PCT

WORLD INTELLECTUAL PROPERTY ORGANIZATION International Bureau



INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification ⁶: G07F 17/34, A63F 9/00, 1/00

(11) International Publication Number:

WO 00/17832

17/34, A63F 9/00, 1/00

(43) International Publication Date:

30 March 2000 (30.03.00)

(21) International Application Number:

PCT/US99/21887

A1

(22) International Filing Date:

21 September 1999 (21.09.99)

(30) Priority Data:

09/157,651

21 September 1998 (21.09.98) US

(71) Applicant: SHUFFLE MASTER, INC. [US/US]; 10901 Valley View Road, Eden Prairie, MN 55344 (US).

(72) Inventor: YOSELOFF, Mark, L.; 1900 Grey Eagle Street, Henderson, NV 89014 (US).

(74) Agent: VIKSNINS, Ann, S.; Schwegman, Lundberg, Woessner & Kluth, P.O. Box 2938, Minneapolis, MN 55402 (US).

(81) Designated States: AT, AU, CA, CH, DE, DK, DM, ES, FI, GB, LU, NZ, PT, SE, ZA, European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE).

Published

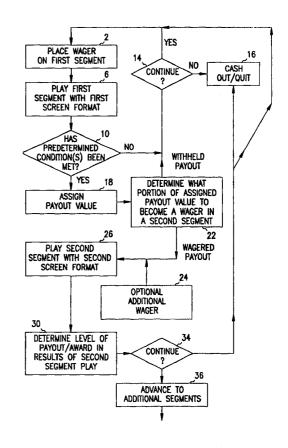
With international search report.

Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.

(54) Title: METHOD OF PLAYING A MULTI-STAGE VIDEO WAGERING GAME

(57) Abstract

A method of playing a video wagering game (48) is disclosed. The method includes at least a first and second segment comprising the steps of placing a wager to participate in a video wagering game, playing the first segment of the video wagering game, continuing play of the first segment until at least one predetermined condition has been met, assigning a payout based on at least one predetermined winning outcome of the first segment, playing a second segment (FIGS 6 and 7) of the video wagering game when the at least one predetermined condition has been met, wherein at least a portion of said payout (50) of the first segment is used as a wager in a second segment video wagering game in which a visually different screen format is used in play of a different game in the play of the second segment (FIGS 6 and 7) and after play of the second segment (FIGS 6 and 7) video wagering game, a second segment payout is assigned based on at least a predetermined outcome of play of the second segment (FIGS 6 and 7) video wagering game.



FOR THE PURPOSES OF INFORMATION ONLY

Codes used to identify States party to the PCT on the front pages of pamphlets publishing international applications under the PCT.

AL	Albania	ES	Spain	LS	Lesotho	SI	Slovenia
AM	Armenia	FI	Finland	LT	Lithuania	SK	Slovakia
AΤ	Austria	FR	France	LU	Luxembourg	SN	Senegal
AU	Australia	GA	Gabon	LV	Latvia	SZ	Swaziland
AZ	Azerbaijan	GB	United Kingdom	MC	Monaco	TD	Chad
BA	Bosnia and Herzegovina	GE	Georgia	MD	Republic of Moldova	TG	Togo
BB	Barbados	GH	Ghana	MG	Madagascar	TJ	Tajikistan
\mathbf{BE}	Belgium	GN	Guinea	MK	The former Yugoslav	TM	Turkmenistan
\mathbf{BF}	Burkina Faso	GR	Greece		Republic of Macedonia	TR	Turkey
BG	Bulgaria	HU	Hungary	ML	Mali	TT	Trinidad and Tobago
BJ	Benin	IE	Ireland	MN	Mongolia	UA	Ukraine
BR	Brazil	IL	Israel	MR	Mauritania	UG	Uganda
BY	Belarus	IS	Iceland	MW	Malawi	US	United States of America
CA	Canada	IT	Italy	MX	Mexico	$\mathbf{U}\mathbf{Z}$	Uzbekistan
CF	Central African Republic	JP	Japan	NE	Niger	VN	Viet Nam
CG	Congo	KE	Kenya	NL	Netherlands	YU	Yugoslavia
CH	Switzerland	KG	Kyrgyzstan	NO	Norway	ZW	Zimbabwe
CI	Côte d'Ivoire	KP	Democratic People's	NZ	New Zealand		
CM	Cameroon		Republic of Korea	PL	Poland		
CN	China	KR	Republic of Korea	PT	Portugal		
CU	Cuba	KZ	Kazakstan	RO	Romania		
CZ	Czech Republic	LC	Saint Lucia	RU	Russian Federation		
DE	Germany	LI	Liechtenstein	SD	Sudan		
DK	Denmark	LK	Sri Lanka	SE	Sweden		
EE	Estonia	LR	Liberia	SG	Singapore		

METHOD OF PLAYING A MULTI-STAGE VIDEO WAGERING GAME

Field of the Invention:

5

10

15

20

25

30

The present invention relates to methods of playing video wagering games. In particular, it relates to a novel method of playing a video wagering game with more than one stage in which the screen format changes significantly between stages and winnings or awards from a first stage may be or must be carried over to at least a second stage.

Background of the Art:

Video wagering games are popular gaming devices in casinos and other gaming establishments. A number of factors have contributed to the popularity of video wagering games. Gaming establishments have expanded the variety of games offered on video platforms beyond what was once limited to video poker, video keno and video reel slot machines. Many casino table games such as blackjack, draw poker, stud poker, Let It Ride ® poker and Caribbean Stud Poker ® are available on video. These games can be learned on video machines before advancing to the more intimidating live table game environment. With video wagering, novice players can enjoy playing a wide variety of casino games without having to play at a table with other more experienced players who may create an intimidating environment for the novice. Players of video games need not worry about playing too slowly to suit the dealer or other players or about feeling embarrassed by making a particular strategic decision.

Video wagering games often are capable of paying a progressive jackpot if the player achieves a predetermined winning outcome, which offers the anticipation or hope for a very large award. For the above reasons, the video wagering format is growing at a pace which exceeds the growth of play of live casino table games and other types of live wagering.

One of the more commonly known video wagering games is poker which is available in numerous variations. Other examples include video reel slot machines, and video keno. Video reel slot machines may simulate the play of a mechanical slot machine such as a three reel slot, for example. Because the "reels" in a video gaming apparatus are not limited by the geometry of a conventional slot reel, the game can provide a larger number of pay lines or of winning combinations than can a conventional mechanical slot machine.

Numerous versions of video poker are available, including numerous versions of draw poker, stud poker, and more recently, Let It Ride® poker and Caribbean Stud® poker games. Some video platforms are provided with the capability of the player being able to select from

among a number of video wagering games. For example, some gaming establishments provide a number of poker game variations on one multi-game video platform. The games are played independently, one-at-a-time, with no inter-relationship between games.

5

10

15

20

25

30

Some video games which are adapted for play on a home computer have a "second screen" feature. That is, if the player wins a certain number of games, or achieves a predetermined skill level in a game, a second screen will appear which either permits the player to play the same game at a higher skill level or allows the player to engage in a special feature of that game (e.g., collect additional game pieces or 'lives' in Mario Brothers®). In the case of video wagering, there are a few video wagering games which provide an opportunity to first play an underlying or principal video wagering game (e.g., draw poker) and then to play a different wagering game, although on the same video screen format as the poker game (e.g., as with "double down" games described herein). For example, some video poker games offer a double-or-nothing feature. If a player has a winning hand in the first segment of the game, the player can optionally risk the amount won by trying to determine whether a given card will be higher or lower than 8. Alternatively the player may have to choose one of four cards in an attempt to get a card higher than one already shown. If the player wins, his original bet is doubled. He may continue to "double up" until he reaches some predetermined limit, or loses. However, if he loses, he loses the winnings from the first game. This "double up" game is played on substantially the identically formatted screen (showing five playing cards, but with the possible addition to that screen of alphanumerics, as later described) as is the underlying poker game. The principal game, the poker game, is played to obtain an award, and only that award allows winnings from that single game to be "doubled up."

There also exist video wagering games that have a video slot segment and at least one additional video wagering segment. Additionally, there are known second, that is alternative screen games in which the winnings from the second screen game are unrelated to and independent of the winnings in the first screen game.

Although some "second screen" games are known in the video game art, there has not been, to the inventor's knowledge, a multiple game segment video wagering game where the outcome of the second segment can directly enhance the payout of at least a portion of the first segment, and particularly, there is not known to the inventor any video gaming apparatus which provides a first wagering game with a first screen format, and then offers a second wagering game with \bar{a} second screen format which is substantially visually different from

PCT/US99/21887

said first screen format and in which second wagering game a portion or all of the award from the first wagering game may be wagered on the second wagering game. For example, in the practice of the present invention a first wagering game could be poker (with for example a display of five cards) and a second wagering game could be Dominoes, Twenty-One, Mah Jong, or another game which does not even include the display of playing cards.

Applicant's commonly assigned copending U.S. Patent Application Serial No. 08/820,438, filed on March 12, 1997 titled "Second Screen Multiplier" describes a second screen video game in which winnings or awards from the play of a first game on a first format screen may be increased or multiplied by play of a second game on a second screen with a different visual format than the first screen.

Summary of the Invention:

5

10

15

20

25

30

The present invention is a method of playing a video wagering game in which there are two distinct video components to either a) at least two distinct games with different video formats played in sequence or b) a single, multi-event game with at least two different video formats, in which at least a portion of the awards or winnings from a first game or event may be or must be carried forward into the second game or the second event. The game includes at least a first and second wagering segment. For purposes of this disclosure, a "segment" is a video wagering game which is capable of being played as a stand alone game (e.g., with a wager and possible outcomes which include the loss of all or a part of a wager, return of an amount equal to the wager, or an award of an amount greater than the initial wager). In the practice of the present invention, at least two of these segments are associated in an order (which order may be consistent or variable over continued play of the game, that is, given segments A, B, C and D, the segments may be played in any order in consecutive games, such as A, B, C and D; B, C, D and A, C, B, A and D; D, A, C and B, etc.). For example, either the player or the video gaming apparatus may select an order of games of poker, dominoes and blackjack; blackjack, dominoes and poker; or dominoes, poker and blackjack.

The method comprises the steps of placing a wager to participate in a video wagering game, playing a first segment of the video wagering game, and continuing to play the first segment of the video wagering game until at least one predetermined condition has been met and for which predetermined condition an award is made to the player. Preferably, there may be more than one predetermined condition which enables advance from the first segment of the video wagering game. The predetermined outcomes may include, for example, achieving

a predetermined number of winning outcomes or achieving one of a specific or general group of winning outcomes. The term "predetermined" in the practice of the present invention does not, as previously understood in the art, limit the outcome to earlier identified item specific outcomes. That is, in the prior art, the term "predetermined outcome" would earlier identify hand distributions that would mean, in poker for example, a particular type of playing hand such as a straight, flush, full house, four of a kind, straight flush, etc. In the present invention such an item specific predetermined outcome may be included in the winning outcome, but the outcome may be item non-specific before the event, such as where, after play of an underlying draw poker game, a randomly generated hand or randomly generated number of cards which does not define a hand (e.g., four cards) may be compared for a match with the final hand in the underlying poker game or with a second randomly generated hand, with each of the later generated hands being dealt from independent fifty-two card decks (for example).

5

10

15

20

25

30

One condition that may be imposed, and would usually be imposed, for playing the second segment is to have a winning outcome and an associated payout assigned for the first segment at the time or before the time when the second segment is played. In on example of the invention, once the predetermined condition or conditions have been met, the player must play the second segment of the wagering game using at least a portion of the payout as a wager in the second segment. The second segment may even constitute a separate game which requires a separate wager. This is substantively different from such games a Double-Down after a video game of draw poker where the player has an absolute right of election to play the Double-Down game, either none of the winnings or all of the winnings are usually required, and the screen format remains the same. The second segment in the present invention may even constitute a game which allows the second wager to be completely lost, places only a portion of the wager at risk, or guarantees at least a return of the wager on the second segment, with a possibility of an increased award (by addition or multiplication of the award achieved on the play of the first segment wager game). In another example of the present invention, a player can optionally choose to participate in the second segment of the game, and is required to put all or part of an award earned in the first segment at risk. Every outcome of the second segment may have a factor associated with it which enhances the payout of the first segment, e.g., by multiplying the original payout by the factor. According to one method of practice of the present invention, the minimum factor in the second segment could be one. The player in that instance is therefore guaranteed a payout at least as great as the original payout, and hence does not risk the payout awarded in the first segment by

15

20

25

30

playing the second segment of the game. Additionally, one or several predetermined outcomes of the second segment may be assigned fixed or progressive jackpots, yielding even larger winnings for the player.

Brief Description of the Drawings:

Figure 1 is a flow diagram of a method of the present invention.

Figure 2 is a flow diagram illustrating an optional enhanced payout option of a method of the present invention.

Figure 3 is a schematic diagram showing a device of the present invention.

Figure 4 is a front elevational view of a preferred video wagering machine of the present invention.

Figure 5 shows a first screen format for play of a segment which is played as Let It RideTM poker.

Figure 6 shows an example of a first screen layout for play of a first segment in the appearance of a slot machine with unique symbols.

Figure 7 shows an example of a second screen layout, visually different from the first screen layout of Figure 6, which represents the appearance of a selection among at least three doors.

Detailed Description of the Invention:

The present invention is a unique method for scoring and participating in a video wagering game. The preferred method can be used to play and/or score virtually any video wagering game having at least two distinct playing segments. Although the method of the present invention is preferably used to score video poker games, the method can be applied to virtually any segmented game where winning outcomes can be determined in advance, and at least one predetermined condition in the first segment can be identified in order to qualify the player to advance to the second segment of the game.

An aspect of the present invention contemplates a mandatory second wager requirement to participate in the second segment of the game, the second wager being required to come from at least a portion of an award from a preceding segment and payout from a preceding segment (or in the case of the play of a third segment, from the earlier played first and second segment). When the play in the second segment is mandatory, the

10

15

20

25

30

award from the first segment may be used so that it is not at risk. For example, a multiplier may be used in the second screen format which is always 1.0 or larger.

A flow diagram of the method of the present invention is shown in Figure 1. A player places a wager 2 to participate in a first segment of a video wagering game. The player first plays the first segment 6 of the video wagering game. If at least one predetermined condition 10 has been met, a payout value 18 is assigned to the play of the first segment of the game 6. Preferably, the player must repeat the wagering 2 and playing 6 steps a number of times before the predetermined set of conditions 10 has been met. The payout is not automatically deposited or dumped into a credit account, as at least a portion of the immediate award must be carried forward into the next segment as a mandatory wager. Although it is preferred that the player continue to place wagers with each round of play of the first segment, the present invention contemplates placing only one wager 2 in the first segment and then carrying forth at least a portion of any award from the first segment into play of a second segment. Between play of each number of the first segment 6, the player has the option to continue 14, or cash out and quit 14 and 16. Of course, if the player does not have any credits remaining, the player simply quits 16 playing the first segment 6.

According to one game method, when the player has achieved a predetermined number (including one outcome) of winning outcomes, the predetermined set of conditions has been met 10. When the set of predetermined conditions has been met 10, a payout value is assigned 18 to at least one predetermined winning outcome from the play of the first segment 6. Preferably, the last predetermined winning outcome is the basis for assigning a payout value 18, although a cumulative award basis or partial accumulated award basis (e.g., all of the awards leading to the predetermined winning outcome, the last two hands, the last five hands, the largest award in the last selected number of hands, etc.) may be used.

Next, the player must exercise an option 22 of participating in the next segment of the

game. The player determined the amount or portion of the assigned payout value 18 which is to be wagered in the play of a second segment 26 or a portion of which is to be credited to the player for a cash out 16. In one embodiment of the present invention, the player may elect to place the entire award as a wager in the second segment, place a portion of the award as a wager in the second segment and accept the remaining portion as a credit, but may not receive the entire award as a credit for play in the first segment 2 and 6. This last restriction may be

voided or prevented where the first award does not reach a minimum threshold multiple of

the initial wager. For example, the player may retrieve a one-to-one award, but must wager a

10

15

20

25

30

portion of all awards with payouts of at least three-to-one, at least five-to-one, at least eight-to-one and the like. In that event, the player may retrieve or wager the award or part of the award in the second segment. There may or may not be additional wager 24 required to participate in the play of the second segment, in addition to advancing a portion of the award from the play of the first segment. The optionally provided additional wager 24 may or may not influence the payout potential of the second segment, as in initiating a fixed award jackpot or progressive jackpot entry. The present invention contemplates providing an optional or required second wager to participate in the second segment. It is to be understood that the second wagering event might necessitate modifying the preferred pay tables of the present invention. That is, because the second segment influences the total amount of award which may be available from a single unit of wager, the pay tables in the first segment may significantly vary from standard pay tables of a similar game, offering either higher awards or lower awards for a given outcome.

PCT/US99/21887

At the conclusion of play of the second segment 26 which has a visually different screen format than play of the first segment 6, an award or factor is identified and the level of payout, bonus or award is determined from the second segment of play 30. The terms payout and award or bonus have related meanings. The payout is usually intended to mean the number of wager credits or coins to be returned to the player from the results of play. An award may include the payout, but may also include potentially non-monetary elements such as the right to proceed to another segment or the accumulation of credits towards play in a special segment for a jackpot or progressive jackpot. For example, in the play of the first segment, if the payout is only an equal value award, there may be no right to advance to a second segment, while if the payout is at least three times the wager, there may be an award of an opportunity to advance to a second (or further) segment play, carrying at least a portion of the award forward as the wager in the second segment. A bonus may be in addition to a payout and award, and may be monetary or non-monetary value towards play or amounts towards a particular payout or jackpot. For example, after play has been enabled in a second or further segment, bonus values may be awarded for particular results in the play, and these bonus values may be carried forth in search of a particularly high payout, factored payout or jackpot. A further example of this type of play would include where, as shown in Figure 6, three doors are to be chosen for an award, if a player chooses the highest value door, a bonus value may be credited on the apparatus (and, for example shown on the screen). A jackpot may be awarded when a set number, e.g., 3, 4, 5, 6, 7, 8, 9, or 10 consecutive plays of the first

10

15

20

25

30

PCT/US99/21887

and second segments results in the highest value door. An option 34 may be provided to the player to convert the bonus values to free plays of the first segment or to advance to a third segment 36 (with the same or visually different screen format). In a second example of the invention, the player may choose to play a second segment of the game in a different screen format. Preferably, entire awards from the first segment are placed at risk when there is an option to engage play in the second segment. Alternatively, only a portion of the award may be placed at risk. Thus, all or only a portion of the award from the first screen may be wagered in the play of the second segment on a different screen format.

According to one aspect of the present invention, payouts from the first segment may be enhanced by multiplying the assigned payout value by a multiplication factor, hereinafter referred to simply as a "factor" or by allowing the player to wager part or all of the payouts from the first segment in a separate game which may offer the opportunity to multiply or otherwise increase the payouts in a different formatted screen and different game. Where there are significantly large awards possible in the play of second or other subsequebt segments, there should be a risk to the initial award involved in the play of the second segment. Preferably with more moderate award effects (e.g., increasing the award by fixed amounts such as five tokens or credits, or by multiples of less than five), the factor is always an integer equal to or greater than one, or to add a little tension to play of the game, at least one potential outcome is for the factor to be a positive value above zero but below one. In other words, the player is not putting the entire payout of the first segment at risk by participating in play of the second segment. This unique feature adds fun and enjoyment to the game. Since there may even be no risk in participating in the second segment, there is really no reason why the player would choose not to participate. In fact, in the example described below, participation in the second segment is required.

The scoring method of the present invention is suitable for scoring video wagering games with a first segment which is a reel slot game, particularly those played on the formats described in the practice of the invention. The second segment may be plyed in any other format, but some particular formats are particularly suitable or particularly entertaining in combination with the underlying format of the first segment.

The method of the present invention has particular benefits with respect to at least one of the segments being a non-traditional casino game. For example, a first game segment may be a video enactment or video screen representing the Three Stooges reel slot game (e.g., with a video display of the reels with a special bonus combination, for example, the features or

10

15

20

25

30

symbols of the Three Stooges, individually or collectively one frames within each reel), with the second game segment showing an entirely different screen view from which the player(s) may make selections of features, such as figures of each of the Three Stooges, pairs of the Three Stooges, or defined events such as Arguments, Discipline, Accidents, Responses or the like, representing activities or skits ordinarily performed by the Three Stooges in their movies. For example, under the various categories, when chosen, would be displays of Curly giving Moe a "Dutch rub," Moe poking Larry or Curly in the eyes, Curly waving his hand in front of Moe's face, Larry and Curly exchanging head slaps, verbal quotations form the movies such as "I ought'a," "Nyuk, nyuk," and the like. After the bonus feature has been engaged, the player would then select from among the figures presented to activate play of the bonus feature or select from the categories to provide additional choices or to activate the bonus feature. The selection from amongst the three or more categories or figures may include, one selection causing loss of the entire wager, a second door causing a more neutral event (e.g., a push, loss of a percentage of the wager, gain of a small percentage of the wager, etc.), and a third door causing a doubling or otherwise substantial increase in the wager award. The awards and play of the bonus feature may also be accompanied by special audio activity associated with the feature. For eample, where the player loses part or all of his wager, Moe could be heard saying "You blockhead!" "You knucklehead!" or one of the characters could be shown getting a pie in the face. Additionally, special bonus points may be accumulated by guessing the highest value bonus feature among those presented in the bonus play feature (with points either always accumulating for a subsequent wager irrespective of bonus selection outcomes, points accumulating only until a loss or wipe-out selection is encountered, or points accumulating only for consecutive winning bonus selections). These bonus points may accumulate towards the player using the points to multiply the bonus awards on a single wager in the underlying game or the first game segment, or (particularly where points are only accumulated with consecutive winning bonus selections) points may be accumulated towards a jackpot or even a progressive jackpot (e.g., a jackpot is paid out when at least five consecutive winning bonus selections are selected, and a progressive jackpot is awarded when at least ten consecutive winning bonus selections are selected). The play of segments in sequence which have an art (especially including the entertainment art) recognized relationship is referred to herein as "thematic continuity." This would be inclusive of a first game in the format of a contestant or player involved in a first game (e.g., a version of Three Stooges video slots) to enable advancement to another game,

such as the feature selection segment described above, which might be successfully throwing a pie at one of the Three Stooges and hitting him in the face, successfully hitting one of the Three Stooges on the head with a hammer, etc. Any type of game play that continues with the underlying theme (e.g., of the Three Stooges) including card games played against the Three Stooges, such as Blackjack or poker, with the characters being animated opposing players.

In this apsect of the invention, the video game may be described as a method of playing a video wagering game, the game comprising at least a first segment and a second segment, the method comprising the steps of:

placing a wager to participate in a first reel or reel video wagering game having a first screen format representing a collection of screen characters or a single character in different roles, etc;

playing the first segment of the video wagering game;

continuing play of the first segment until at least one predetermined condition has been met (such as the appearance on a pay line of the necessary number of bonus characters, e.g., the Three Stooges, one figure of any Stooge on each of the frames in a payline);

assigning a payout based on at least one predetermined winning outcome of the first segment;

playing the second segment of the video wagering game when the at least one predetermined condition has been met;

wherein at least a portion of said payout of the first segment is directly used as a wager in a second segment video wagering game in which a second screen format is used in the play of the second segment, which second screen format is visually different from the first screen format and also represents a segment of a game show (e.g., the second segment screen format has multiple features from among which a player may make a selection to engage a bonus play or bonus feature), and the second screen format is used in the play of a different wagering game than that played in said first segment; and

after play of the second segment video wagering game, a second segment payout is assigned based on at least a predetermined outcome of play of the second segment video wagering game.

15

10

5

20

25

30

The second feature selection may be among still pictures, slightly animated pictures (e.g., characters with limited movement in a scene) or highly animated partial film clips. The scenes or symbols may also be surrounded by a border that has the imagery or appearance of a film strip to maintain the continuity. The symbol, character or selection feature may also be bordered by the imagery of a motion picture or theater screen. Upon activation or selection of that symbol or feature from among the choices, part of the reward may include an animated movie clip of a thematic scene, such as Moe, Larry and Curly exchanging insults (e.g., with sound) and trading hits, kicks ad slaps or being involved in an otherwise comic scene. Scenes

5

10

15

20

25

30

value.

According to one preferred method of play, the first segment is Let It Ride ® poker and the predetermined winning outcome of the first segment is achieving a known winning hand from a plurality of poker hands having conventional poker hand rankings, such as two pairs, for example. In the example which is described below, the minimum ranking poker hand required to meet the predetermined conditions is a pair of 9's. According to the invention, there must be a payout to meet the predetermined conditions.

from various Three Stooges movies would be artistically selected for their entertainment

Wagers are placed according to conventional play of video wagering games. For example, a player may insert coins, bills, tokens or register credits in another manner to participate in the game. Playing the first segment can either take place automatically as the result of placing a wager, for example, or in response to instructions from the player transmitted to a microprocessor via player controls. The term direct usage of the award from an earlier segment requires that any such award not be first accumulated into a general credit fund or bank, but that the award or a portion of the award is chosen by a player to be forwarded as a wager in a second segment.

A preferred method of play of the present invention includes providing a progressive payout in the event a predetermined winning combination on a different visually formatted screen is achieved in the second segment of the game. The term "visually different formatted screen" means more than merely the addition of only alphanumerics to the original screen, as is done is "Double-Down" poker play. In that format, after a winning hand is achieved, alphanumerics (e.g., "Play Double Down?", "Yes," "No," and arrows pointing to the appropriate keys or buttons to engage the Double Down segment) appear on the video screen with the winning hand asking the player if the player wishes to engage play of the double down game. The visūal appearance of the screen is the winning poker hand with the addition

of alphanumerics. Furthermore, the "Double-Down" game shows the backs of five playing cards which is substantially the same visual appearance as the first segment game showing either five playing cards facing down with a turning of the cards to initiate play, or 'dealing' five cards face up to initiate play. The closest resemblance which a second segment wagering game may have to a first segment wagering game and be within the broadest definition of "visually different formatted screen" is to provide a different number of symbols such as movie film strips on a continuous reel or virtual reel in the first segment and three spearate, individual frames from a movie reel (preferably in a difference size format) in the bonus play second screen segments. By varying the screens with different games in sequence, a greater feel for live entertianmnet may be effected, with a greater variety of events occurring. The term "visually different formatted screen" can also include requirements that not only does the primary visual format of the game differ (e.g., motion picture film strip frames versus theater screen display, etc.), but may also include a requirement that the screen indicates different operation functions for keys or buttons and/or indicates differences in rules of play of the second segment different game. It is of course contemplated that the visually different screen may display different backgrounds or backdrops than the earlier screen, as well as different game functional elements.

Another way of describing a form of play of the multiple segment game of the present invention is as a method of scoring a video wagering game, the game comprising at least a first and second segment, the method comprising the steps of:

placing a wager to participate in a video wagering game;
playing the first segment of the video wagering game;
continuing play of the first segment until at least one award-achieving
condition has been met;

25

30

5

10

15

20

assigning a payout based on the at least one award-achieving condition of the first segment;

optionally or mandatorially playing the second segment of the video wagering game when the at least one predetermined condition has been met;

wherein at least a portion of the payout of the first segment is directly carried into the second segment as a wager in a second segment video wagering game in which a visually different screen format is used in play of a different game in the play of the second segment; and

10

15

20

25

30

after play of the second segment video wagering game, a second segment payout is assigned based an award winning outcome such as on at least a predetermined outcome of play of the second segment video wagering game.

The method may optionally require that at least a portion or all of the payout based on the at least one award-achieving condition of the first segment may be or must be carried forward as a wager in the second segment. The method may also optionally require that a portion or all (particularly where a low award payout, e.g., only one-to-one) of the payout based on the at least one award-achieving condition of the first segment is retained as a credit or paid out to a player.

Figure 2 is a flow diagram which shows how a method according to the present invention may be practiced. After an assigned payout value has been made in the play of the first segment 120, the player may elect to wager the entire payout or a portion of the payout in the play of a second segment with a visually different formatted screen 124. Any portion or all of the payout 120 may be the basis of a decision 136 to continue play, cash out or quit 140 or return to the first segment 144. With any further wager in the second segment 124, the play of the second segment will determine the level of payout, award or bonus for the play of the second segment 128. The player may at that time determine what portion of the payout, award or bonus is to be applied among the various options allowed. These options, for example, include but are not limited to cash out or quit 140, return to the first segment 144, play of additional or repeat segments (including the second segment 132, or retention of awards or bonuses towards free play or a jackpot 148. Continued play of additional or repeat segments 132 may result in additional or special payouts, awards or bonuses 152, including a fixed award or a jackpot, such as a progressive jackpot.

A video wagering device of the present invention includes a microprocessor (MPU) 33, as shown in Figure 3. The MPU can be a conventional home computer or other known microprocessor commonly used in gaming devices. A visual display 35 such as a cathode ray tube, for example is provided to show a visual representation of the video wagering game of the present invention. The visual display 35 and MPU 33 are mounted within a video terminal cabinet 37 (shown in Figure 4). A plurality of player controls 38 are provided and are preferably mounted in the cabinet 37. The device is equipped with a payout meter 40 and a device for accepting bets 42. The MPU is equipped with memory, such as RAM 44 memory, as well as ROM 46 memory. A program is loaded into the ROM memory 46 which provides visual images which correspond to the first and second game segments, and allow

the player to input instructions into the RAM memory 44. Although the device and method of the present invention are described in terms of providing a two segment wagering game, it is to be understood that the game and device of the present invention can be used to provide video wagering games with more than two segments. The payout from the first game can be enhanced by outcomes in each successive game, for example.

5

10

15

20

25

30

The MPU is further programmed to register bets, credit bets, calculate payouts, continually check to see if all of the set of predetermined conditions have been met, determine if the winning outcome qualifies for a progressive payout, receive player instructions, dispense payouts and provide visual displays in response to player instructions. Each of the visual display 35, the payout meter 40, the bet acceptor 42 and the player controls 38 are preferably electronically connected to the MPU 33 by means of a data bus.

As shown in Figure 4, in a preferred game of the present invention, a video wagering device 48 is provided with a visual display 50, a plurality of player controls 52 mounted into the cabinet 37, a coin acceptor 54, a bill acceptor 56 and a coin collection tray 58. The player controls 52 preferably include a plurality of numbered buttons 92, 94, 156, 159, and 161, "yes" and "no" buttons 146 and 148 for election of any options during play of the segments or for making decisions after play and/or after awards on each segment, "bet" 66, "Max bet" 68 and "play credit" 64 buttons, "cash out" 60 and a "deal" 80 button. If a player chooses to cash out winnings, the cash out button 60 is depressed, and all credited wins are dispensed through chute 62 into tray 58. Other buttons or keys which are not shown may include a proportionating key for dividing awards for retention versus advanced play, conversion of award buttons, conversion of bonus buttons, and the like.

In a preferred method of the present invention, Let It Ride® poker is the first segment of the video wagering game, and ordinary Twenty-One is the second segment. Let-It-Ride® poker is fully described in U.S. Patent 5,288,081 to Breeding and is hereby incorporated by reference. This patent is commonly owned by the assignee of the present invention.

In a preferred screen display 106, as shown in Figure 5, a fanned shaped meter 108 is provided which represents nine playing cards 110, 112, 114, 116, 118, 120, 122, 124 and 126. Alternatively, a meter which is a numerical counter 84 (shown in Figure 4) is provided. Any type of electronic, mechanical or electromechanical meter could be used. Preferably, the visual representation of each card 110, 112, 114, 116, 118, 120, 122, 124 and 126 includes a single letter on each card, which spells Let It Ride. There are a total of nine cards. When a winning combination of cards is achieved in the first segment of the game, one card in the fan

is turned over, and appears as if it were filled in with a solid color (not shown). In this example, the meter 108 increments to nine, at which time the MPU causes the visual display to advance to the next segment, providing that the remaining predetermined conditions have been met.

5

10

15

20

25

The play of the underlying game is briefly described as follows. The player places a wager, which preferably is a three equal part bet. A visual display of the three parts of the bet 128, 130 and 132 is incorporated into the preferred screen display 134. A video representation of a five card hand is displayed. The cards are drawn randomly from a single deck of cards. Each card 136, 138, 140, 142 and 144 is dealt face down. After the player places his wager, he/she depresses the deal button 80 (shown in Figure 4). The first three cards 136, 138, and 140 are turned face up, and the remaining two cards 142 and 144 remain turned down. At this point, the player is given the opportunity to withdraw the first part of the bet, based on his assessment of the likelihood that the hand will be a winning hand. If the player wishes to withdraw the bet, he/she depresses the "no" 148 button (see Figure 4). In this instance, the player has drawn three aces, which in itself is a winning hand. He therefore would choose to "let it ride," by selecting the "yes" button 146 and continue to maintain that portion of the bet. Once "yes" or "no" is chosen, the fourth card 142 is turned over. He is then given the opportunity to "Let It Ride" by pressing the "yes" button 146, or withdraw a second portion of his bet 130 by depressing the "no" button 148 on the player control panel. Since he has already determined that the hand ia a winning hand, he would continue to "let it ride." Again, upon choosing "yes" or "no", the final card 144 is turned over, and the hand is scored. According to the preferred method of play, the payout for a full house is 9 for one. At the beginning of play, and before any bets are placed, the screen display preferably shows zero credits 86 (shown in figure 4). Just prior to play of the last hand which increments the meter to the ninth position, the player has 120 credits. The player placed the maximum bet of fifteen coins which is shown at 147 on screen display 134. The player achieved a full house which is one predetermined arrangement of cards, and according to the preferred pay table, pays 9 for 1. The most preferred predermined arrangements of cards, corresponding payouts and respective factors are shown in the table below:

30	<u>Outcome</u>	Payout	Factors
	Royal Flush (max. Bet)	1000	Progressive
	Royal Flush	1000	100
	Straight Flush	200	50

WO 00/17832	PCT/US99/21887
-------------	----------------

		16	
	Four-of-a-kind	50	25
	Full house	9	6
	Flush	6	5
	Straight	5	4
5	Three-of-a-kind	4	3
	Two pairs	3	2
	Jacks or better pair	2	1
	Pair of 9's or 10's	1	1
	Low pair		1
10	Nothing		1

20

25

30

This pay table 149 is preferably incorporated into the visual display 134 of the first segment. Alternatively, the MPU is programmed to display the type of winning hand, payout and factor for a single winning outcome only when that outcome is achieved. Displaying the factors provides the player with an incentive to advance to the next screen because it motivates the player to finish what he has started.

In another embodiment of the present invention, the payout is further enhanced by paying a progressive jackpot if the maximum bet is placed, and a unique or special distribution of symbols or events occur, such as is achieved or if a certain number of bonus values are applied to the play of that segment. It is contemplated that 100% of a progressive jackpot would be awarded to special, low ferquency events, such three Curly figures occurring in the play of the first segment slot game and then selection of the maximum payout second feature segment. In other embodiments, lower frequency special events would qualify for 20% or more or less of the progressive jackpot, for example.

In order to maximize the appeal of a progressive jackpot feature, it would be desirable to pool a small percentage of the bets placed on a plurality of machines to fund the progressive jackpot. For example, it would be desirable to set aside about two percent of the coin in, and hook up a bank of video wagering games so that the prize pool climbs quickly.

Figures 6a), b), c), d), e), f), g) and h) show a thematically continuous series of second segments that can be used in the play of the second segment in the practice of the present invention. Figure 6a) shows the Three Stooges in stage scene or screen scene. This feature could attract a player to place the maximum bet or the largest portion of his winnings in the play of the first segment or the second segment, with printed and/or audio messages, such as

"Place the maximum bet, you knucklehead!" Alternatively or in alternating format, Figure 6b) shows a closed curtain for an idle mode, or a break between segments. In Figure 6c), after a bonus has been achieved in the play of a first segment, the curtain may be highlighted or overlain with words and/or accompanied by audio portions, such as "It's Bonus Time!" In one particularly desirable type of play, the curatin may open, displaying the Three Stooges, one-at-a-time, for example, with each of the Stooges greeting the player in their own voices or imitiations of their voices, for example, merely saying "Hello1" or making some other form of greeting (including insults). Figure 6e) shows three different figures of each of Three Stooges, from which the player may select any one figure to play the second segment. There may be banter of physical interaction on the screen among the Three Stooges, such as "Pick me!" or "Hit the Spin Button" to enact selection of one of the figures in the second feature. When one of the Figures is selected, that figures name may be called out or that particular Stooge identified, as by the other Stooges insulting him, with the selected figure particularly identified in Figure 6f). The screen may then undergo a transition (e.g., shown in Figure 6g)) to a bonus "violence" event, shown in Figure 6h). By violence event is meant that the figures, as is repesentative of the humor of the Three Stooges undertake specific types of physical attacks or actions against other characters, including, but not limited to the other Three Stooges. A movie clip of the Three Stooges rom one of their movies could be played for a sufficient time to enable entertainment of the player, such as from 2 to 20 second, or from 3-15 seconds or from 3 to 12 seconds, or the like.

5

10

15

20

Workers skilled in the art will recognize that the above example is not intended to limit the scope of the invention, and that other examples exist which do not depart from the spirit and scope of the invention, and are encompassed by the appended claims.

What is claimed is:

1. A method of playing a video wagering game on a microprocessor based gaming device comprising:

placing a wager to participate in a first video wagering game having a first screen format;

playing the first segment of the video wagering game;

continuing play of the first segment until at least one predetermined condition has been met and recognized by said microprocessor based gaming device;

assigning a payout based on at least one predetermined winning outcome of the first segment; the method being characterized by:

playing a second segment of the video wagering game when the at least one predetermined condition has been met and recognized by said microprocessor based gaming device;

wherein at least a portion of said payout of the first segment is directly used as a wager in the second segment of the video wagering game in which a second screen format is used in the play of the second segment, which second screen format is visually different from the first screen format, and the second screen format is used in the play of a different wagering game than that played in said first segment; and

after play of the second segment video wagering game, a second segment payout is assigned based on at least a predetermined outcome of play of the second segment video wagering game.

- 2. The method of claim 1 wherein the first segment comprises poker.
- 3. The method of claim 1 wherein the first segment comprises stud poker.
- 4. The method of claim 1 wherein the first segment comprises draw poker.

10

5

15

20

25

- 5. The method of claim 3 wherein the first segment comprises Let It Ride ® poker or Caribbean Stud® poker.
- 6. The method of claim 1 wherein the second segment comprises two card high low.
- The method of claim 1 wherein the second segment comprises poker.
 - 8. The method of claim 1 wherein the second segment is Let It Ride ® poker, wherein the predetermined winning outcomes and corresponding factors are as follows:

Hand	Multiplier
Royal flush	100
Straight flush	50
Four-of-a-kind	25
Full house	6
Flush	5
Straight	4
Three-of-a-kind	3
Two pairs	2
Medium pair	1
Low pair	1
Nothing	1
	Royal flush Straight flush Four-of-a-kind Full house Flush Straight Three-of-a-kind Two pairs Medium pair Low pair

9. The method of claim 1, wherein the first segment is Let It Ride ® poker, wherein the set of predetermined winning outcomes and corresponding factors comprise:

	Winning Outcome	Payout
	Royal flush	1000
25	Straight flush	200
	Four-of-a-kind	50
	Full House	9
	Flush	6
-	Straight	5

WO 00/17832

15

PCT/US99/21887

Three-of-a-kind 4 Two pairs 3 Jacks or Better pair 2 Pair of 9's or 10's 1

20

5 The method of claim 1 wherein a payout from at least one predetermined 10. winning outcome from the second segment is augmented with a progressive jackpot.

- The method of claim 10, wherein the progressive jackpot payout is 100 11. percent of the progressive jackpot when the player obtains a royal flush, and a maximum bet has been placed.
- 10 12. The method of claim 1 wherein said first segment comprises a video reel slot game.
 - The method of claim 12, wherein the video format of said second segment 13. does not display a video reel slot game.
 - 14. The method of claim 2 wherein the video format of said second segment does not automatically display a number of cards equal to the number of cards initially displayed in the play of said poker in said first segment.
 - 15. The method of claim 1 wherein each said first segment and said second segment provide formats on a screen which do not include playing cards.
- 16. The method of claim 1 wherein only one video format of said first segment and 20 said second segment displays playing cards.
 - 17. The method of claim 1, wherein the apparatus includes a feature of providing a meter for keeping track of a number of winning outcomes which is independent of credits for play retained or awards from a single play of any segment.

10

15

20

25

30

18. A method of scoring a video wagering game on a microprocessor based gaming device, comprising the steps of:

a player placing a wager to participate in a video wagering game;

providing a video display cabinet, a device for accepting wagers mounted in the cabinet, a visual display mounted in the cabinet, a plurality of player controls mounted in the cabinet, a microprocessor located in the cabinet with RAM and ROM storage, wherein a program is stored in the ROM for playing a video wagering game with a first segment and a second segment, and a device for dispensing payouts; and a plurality of data busses for electronically connecting the visual display, player controls and device for dispensing payouts to the microprocessor;

the player activating a player control which causes the microprocessor to display the first segment of the game;

a player playing the first segment of the game, wherein the player controls are optionally manipulated by the player to participate in the game;

upon the happening of a set of predetermined conditions, the microprocessor assigning a payout to the first segment and causing the second segment of the game to be displayed;

the player, upon electing to participate in the second segment of the game, places at least a portion of the award from play of the first segment, which second segment is a different game than the first segment of the game and which second segment is played in association with a visually different formatted screen than was associated with the play of the first segment; and

wherein an award outcome of the second segment is determined by accomplishing a predetermined outcome in the second segment; and

paying the player an amount based upon the award achieved by the outcome of the second segment.

- 19. The method of claim 18 wherein the award outcome of said second segment includes a non-monetary award which may be accumulated towards a special feature.
- 20. The method of claim 19 wherein said special feature comprises play of a segment for a chance to win a jackpot.

- 21. The method of claim 20 wherein the first segment of the game comprises Let It Ride ® poker.
- 22. A video wagering device for play of a video wagering game having at least a first and second segment, comprising:

a cabinet;

5

10

15

a screen display mounted in the cabinet;

player controls mounted in the cabinet;

a device for receiving wagers mounted in the cabinet;

a payout device for paying player winnings mounted in the cabinet;

a microprocessor located within the cabinet having RAM and ROM memory, where a program is stored in the ROM memory which comprises a video wagering game with at least a first segment and a second segment, wherein the program generates a first screen display corresponding to the first segment and a second screen display corresponding to the second segment, wherein player instructions received from the player controls are stored in RAM, wherein an outcome from the first segment is used to allow a player an option of playing said second segment video wagering game, and a video format used in association with play of said second segment video wagering game is visually different from a video screen format used in association with play of said first segment video wagering game.

- 23. The device of claim 22 wherein the microprocessor is programmed to playvideo poker as the first segment, and blackjack as the second segment.
 - 24. The method of claim 1, wherein the first segment is selected from the group consisting of: video poker, video reel slot, video blackjack, solitaire, bingo, tick tack toe, hangman and video keno.
- 25. The method of claim 1, wherein the second segment is selected from the group consisting of: video poker, video reel slot, video blackjack, solitaire, a door game, bingo, tick tack toe, hangman and video keno, play of which second segment is associated with a visually different screen format as compared to a video screen format used with said first segment.

10

15

20

25

PCT/US99/21887

26. The method of claim 1 wherein video displays of said first segment and said segment are thematically continuous.

23

- 27. The method of claim 22 wherein a video display format used in association with play of said second segment video wagering game is thematically continuous with respect to a video display of said first segment.
- 28. A method of scoring a video wagering game, the game comprising at least a first and second segment, the method comprising the steps of:

placing a wager to participate in a video wagering game;

playing the first segment of the video wagering game;

continuing play of the first segment until at least one award-achieving condition has been met;

assigning a payout based on said at least one award-achieving condition of the first segment;

playing the second segment of the video wagering game when the at least one predetermined condition has been met;

wherein at least a portion of said payout of the first segment is directly carried into said second segment as a wager in a second segment video wagering game in which a visually different screen format is used in play of a different game in the play of the second segment; and

after play of the second segment video wagering game, a second segment payout is assigned based on at least a predetermined outcome of play of the second segment video wagering game.

- 29. The method of claim 28 wherein a portion of said payout based on said at least one award-achieving condition of the first segment must be carried forward as a wager in said second segment.
- 30. The method of claim 29 wherein a portion of said payout based on said at least one award-achieving condition of the first segment is retained as a credit or paid out to a player.

31. The method of claim 1 wherein said at least a portion of said payout of the first segment which is directly used as a wager in a second segment video wagering game is placed at least in part at risk of being diminished by play in said second segment.

24

- 32. The method of claim 2 wherein said at least a portion of said payout of the first segment which is directly used as a wager in a second segment video wagering game is placed at least in part at risk of being diminished by play in said second segment.
 - 33. A method of playing a video wagering game, the game comprising at least a first segment and a second segment, the method comprising the steps of:

placing a wager to participate in a first video wagering game having a first screen format representing a game show;

playing the first segment of the video wagering game;

10

15

20

25

continuing play of the first segment until at least one predetermined condition has been met;

assigning a payout based on at least one predetermined winning outcome of the first segment;

playing the second segment of the video wagering game when the at least one predetermined condition has been met;

wherein at least a portion of said payout of the first segment is directly used as a wager in a second segment video wagering game in which a second screen format is used in the play of the second segment, which second screen format is visually different from the first screen format and also represents a segment of a game show, and the second screen format is used in the play of a different wagering game than that played in said first segment; and

after play of the second segment video wagering game, a second segment payout is assigned based on at least a predetermined outcome of play of the second segment video wagering game.

34. The method of claim 33 wherein said first video wagering game having a first screen format representing a game show, represents Let's Make a Deal ®.

- 35. The method of claim 33 wherein said first video wagering game having a first screen format representing a game show, represents a different theatrical segment of Let's Make a Deal® than that represented in said first segment.
- 36. The method of claim 33 wherein said first segment and said second segment display thematic continuity.
 - 37. The method of claim 33 wherein at least a portion of said payout based on at least one predetermined winning outcome of the first segment must be wagered in the play of said second segment and said second segment must be played.
- 38. The method of claim 37 wherein at least a portion of said payout based on at least one predetermined winning outcome of the first segment is placed at risk in said second segment.
 - 39. A method of playing a video wagering game, the game comprising at least a first segment and a second segment, the method comprising the steps of:

placing a wager to participate in a first video wagering game having a first screen format;

playing the first segment of the video wagering game;

15

20

25

continuing play of the first segment until at least one predetermined condition has been met:

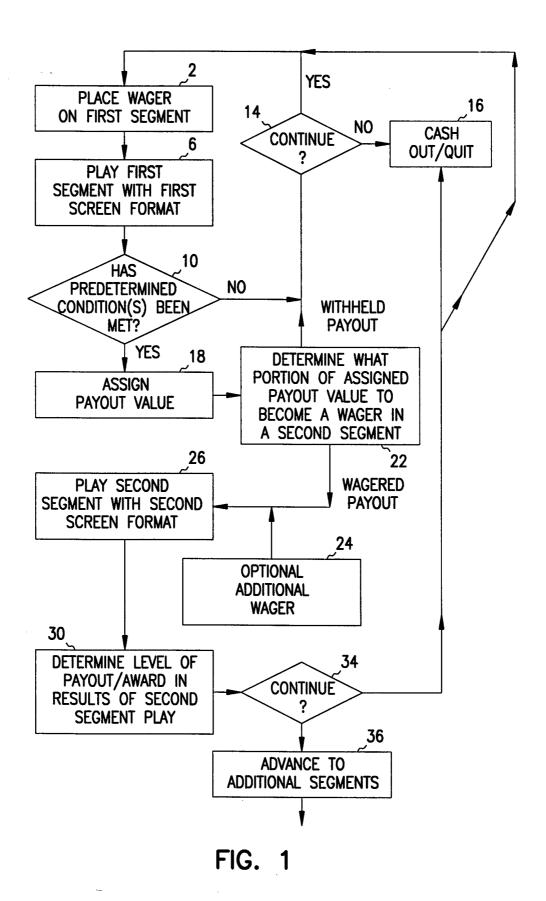
assigning a payout based on at least one predetermined winning outcome of the first segment;

playing the second segment of the video wagering game when the at least one predetermined condition has been met;

wherein at least a portion of said payout of the first segment is used as a wager in a second segment video wagering game in which a second screen format is used in the play of the second segment, which second screen format is visually different from the first screen format, and the second screen format is used in the play of a different wagering game than that played in said first segment; and

26

after play of the second segment video wagering game, a second segment payout is assigned based on at least a predetermined outcome of play of the second segment video wagering game.



1/7

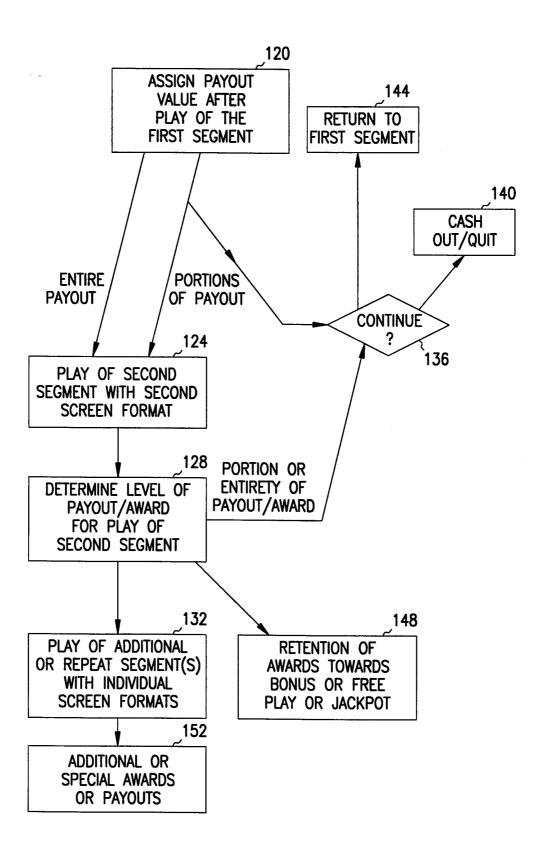


FIG. 2

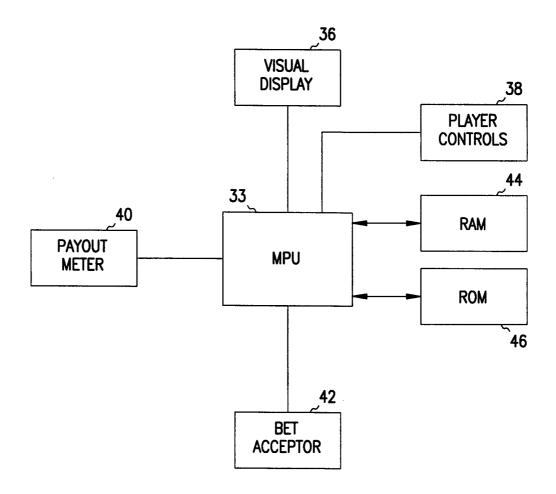


FIG. 3

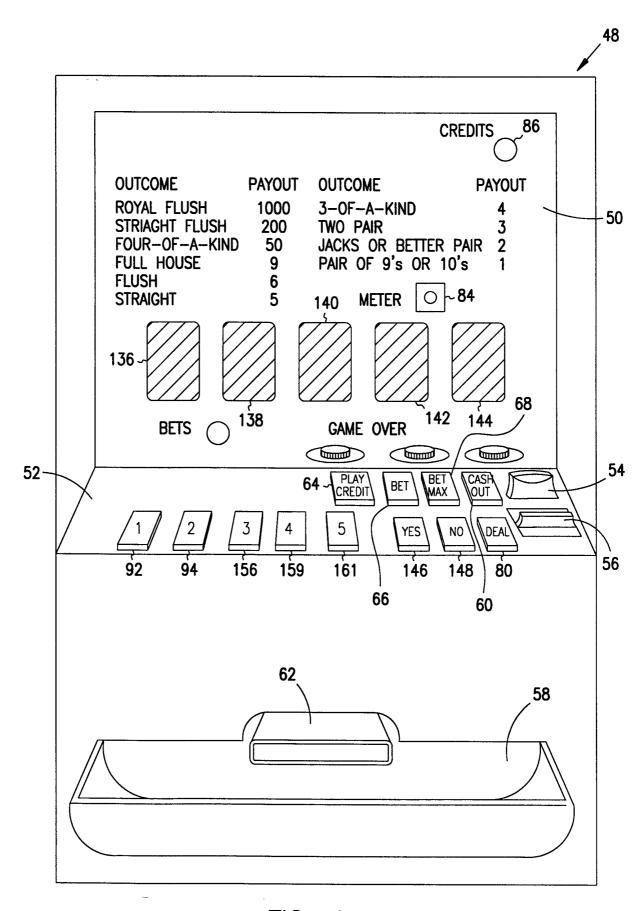
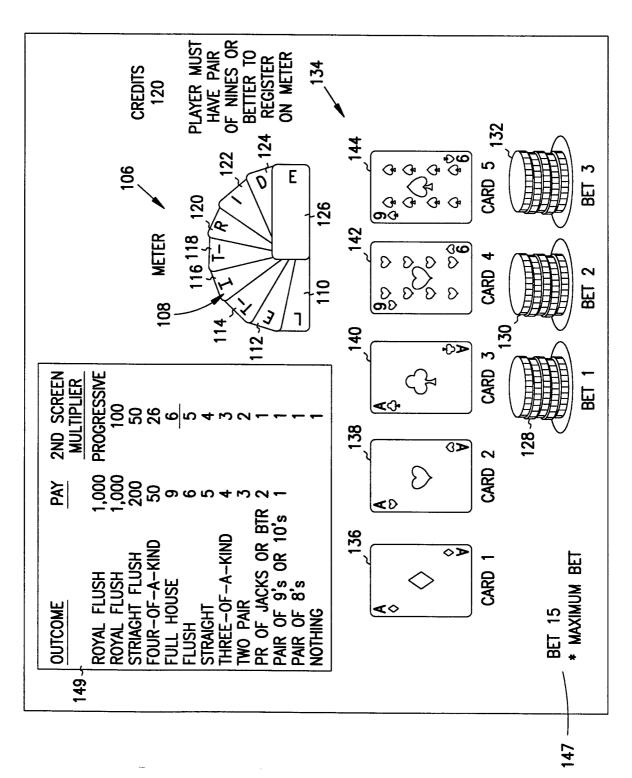


FIG. 4

FIG. 5



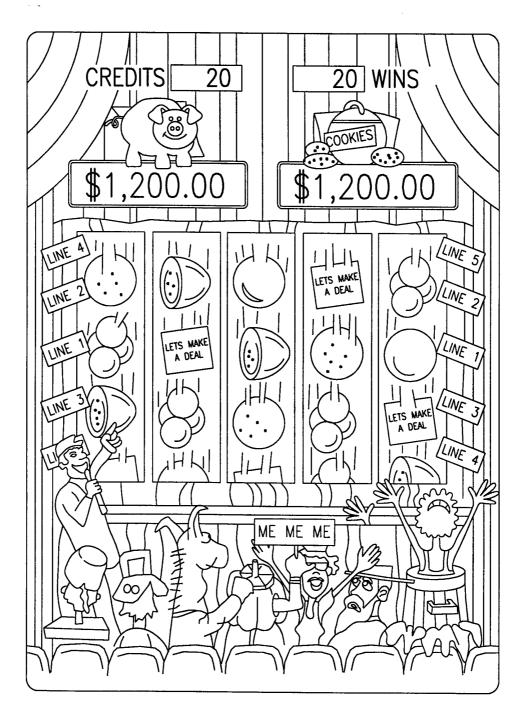


FIG. 6

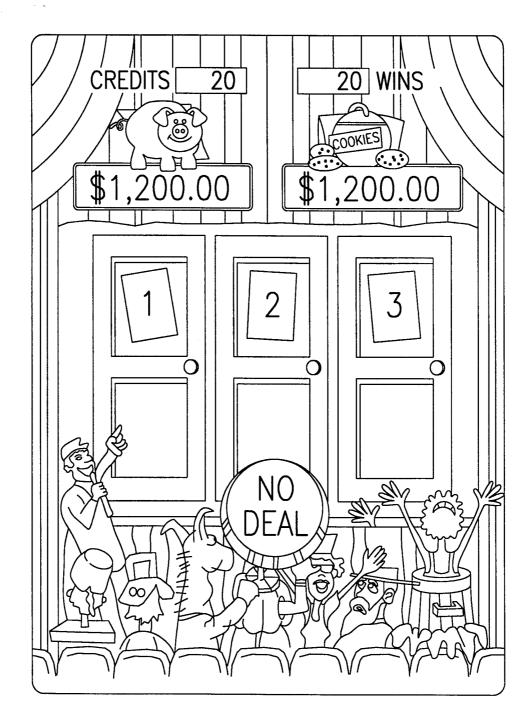


FIG. 7

INTERNATIONAL SEARCH REPORT

International application No. PCT/US99/21887

A. CLASSIFICATION OF SUBJECT MATTER IPC(6) :G07F 17/34, A63F 9/00, 1/00 US CL :Please See Extra Sheet. According to International Patent Classification (IPC) or to both national classification and IPC				
	DS SEARCHED			
Minimum de	ocumentation searched (classification system followed	by classification symbols)		
U.S. : 4	463/12, 13; 273/143R, 269			
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched				
Electronic d	ata base consulted during the international search (nat	me of data base and, where practicable,	search terms used)	
C. DOC	UMENTS CONSIDERED TO BE RELEVANT			
Category*	Citation of document, with indication, where app	propriate, of the relevant passages	Relevant to claim No.	
A	US 5,393,061 A (MANSHIP et al.) 26 line 15-60.	8 FEBRUARY 1995, Col 6,	1-39	
A	US 5,531,441 A (DABROWSKI et al. 4- col 6 line 29.) 02 JULY 1996, col 5, line	1-39	
A	US 5,393,057 A (MARNELL, II) 28 F 35-col 3, line 9.	EBRUARY 1995, col 2, line	1-39	
A	US 5,542,669 A (CHARRON et al.) 06 33-col 10, line 32.	6 AUGUST 1996, col 9, line	1-39	
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			ation but cited to understand the	
"E" earlier document published on or after the international 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) "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered novel or cannot be considered to involve an inventive step when the document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is			ered to involve an inventive step	
me	"O" document referring to an oral disclosure, use, exhibition or other combined with one or more other such documents, such combination being obvious to a person skilled in the art			
	"P" document published prior to the international filing date but later than "&" document member of the same patent family the priority date claimed			
	actual completion of the international search MBER 1999	Date of mailing of the international sea 0 8 FEB 200	arch report	
Name and r Commissio Box PCT	Name and mailing address of the ISA/US Commissioner of Patents and Trademarks Authorized officer			
Washington	n, D.C. 20231	SHEILA CLAYTON	Paralegal Specialist	
Facsimile N	To. (703) 305-3230	Telephone No. (703) 308-1148 2	Technology Cover 3700	

INTERNATIONAL SEARCH REPORT

International application No. PCT/US99/21887

A. CLASSIFICATION OF SUBJECT MATTER: US CL:		
463/12, 13; 273/143R, 269		