primary game; evaluating a primary game outcome produced in the primary game to establish a primary game payout; evaluating the drawn secondary game indicia, thus the secondary game outcome, to establish participation in a secondary game feature; and rewarding, according to the evaluations, a game player with the primary game payout and the secondary game feature, wherein fulfillment of the predetermined criterion establishes the number of secondary game indicia composing the secondary game outcome.

[0012] In another embodiment, the present invention provides a computer program embodied on a computer readable medium having coding means adapted: to draw primary game indicia and secondary game indicia from a population of indicia for a primary game and a secondary game until a predetermined criterion is fulfilled in the primary game; to evaluate a primary game outcome produced in the primary game to establish a primary game payout; to evaluate the drawn secondary game indicia to establish a participation in a secondary game feature; and—to reward the player with the primary game payout and, possibly, with the secondary game feature based on the participation evaluation, wherein fulfillment of the predetermined criterion establishes the number of secondary game indicia composing the secondary game outcome.

[0013] In yet another embodiment, the present invention provides a computer program embodied in an electrical or an electromagnetic carrier signal having codes adapted to draw primary game indicia and secondary game indicia from a population of indicia for a primary game and a secondary game until a predetermined criterion is fulfilled in the primary game; to evaluate a primary game outcome produced in the primary game to establish a primary game payout; to evaluate the drawn secondary game indicia to establish a participation in a secondary game feature; and to reward the player with the primary game payout and, possibly, with the secondary game feature based on the participation evaluation, wherein fulfillment of the predetermined criterion establishes the number of secondary game indicia composing the secondary game outcome.

[0014] In still another embodiment, the present invention provides a gaming machine generating a combination of

outcomes for a primary game and a secondary game in a single play, comprising: storage means storing a population of primary game indicia and secondary game indicia for the primary game and the secondary game; drawing means drawing game indicia from the storage means; draw judging means evaluating each drawn indicia to determine a participation in either the primary game or the secondary game for each one of the drawn indicia; completion judging means evaluating the drawn primary game indicia to establish when a predetermined criterion is fulfilled in the primary game; primary evaluation means evaluating a primary game outcome resulting from the primary game to establish a primary game payout; secondary evaluation means evaluating a secondary game outcome resulting from the drawn secondary game indicia to establish a participation in a secondary game feature; and awarding means awarding a player the evaluated primary game payout and possibly the secondary game feature based on the evaluation of the secondary evaluation means, wherein the draw judging means, by ending participation of the drawn secondary game indicia in the secondary game when the predetermined criterion is fulfilled, establish the number of secondary game participating indicia.

#### BRIEF DESCRIPTION OF THE DRAWINGS

[0015] Further features and advantages of the present invention will become apparent from the following detailed description, taken in combination with the appended drawings, in which:

[0016] FIG. 1 is schematic diagram showing a perspective view of a gaming machine suitable for the present invention;

[0017] FIG. 2 is a screen shot illustrating the play format of a poker game;

[0018] FIG. 3 is a screen shot of the poker game of FIG. 2 during its play;

[0019] FIG. 4 is a screen shot of a poker game illustrating the use of game indicia in a predetermined configuration for the evaluation of the secondary game outcome;

[0020] FIG. 5 is a screen shot of another poker game wherein the evaluation of the secondary game indicia takes into account the order in which they are drawn;

[0021] FIG. 6 is a representation of a reel-based embodiment of the invention;

[0022] FIG. 7 is a schematic flow chart illustrating the present method; and

[0023] FIG. 8 is a block diagram schematically illustrating a gaming machine suitable for an embodiment of the invention.

[0024] It will be noted that throughout the appended drawings, like features are identified by like reference numerals.

#### DETAILED DESCRIPTION OF THE INVENTION

[0025] The typical embodiment of the invention method is carried out on a gaming machine. Accordingly, FIG. 1 illustrates such a suitable gaming machine 10. Gaming machine 10 includes credit-receiving means in the form of a bill acceptor 11, a card reader 12, or a ticket reader 13. It

also includes player controls that usually involve push buttons 14, and touch screen controls 15 (not specifically shown). It further includes a game controller (not shown), outcome-providing means embodied as an electronic display 16, speakers 17, and additional displays when suitable. Finally, the gaming machine includes credit-dispensing means taking the form of a coin drop 18, or a ticket printer 19.

[0026] A person familiar with this field would realize that the above gaming machine is typical. Many alternative gaming machines could be used to carry on the invention.

[0027] Since the invention essentially relates to the method used for the generation of outcomes, to the evaluation of these outcomes and to the feature triggered by a positive evaluation of these outcomes, the following descriptions are illustrated mostly by screen shots of games at significant steps during their outcome generation processes.

[0028] FIGS. 2 and 3 illustrate a first embodiment. In the first embodiment, the primary game is a poker game using only cards having a value of seven (7) or higher. The other cards are still in the card deck, but they are exclusively used to yield the secondary game outcome. Depending on the secondary game outcome obtained at the end of the play, the player may be awarded a bonus prize. In FIG. 2, the gaming machine shows a game representation divided in three areas: card deck area 20, poker game area 21, and bonus area 23. Poker game area 21 receives the cards participating in the poker game as they are drawn. Bonus area 23 only illustrates the monitoring of the low cards, which are drawn and do not participate in the poker game.

[0029] FIG. 3 illustrates the poker game at some stage during the play. Nine (9) cards 27 have been drawn from deck 20 at this time. Among these are four (4) cards that have a value over six (6) 27c, 27f, 27g, 27h; the others 27a, 27b, 27d, 27e, 27i have a low value. Four (4) high cards 27c, 27f, 27g, 27h are displayed as a partial poker hand 22 in poker game 21, whereas low cards 27a, 27b, 27d, 27e, 27i are monitored in bonus area 23. Low cards 27a, 27b, 27d, 27e, 27i are monitored on the basis of matching card suits 24 and values 25 with markings 26 in bonus area 23. Accordingly, the player can follow the evolution of the secondary game as the play progresses.

[0030] One step further (not shown), five (5) cards are displayed to form poker hand 22. At this stage, the player selects which cards to hold and which to discard. Afterwards, the draw continues. The discarded cards are replaced with newly drawn ones. Then, the final hand, also called the primary game outcome, is finally fully raised. The secondary game outcome is also established at the same time; no new card is required. At this stage, the gaming machine evaluates poker hand 22 and markings 26 in bonus area 23. The player is awarded the evaluated value of both poker hand 22 and the coverage of bonus area 23 with markings 26. In this example, the player is awarded a bonus prize for each set of four (4) cards of the same value being marked. He wins a jackpot if bonus area 23 is completely marked.

[0031] FIG. 4 illustrates a closely related game. In this embodiment, bonus area 23 shows a set 30 of low card values 31 in a bingo-card like configuration. It will be noted that only some of the low cards present in deck 20 are also

present in set **30**; the other ones do not participate in the bonus and are accordingly called inert cards.

[0032] As the play progresses, card values **31** of set **30** matching the low cards drawn **27a, 27b, 27d, 27e, 27f, 27i** are marked in bonus area **20**. Such a marking takes the form of daubing card identifications in set **30**. At the end of the play, set **30** is evaluated according to predetermined winning configurations of daubing marks **32**. If set **30** presents a straight line of four (4) daubing marks **32**, it triggers a bonus screen wherein the player may win additional prizes.

[0033] Another embodiment of the invention is illustrated in FIG. 5. Once again, a poker game is the primary game. This time, the game uses all cards of a standard fifty-two (52) card deck **20**. Additional bonus cards complete the deck. These bonus cards are divided in three categories: cards bearing Blue Circles, White Squares, and Red Stars. As the play progresses, the gaming machine monitors the drawn bonus cards in bonus area **23**. In this particular embodiment, the bonus cards have to be drawn in a predetermined order to produce their optimal effect in the secondary game. The machine marks the draw in bonus area **23** only if the card drawn corresponds to the category monitored at that time. If the card is from another category, no marking occurs in the bonus area. Thus, some cards may be evaluated as inert cards depending on the draw order. At the end of the poker game, the gaming machine evaluates final poker hand **22** and the markings in the three categories. If at least one category is fully marked in bonus area **23**, the player is awarded a bonus prize. The low-value bonus prize is awarded if the Blue Circles category is fully marked, the medium-value prize for the White Squares, and a jackpot if the four (4) Red Stars are marked.

[0034] To increase the suspense, the game may even use contrasting color bonus cards. The bonus cards may be placed aside still unrevealed as they are drawn. When the primary game outcome is fully raised, the value of the bonus cards may be revealed one at a time in the draw order, or in the order the player selects them. Consequently, a new incentive requiring player interaction may be provided.

[0035] FIG. 6 illustrates a last example of an embodiment of the invention. This time, the example is a reel-based game with its secondary game outcome influencing the progression of a multi-play gaming feature.

[0036] The primary game is a one-line game using mechanical reels **40a, 40b, 40c** for the determination of the outcome game indicia. The game indicia of the outcome are the ones displayed in the central position, thus on pay line **42**. A die, represented among the regular game indicia on the reels, is secondary game indicium **41** of this example.

[0037] When the play is initiated, first reel **40a** spins and stops, thereby establishing a first reel symbol. If it is a die symbol, a die **43** displayed above reels **40** is tossed and its outcome is cumulated by a counter **44**. Afterwards, these steps are repeated until reel **40a** provides a regular symbol. The same process is performed for second and third reels **40b, 40c**.

[0038] When pay line **41** is solely composed of regular symbols, a pay line outcome is raised for the play. Subsequently, the gaming machine performs an evaluation of the pay line outcome, establishes a prize value and awards the prize to the player.

[0039] Furthermore, the machine also evaluates counter **44** value. This value is used to establish the player's participation in a multi-play board-type game. The player has a token **48** traveling along a path on board **47**. The gaming machine determines whether player's token **48** progresses based on counter **44** value. Furthermore, the machine determines whether the player has obtained an activation of an acceptance/refusal feature **46**; it also determines the number of tries during which the feature stays activated. Accordingly, each time a new play ends, the player may be in one of the following situations:

[0040] a) The counter value is equal to zero (0). Consequently, player's token **48** stays in place.

[0041] b) The counter value is under a first threshold. The die is tossed twice to determine a progression outcome **45**, and the player sees token **48** advancing the number of stations corresponding to progression outcome **45**.

[0042] c) The counter value reaches the first threshold. The machine generates a first progression outcome **45**. The player either refuses or accepts the outcome. If the player accepts the outcome, player's token **48** advances on board **47**. If the player refuses outcome **45**, the machine establishes a new progression outcome **45** which the player may either refuse or accept depending on the number of available refusals **46** he has left.

[0043] After token **48** has landed on a new station, the player may receive a bonus prize based on his token landing station.

[0044] Accordingly, the latter embodiment presents many additional characteristics: a) the same symbol may be drawn a plurality of times during the same play; b) an additional means (a die **43**) establishes the secondary game symbol value; c) the feature associated with the monitoring of the draw of secondary game indicia is not a prize or a bonus, but rather a play participation (the player's token traveling forward) with or without the activation of a progression outcome refusal feature; and d) the play participation established by the monitoring of the secondary game indicia is for a game (board game **47**) that evolves over a plurality of plays of the primary game.

[0045] In FIG. 7, a flow chart summarizes the present outcome generation process. It starts when the player initiates a play (step **50**). A symbol is drawn from the population (step **51**) and is evaluated as a primary or a secondary game indicium (step **52**). If the drawn game indicium participates in the secondary game, the game indicium is taken into account in the secondary game (step **53**). Otherwise, the drawn game indicium takes place in the primary game (step **54**). After each draw of a primary game indicium, an evaluation is performed to determine whether a complete primary game outcome has been fully raised (step **55**). Until this condition is fulfilled, the preceding steps (steps **51** to **55**) are repeated. When a complete primary game outcome has been raised, it is evaluated (steps **56** and **57**) and the player is awarded the corresponding prize (step **58**). Similarly, an evaluation (steps **59** and **60**) followed by a reward to the player with a corresponding feature (step **61**) is also performed regarding the secondary game outcome.

[0046] It will be noted that the method of the present invention can be carried out through many embodiments. A

gaming machine, suitable gaming systems, and network gaming systems may perform the method of the invention. Electrical or electromagnetic signals and computer readable media may also carry out codes used by gaming systems to provide a game that presents all the characteristics of the invention.

**[0047]** In FIG. 8, a schematic representation of modules of a suitable gaming machine for embodiment of the invention is illustrated. Such a gaming machine includes storage means 70 (usually embodied in a memory or in a physical form such as a card shoe) for storing the population of primary and secondary game indicia. Drawing means 72 (usually in the form of software commands) draw game indicia from the storage means 70 for the play. Draw judging means 74 evaluate the drawn indicia to determine the participation of each indicium in either the primary game or the secondary game. Completion judging means 76, for its part, evaluate which state the primary game outcome has reached, determine if the predetermined criteria to establish when no new indicium participates in the secondary game, and therefore end the generation of the secondary game. Primary evaluation means 78 and secondary evaluation means 80 respectively evaluate the primary game outcome and the secondary game outcome. An awarding means 82 rewards the player according to the evaluation. In addition, the gaming machine may comprise input means 84 allowing the player to input information with this information either or not influencing the play and potentially the number of indicia participating in the secondary game. Such a gaming machine may either be fully electronic (and therefore include an electronic display used to illustrate the game play) or partially electronic with physical indicia taking part in the primary game and the secondary game with physical structures to receive the indicia.

**[0048]** In conclusion, the intent of the inventors through the above disclosure is to provide examples of embodiments of the invention. The scope of the invention is intended to be solely limited by the scope defined in the appended claims.

We claim:

1. A method of generating a combination of game outcomes, comprising:

drawing primary game indicia and secondary game indicia from a population of indicia for a primary game and a secondary game until a predetermined criterion is fulfilled in said primary game;

evaluating a primary game outcome produced in the primary game to establish a primary game payout;

evaluating the drawn secondary game indicia, thus the secondary game outcome, to establish participation in a secondary game feature; and

rewarding, according to the evaluations, a game player with the primary game payout and the secondary game feature,

wherein fulfillment of said predetermined criterion establishes the number of secondary game indicia composing the secondary game outcome.

2. The method of claim 1, wherein said secondary game is characterized in drawing a higher number of secondary game indicia increases the probabilities of producing a winning secondary game outcome.

3. The method of claim 1, further comprising mixing said indicia in order to generate said population of indicia.

4. The method of claim 1, further comprising evaluating if the primary outcome is fully raised to establish fulfillment of said predetermined criterion.

5. The method of claim 1, further comprising establishing through a random process a value for each drawn secondary game indicia.

6. The method of claim 1, further comprising comparing drawn secondary game indicia to a set of predetermined game indicia, and marking matches between the game indicia of the set and the drawn secondary game indicia.

7. The method of claim 6, further comprising evaluating participation in the secondary game feature based on a predetermined configuration of said markings.

8. The method of claim 1, further comprising displaying the evolution of drawn secondary game indicia as the draw progresses.

9. The method of claim 8, further comprising evaluating drawn secondary game indicia according to validity criteria, and setting out each secondary game indicium that does not fulfill its validity criterion.

10. The method of claim 1, further comprising gathering drawn secondary game indicia in groups based on common characteristics.

11. The method of claim 1, further comprising receiving a player's command and establishing a number of primary game indicia that must be drawn to fulfill said predetermined criterion based at least on the received player's command.

12. The method of claim 11, wherein said player's command is a hold or a discard command.

13. The method of claim 1, further comprising tracking an order in which the secondary game indicia are drawn, and evaluating said participation in the secondary game feature further based at least on said draw order.

14. The method of claim 1, further comprising displaying the secondary game indicia in a distinguishable manner from the primary game indicia.

15. The method of claim 1, further comprising revealing the value of an indicia participating in the secondary game outcome after fulfillment of said predetermined criterion.

16. The method of claim 1, wherein said indicia are at least one of card values, ball values, symbols, dice values and numbers.

17. The method of claim 1, further comprising preventing an indicium to be drawn twice during a single generation of a game outcome combination.

18. The method of claim 1, further comprising keeping unchanged the draw probabilities of each indicium regardless of the indicia already drawn.

19. The method of claim 1, wherein the primary game is one of (1) a poker, (2) a reel, (3) a bingo and (4) a keno game.

20. The method of claim 1, wherein the secondary game feature is one of (1) a secondary game payout, (2) a bonus sequence, (3) an extra play, and (4) a feature having a lasting effect over a plurality of plays.

21. The method of claim 1, performed on a gaming machine.

22. A computer program embodied in an electrical or an electromagnetic carrier signal having codes adapted

to draw primary game indicia and secondary game indicia from a population of indicia for a primary game and a

secondary game until a predetermined criterion is fulfilled in said primary game;  
to evaluate a primary game outcome produced in the primary game to establish a primary game payout;  
to evaluate the drawn secondary game indicia to establish a participation in a secondary game feature; and  
to reward the player with the primary game payout and, possibly, with the secondary game feature based on the participation evaluation,  
wherein fulfillment of said predetermined criterion establishes the number of secondary game indicia comprising the secondary game outcome.

**23.** A computer program embodied on a computer readable medium having coding means adapted:

to draw primary game indicia and secondary game indicia from a population of indicia for a primary game and a secondary game until a predetermined criterion is fulfilled in said primary game;  
to evaluate a primary game outcome produced in the primary game to establish a primary game payout;  
to evaluate the drawn secondary game indicia to establish a participation in a secondary game feature; and  
to reward the player with the primary game payout and, possibly, with the secondary game feature based on the participation evaluation,  
wherein fulfillment of said predetermined criterion establishes the number of secondary game indicia comprising the secondary game outcome.

**24.** A gaming machine generating a combination of outcomes for a primary game and a secondary game in a single play, comprising:

storage means storing a population of primary game indicia and secondary game indicia for the primary game and the secondary game;

drawing means drawing game indicia from the storage means;

draw judging means evaluating each drawn indicia to determine a participation in either the primary game or the secondary game for each one of said drawn indicia;

completion judging means evaluating the drawn primary game indicia to establish when a predetermined criterion is fulfilled in said primary game;

primary evaluation means evaluating a primary game outcome resulting from the primary game to establish a primary game payout;

secondary evaluation means evaluating a secondary game outcome resulting from the drawn secondary game indicia to establish a participation in a secondary game feature; and

awarding means awarding a player the evaluated primary game payout and possibly the secondary game feature based on the evaluation of the secondary evaluation means,

wherein the draw judging means, by ending participation of the drawn secondary game indicia in the secondary game when said predetermined criterion is fulfilled, establish the number of secondary game participating indicia.

**25.** The gaming machine of claim 24, further comprising input means receiving a command from the player that modifies the draw process.

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