A keno game in which 20 poker cards, each card representing one rank and suit of the four possible royals, are arranged in two columns consisting of 10 rows. 20 balls are displayed in conjunction with the 20 cards in which one card and one ball is declared one of 20 positions. If any of the players winning numbers (balls) land in line or position with one of the 20 cards, that card becomes a live feature. A payout is awarded to a player based on a poker hand according to a poker pay table.
Place Wager 1 to 5 Credits

Select 10 player numbers from 1-80 playing grid

Provide a display defining 20 playing cards

Display player's winning numbers among random winning numbers

Display 20 random winning numbers in conjunction with the 20 playing cards

Provide video poker pay table including seven card combinations

Award a payout if a winning player number falls in line or position with a playing card and forms a poker hand according to the provided pay table

Fig. 7
Fig. 8

GAMING MACHINE

CONTROLLER

DISPLAY

USER INTERFACE
METHOD AND GAMING MACHINE FOR PROVIDING KENO-LIKE GAME WITH POKER PAY TABLE

CROSS REFERENCES TO RELATED APPLICATIONS

[0001] The present application claims the benefit of U.S. Provisional Application No. 61/133,861, filed Jul. 5, 2008, which is hereby incorporated by reference.

FIELD OF THE INVENTION

[0002] The present invention relates generally to a keno style game, and more particularly, to a keno style game which establishes a poker hand and awards a player an award as a function of the poker hand and a video poker pay table.

BACKGROUND OF THE INVENTION

[0003] Keno is a well recognized game played in casinos throughout the world. In certain regions, video keno has been installed in bars, restaurants and grocery stores. The rules of keno are simple. Players choose 1 to 10 numbers from a 1 through 80 numbered grid. Keno, live or video, has drawbacks that reduce the amount of time a player will play. One drawback is that keno is a slow game that requires patience from the player. Another drawback is the large gaps in the present keno pay table. The above issues reduce the level of interest and excitement for the player thus reducing playing time. Technology has increased the speed of the game but has done little in maintaining interest or increasing excitement for the player. Manufacturers and game developers have created variations such as Caveman Keno, Four Card Keno, Super Keno, Power Keno, Top/Bottom Keno, Extra Draw Keno and Triple Trouble Keno to add more excitement to the standard game of keno. Manufacturers have added more graphics to the video machines in an attempt to add more excitement for the player. A jumbling device that extracts the twenty winning keno balls and displays them in two columns consisting of ten rows was added to many machines to enhance player appeal. In Caveman Keno, IOT added three dinosaur eggs as bonuses to create excitement. Power Keno added excitement by allowing the player to receive four times the payout if the 20th ball drawn is one of the numbers the player has chosen. Extra Draw Keno created excitement by allowing the player to purchase three more balls for the price of the original wager. All these variations have added more excitement to the standard game of video keno.

[0004] However, one of the problems associated with Keno games is the large gaps which exist in a standard keno’s game pay table.

[0005] The present invention is aimed at one or more of the problems identified above.

SUMMARY OF THE INVENTION

[0006] In a first aspect of the present invention, a method of providing a game to a player is provided. The method includes the steps of allowing the player to place a wager, establishing a set of game symbols and allowing the player to choose a first predetermined number of game symbols. The method further includes the steps of randomly choosing a second set of game symbols, providing a set of playing cards, associating each of the randomly chosen game symbols with one of the playing cards, comparing the first and second set of game symbols and identifying any game symbols common to the first and second set of game symbols, establishing a poker hand consisting of the playing card(s) in the set of playing cards associated with the common symbol(s), and responsively awarding the player an award as a function of the poker hand and a poker pay table.

[0007] In a second aspect of the present invention, a gaming machine for providing a game to a player is provided. The gaming machine includes a user interface and a controller. The user interface allows the player to place a wager. The controller establishes a set of game symbols and allows the player to choose a first predetermined number of game symbols. The controller randomly chooses a second set of game symbols, provides a set of playing cards, associates each randomly chosen game symbols with one of the playing cards, compares the first and second set of game symbols, and identifies any game symbols common to the first and second set of game symbols. The controller further establishes a poker hand consisting of the playing card(s) in the set of playing cards associated with the common symbol(s) and awards the player an award as a function of the poker hand and a poker pay table.

[0008] In a third aspect of the present invention, a method of providing a game to a player is provided. The method includes the steps of allowing the player to place a wager, establishing a set of game symbols and allowing the player to choose a first predetermined number of game symbols, and providing a set of 20 playing cards. The set of game symbols includes the number "1" to "80" and the playing cards include one of the following cards in each of 4 suits: Ace, King, Queen, Jack and Ten. The method further includes the steps of randomly choosing a second set of game symbols, associating each of the randomly chosen symbols with one of the playing cards, comparing the first and second set of game symbols and identifying any game symbols common to the first and second set of game symbols, establishing a poker hand consisting of the playing card(s) in the set of playing cards associated with any common symbol(s), and awarding the player an award as a function of the poker hand and a poker pay table.

[0009] In one aspect, the present invention is different from conventional keno in that the final outcome is based on a poker hand consisting of, say seven, different card combinations. Twenty playing cards are displayed in two columns consisting of ten rows. The display is preferably outside the 1 through 80 numbers grid. Each of the twenty cards represents one rank and suit of the four possible poker royals. After a wager is made, say 1 to 5 credits, the player will choose numbers; say ten, from a grid containing the numbers 1 through 80. Twenty keno balls, say white, that represent the random winning numbers are displayed in conjunction with the twenty royal cards in which one card and one ball is declared one of twenty positions. If any of the players winning numbers represent the same Royal Balls, and card position with one of the twenty royal cards, that card becomes a live feature.

[0010] In another aspect of the present invention, a video poker pay table consisting of, say seven, card combinations including a Royal Flush, Four of a Kind, a Full House, a Straight, Three of a Kind, Two Pair and a Pair of, say Tens is provided. The video poker-type pay table preferably has five columns, each column relating to the amount of credits bet.

[0011] In another embodiment, one or more cards with the rankings including 2 through 9 may be utilized.

BRIEF DESCRIPTION OF THE DRAWINGS

[0012] FIG. 1 shows the video display of the main 1 through 80 grid utilized in conventional keno;
FIG. 2 shows the numbers chosen by the player utilizing the 1 through 80 grid;

FIG. 3 shows the 20 playing cards displayed in two columns consisting of ten rows;

FIG. 4 shows the 20 winning random keno balls in conjunction with the 20 playing cards;

FIG. 5 shows the players winning numbers converted to balls among the winning random keno balls in conjunction with the 20 playing cards;

FIG. 6 shows the five column video poker pay table with seven different card combinations;

FIG. 7 shows a flowchart of the present invention; and,

FIG. 8 is a block diagram of a gaming machine for providing a keno-like game having a poker pay-table, according to an embodiment of the present invention.

DETAILED DESCRIPTION OF THE INVENTION

With reference to the Figures, and in operation, the present invention provides a gaming machine 10 and a method for providing a keno-like game which results in a poker hand and which may award a player an award based on the poker hand and poker pay table. With specific reference to FIG. 8, the gaming machine 10 includes a controller 12, a user interface 14, and a display 16. The gaming machine 10 may take one of several forms. For example, the gaming machine 10 may be an upright or slant-top machine or a kiosk machine which may be located within a casino. The gaming machine 10 may be a stand-alone machine or may be linked to an external or remote computer over a network (not shown). The functions of the controller 12 (see below) may be divided between the controller 12 located on the gaming machine 10 and the external or remote computer. This allows the game to be played at numerous gaming machines 10 by one or more players. The user interface 14 may include one or more buttons (physical or implemented via a touchscreen), card reader, and bill reader/validator. Such gaming machines 10 are known in the prior art and are therefore not further discussed. Alternatively, the gaming machine 10 may be a desktop computer, laptop or notebook computer, cell phone or other computing or mobile device which allows the player to place wagers and play the game. Such gaming machines 10 may be connected to a server computer or remote computer (not shown) to facilitate the play of the game and the wagering aspect of the present invention. The user interface 14 will depend on the type of gaming machine 10, and may include without limitation, buttons, touchscreens, a keyboard and/or a keypad.

In general, the method and gaming machine 10 operate in a similar manner to a normal keno game. The player is presented with a predetermined number of game symbols. Typically, these game symbols are numbers, e.g., the numbers “1” through “80”. The player is allowed to choose or select a predetermined number of the game symbols, for example, 10. After the player chooses their game symbols, another predetermined number, for example, 20, of the game symbols are randomly chosen. The game includes a set of playing cards. After the second set of game symbols are randomly chosen, each randomly chosen game symbol is associated with one of the play cards. The player chosen game symbols and the randomly chosen game symbols are compared and any symbols common to both sets are identified. A poker hand, composed of the playing cards with which the common game symbols are associated, is then established. The player is then awarded an award based on the poker hand and a poker pay table.

FIG. 14 allows the player to place a wager. The controller 12 establishes a set of game symbols, e.g., and allows the player to choose a first predetermined number of game symbols. For example, the set of game symbols may be the numbers “1” to “80” and the player may be able to choose 10 of the numbers from “1” to “80”.

The controller 12 picks or selects a second predetermined number of the game symbols, e.g., 20. The controller provides or establishes a set of playing cards and associates each of the randomly selected game symbols with one of the playing cards.

The controller 12 compares the first and second set of game symbols and identifies any game symbols common to the first and second set of game symbols. The controller 12 establishes a poker hand consisting of the playing card(s) in the set of playing cards associated with the common symbol(s) and awarding the player an award as a function of the poker hand and a poker pay table.

In one embodiment, the set of playing cards includes 20 cards: one of the following cards in each of 4 suits (clubs, spades, hearts, diamonds): Ace, King, Queen, Jack, and Ten. In an alternate embodiment, the set of playing cards may also include one or more cards taken from the set of cards including “2” through “9” in each suit.

In one embodiment, the poker pay table includes a plurality of predefined poker hands. Each predefined poker hand has an associated award. The pay table may also have more than one award per predefined poker hand based on the player’s wager. For example, in the poker pay table of FIG. 6, the predefined poker hands includes a Royal Flush, 4 of a Kind, Full House, Straight, 3 of a Kind, Two Pair, and Tens or better. Each predefined poker hand has an associated player award based on the credits wagered by the player, i.e., 1, 2, 3, 4 or 5 credits.

In one embodiment, the poker table may have additional awards based on an associated number of common symbols between the first and second sets. For example, in the exemplary pay table of FIG. 6 if there are 10 common symbols between the first and second sets of game symbols, the player is awarded (independent of their wager) an award of 250,000 credits.

INDUSTRIAL APPLICABILITY

The present invention may be played in a live keno game format on an electronic video gaming machine 10. The following refers to an electronic video gaming machine 10 but the present invention may be adapted to a live keno game format. One implementation of a keno-like game, according to an embodiment of the present invention will now be explained with reference to FIGS. 1 through 7. Operation of the present invention (method 28 of FIG. 7) will now be discussed with reference to FIG. 1-6.

FIG. 1 is a schematic of a 1 through 80 first grid 20 shown on the display 16. The first grid 20 is also used in a live keno game format. The numbers 1 through 80 represent the possible winning numbers and are displayed in 10 columns consisting of 8 rows.

FIG. 2 represents the 10 numbers the player wishes to play which may be displayed in a second grid 22. The player picks the numbers from the 1 through 80 in the first
grid 20. In other words, the player chooses ten of the game symbols in the first grid 20 and the chosen symbols are displayed in the second grid 22. In FIG. 2, the player is playing a 10-spot game but the present invention can adapt to 1 through 9 spot games.

[0031] FIG. 3 represents a portion of the improved method of the present invention. Twenty playing cards 24 taken from a standard deck of traditional playing cards 24 are used and displayed. The cards 24 used in FIG. 3 are as follows: Ace of Diamonds, Ace of Hearts, Ace of Spades, Ace of Clubs, King of Diamonds, King of Hearts, King of Spades, King of Clubs, Queen of Diamonds, Queen of Hearts, Queen of Spades, Queen of Clubs, Jack of Diamonds, Jack of Hearts, Jack of Spades, Jack of Clubs, Ten of Diamonds, Ten of Hearts, Ten of Spades, and Ten of Clubs.

[0032] In another embodiment of the present invention, other ranking cards such as 2 through 9 of each suit or one or more jokers may be used.

[0033] The 20 playing cards 24 representing the four possible royals are displayed in two columns consisting of ten rows. The placement of the cards 24 within the display is predetermined or randomly chosen by the computer each round. In other embodiments of the invention, other poker-style designs are used but final outcome of the game is based on a poker hand with the 20 cards and the 20 keno balls forming a total of 20 separate positions.

[0034] FIG. 4 shows the 20 random winning keno balls (W₁ through W₂₀) after they are extracted from a jumbling device, i.e., the second set of game symbols is randomly selected. The winning balls are white but can range in color. The 20 random winning keno balls are aligned in conjunction with the 20 playing cards so that one ball and one card make up one of 20 positions.

[0035] FIG. 5 shows the winning player numbers (P₁, P₂, P₃, P₄, P₅) that are represented by keno balls. The players winning keno balls are yellow but can range in color. Ten numbers are chosen by the player from the 1 through 80 display grid. The player's numbers are part of the total playable numbers that are extracted from the jumbling device. If any of the player's winning numbers fall in line or position with a certain card value, that card value becomes a live feature. The card(s) representing the player's winning numbers may illuminate, blink or otherwise alter their design to let the player know that this card has been activated. After all the random winning keno balls are in position as seen in FIG. 5, the computer will acknowledge all the player's winning numbers (balls) within the group. The number of spots the player plays is the total number of wins possible. Each card in conjunction with a player's winning number (ball) is part of a poker hand. Together, all the winning positions will form the final poker hand. By adding the playing cards, the present invention has increased the level of excitement in the game of keno. The player's attention will now be focused on receiving the best possible poker hand according to the pay table provided. In conventional keno, the player needs five winning numbers in a 10-spot game to be awarded a payout. In the present invention, the player only needs two winning numbers in a 10-spot game to be awarded a payout. By reducing the winning numbers from five to two in a 10-spot game, the present invention clearly increases the player's anticipation of receiving a winning hand.

[0036] FIG. 6 shows the pay table 26 used in the present invention. By utilizing a video poker pay table 26, certain negative aspects of the conventional keno pay table have been addressed. In conventional keno, winning player numbers are referred to as "HITS". The more "HITS" the player receives per round, the more credits the player will be awarded. Because of the low hit frequency in keno, gaps can occur in the standard pay table. By replacing "HITS" with card combinations, the present invention increases the hit frequency. By increasing the hit frequency, the gaps as seen in the keno pay table have been successfully reduced. FIG. 6 shows a pair of tens as the lowest possible card combination and a royal flush being the highest. Prior art shows that using the amount of "HITS" as your template has limitations. If the player "HITS" 6 out of 10 in conventional keno, the player "HITS" 6 out of 10. The present keno pay table lacks "variety" which reduces the level of excitement for the player. In video poker, a variety of pay tables are offered. The Jacks or Better pay table is the main template for video poker. Prior art shows that paying more for Aces has increased the popularity of the game. In regards to FIG. 6, adding a pay table that pays more for four aces would add excitement to the game thus making the game of keno more popular.

[0037] The present invention has addressed many of the drawbacks in the conventional game of keno:

1. A method of providing a game to a player, comprising: allowing the player to place a wager; establishing a set of game symbols and allowing the player to choose a first predetermined number of game symbols; randomly choosing a second set of game symbols, the second set of game symbols have a second predetermined number of game symbols; providing a set of playing cards; associating each of the randomly chosen game symbols with one of the playing cards; comparing the first and second set of game symbols and identifying any game symbol(s) common to the first and second set of game symbols; establishing a poker hand consisting of the playing card(s) in the set of playing cards associated with the common symbol(s); and, responsive awarding the player an award as a function of the poker hand and a poker pay table.

2. A method, as set forth in claim 1, wherein the set of game symbols includes 80 symbols.

3. A method, as set forth in claim 2, wherein the set of game symbols includes the numbers "1" to "80".

4. A method, as set forth in claim 3, wherein the first predetermined number is equal to 10.

5. A method, as set forth in claim 4, wherein the second predetermined number is equal to 20.

6. A method, as set forth in claim 1, wherein the set of playing cards includes one of the following cards in each of 4 suits: Ace, King, Queen, Jack, and Ten.

7. A method, as set forth in claim 6, wherein the set of playing cards includes one or more of the cards "2" through "9" in each suit.

8. A method, as set forth in claim 6, wherein the poker pay table includes a plurality of predefined poker hands, each predefined poker hand having an associated award.

9. A method, as set forth in claim 8, wherein the poker pay table includes at least one award having an associated predetermined number of matches between the first and second sets of game symbols.
10. A method, as set forth in claim 8, wherein the plurality of predefined poker hands includes a Royal Flush, 4 of a Kind, Full House, Straight, 3 of a Kind, Two Pair, and Tens or better.

11. A gaming machine for providing a game to a player, comprising:
   a user interface allowing the player to place a wager;
   a controller for establishing a set of game symbols and allowing the player to choose a first predetermined number of game symbols, for randomly choosing a second set of game symbols, for providing a set of playing cards and associating each the randomly chosen game symbols with one of the playing cards, comparing the first and second set of game symbols, and identifying any game symbols common to the first and second set of game symbols, the second set of game symbols have a second predetermined number of game symbols, for establishing a poker hand consisting of the playing card(s) in the set of playing cards associated with the common symbol(s) and responsive awarding the player an award as a function of the poker hand and a poker pay table.

12. A gaming machine, as set forth in claim 11, wherein the set of game symbols includes 80 symbols.

13. A gaming machine, as set forth in claim 12, wherein the set of game symbols includes the numbers “1” to “80”.

14. A gaming machine, as set forth in claim 13, wherein the first predetermined number is equal to 10.

15. A gaming machine, as set forth in claim 14, wherein the second predetermined number is equal to 20.

16. A gaming machine, as set forth in claim 15, wherein the set of playing cards includes one of the following cards in each of 4 suits: Ace, King, Queen, Jack, and Ten.

17. A gaming machine, as set forth in claim 16, wherein the set of playing cards includes one or more of the cards “2” through “9” in each suit.

18. A gaming machine, as set forth in claim 16, wherein the poker pay table includes a plurality of predefined poker hands, each predefined poker hand having an associated award.

19. A gaming machine, as set forth in claim 18, wherein the poker pay table includes at least one award having an associated predetermined number of matches between the first and second sets of game symbols.

20. A gaming machine, as set forth in claim 19, wherein the plurality of predefined poker hands includes a Royal Flush, 4 of a Kind, Full House, Straight, 3 of a Kind, Two Pair, and Tens or better.

21. A method of providing a game to a player, comprising:
   allowing the player to place a wager;
   establishing a set of game symbols and allowing the player to choose a first predetermined number of game symbols, the set of game symbols includes the number “1” to “80”;
   randomly choosing a second set of game symbols, the second set of game symbols have a second predetermined number of game symbols;
   providing a set of 20 playing cards, the playing cards including one of the following cards in each of 4 suits: Ace, King, Queen, Jack, and Ten;
   associating each of the randomly chosen game symbols with one of the playing cards;
   comparing the first and second set of game symbols and identifying any game symbols common to the first and second set of game symbols;
   establishing a poker hand consisting of the playing card(s) in the set of playing cards associated with any common symbol(s); and,
   responsive awarding the player an award as a function of the poker hand and a poker pay table.

* * * * *