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(54) MULTI-USE GAMING MACHINE

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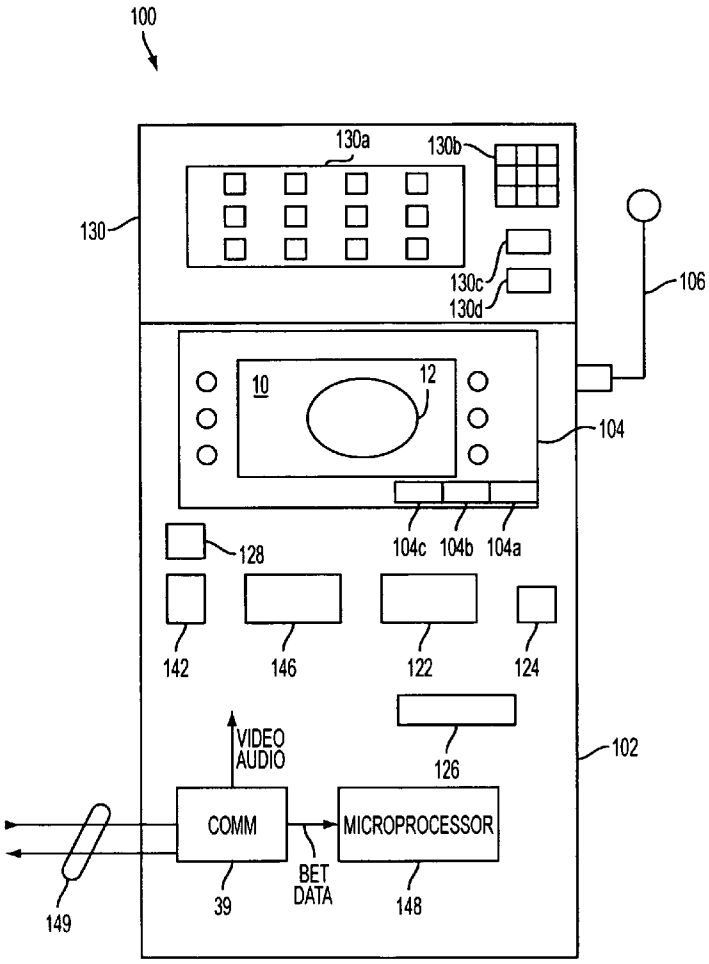
(57) **ABSTRACT**

A multi-use gaming machine is switchable between playing a game native to the machine and for interactive play of a game taking place at a remote location has a common video display for displaying the results of the game being played by a player at the machine. The machine includes a touch screen corresponding to a betting grid of the game taking place at the remote location by which wagers can be placed on the remote game and a computer that determines winning and losing wagers and maintains a running account balance for the machine. The machine also can be used for tournament play with a number of machines where there is a data processor manager, a counter that sets a predetermined number of games for the tournament, a communication link by which the data processor obtains and stores the running account balances of all of the machines after completion of a game, the data processor determining the tournament winner based on only one machine having a running account with a positive balance prior to the completion of the predetermined number of games or the machine having the highest balance after completion of the predetermined number of games. Data of the machine having the highest account balance is also provided to all of the machines after each game.



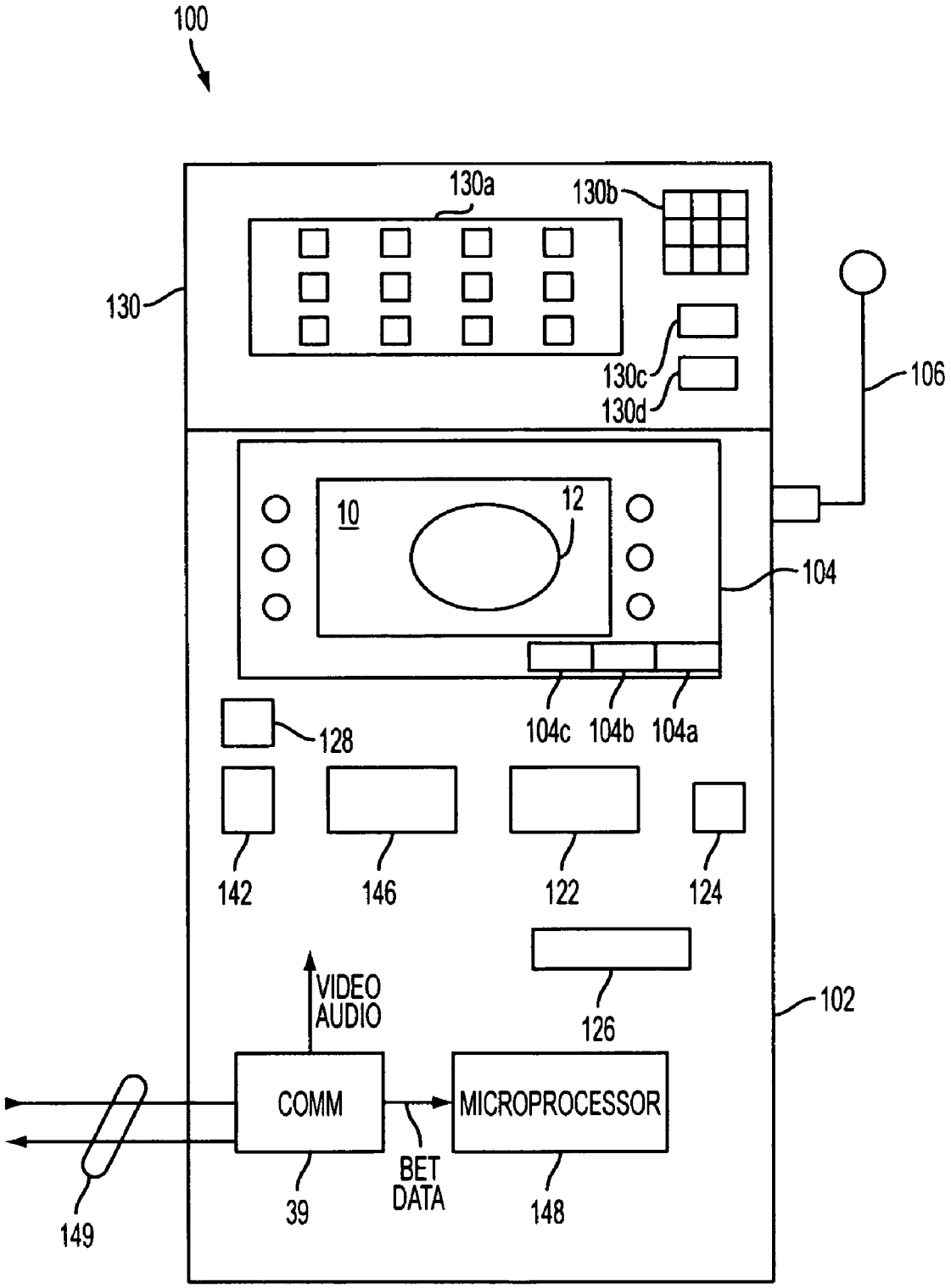

100
130a
130b
130
130c
130d
106
10
12
104
104c
104b
104a
128
142
146
122
124
126
102
VIDEO
AUDIO
COMM
MICROPROCESSOR
BET
DATA
39
148
149

FIG. 1

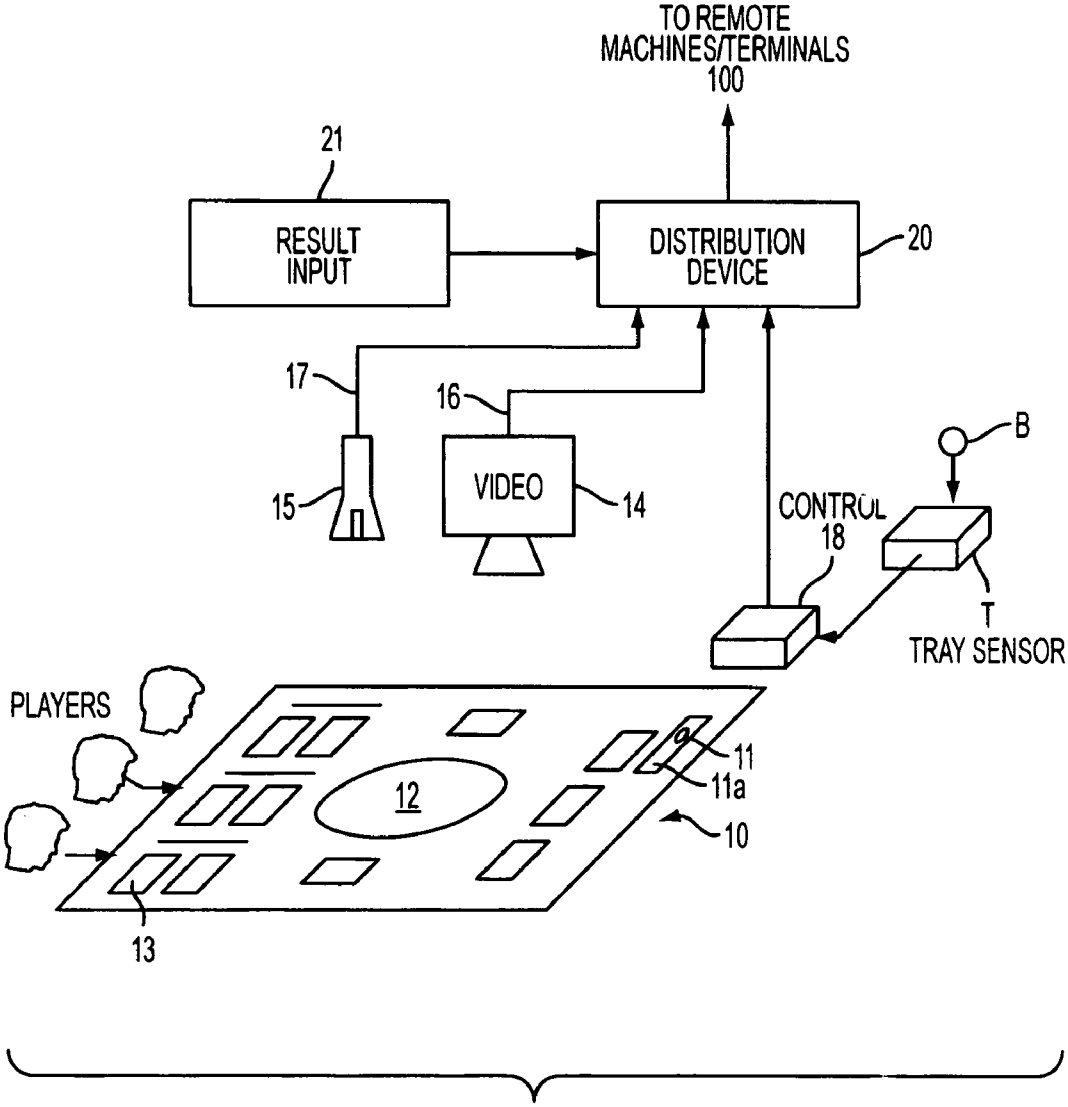

TO REMOTE
MACHINES/TERMINALS
100
21
RESULT
INPUT
DISTRIBUTION
DEVICE
20
17
16
15
VIDEO
14
B
CONTROL
18
T
TRAY SENSOR
PLAYERS
11
11a
12
10
13

FIG. 2

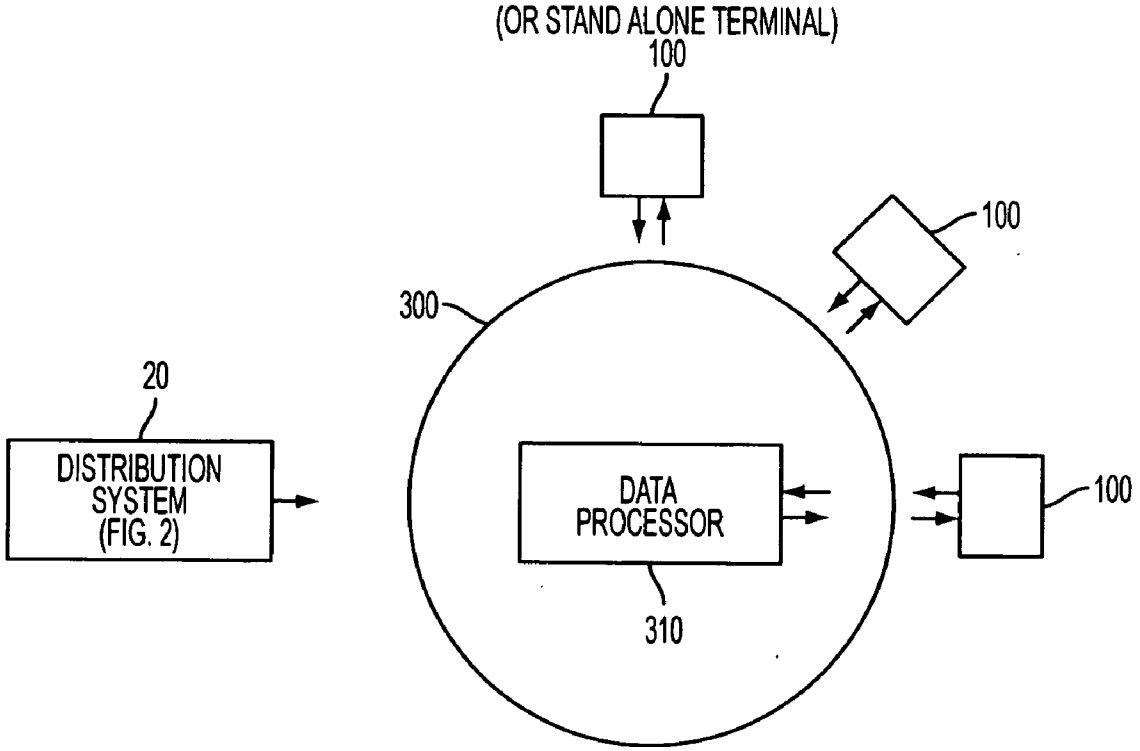

(OR STAND ALONE TERMINAL)
100
100
300
20
DISTRIBUTION SYSTEM (FIG. 2)
DATA PROCESSOR
310
100

FIG. 3

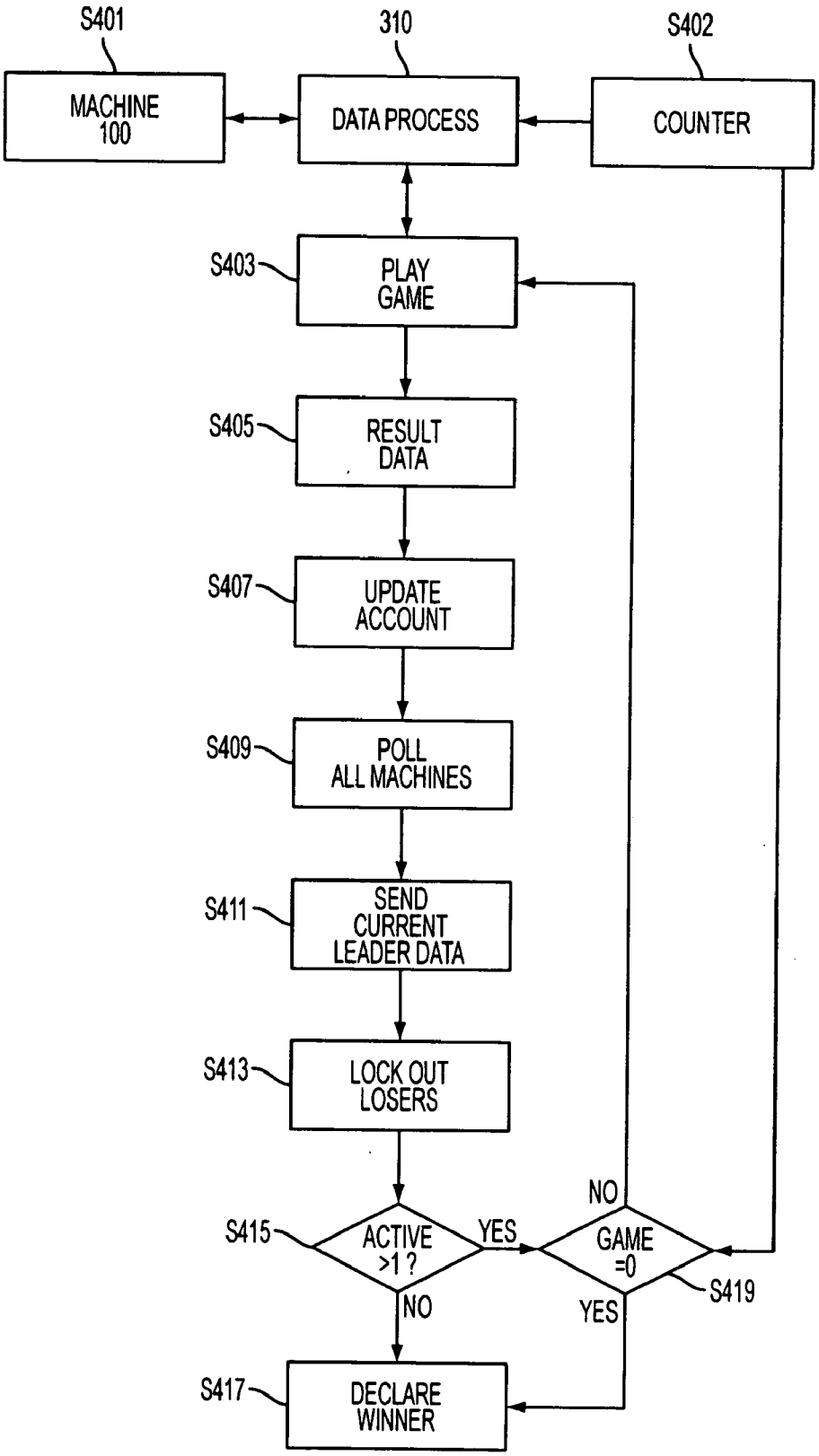

S401
MACHINE 100
310
DATA PROCESS
S402
COUNTER
S403
PLAY GAME
S405
RESULT DATA
S407
UPDATE ACCOUNT
S409
POLL ALL MACHINES
S411
SEND CURRENT LEADER DATA
S413
LOCK OUT LOSERS
S415
ACTIVE >1 ?
YES
NO
GAME =0
NO
YES
S419
S417
DECLARE WINNER

FIG. 4

MULTI-USE GAMING MACHINE

BACKGROUND OF THE INVENTION

[0001] Video gaming machines, such as slot machines, poker, wheel of fortune and other types, have replaced the well-known mechanical type machines on the floors of most casinos. More and more people are playing video gaming machines because they are easy to learn, require little or no skill and provide relatively large returns. While such machines are usually profitable for the casino owner, they present some limitations. First of all, the number of such machines that can be used in a casino is limited by one or both of space and/or regulatory considerations. In the latter case, the State in which the casino is located limits the number of machines that can be located in any one area or in the entire casino premises.

[0002] Such video gaming machines are basically dedicated devices in that they permit playing only of a programmed, or native, game. In the case of a video slot machine, this usually is a number of video wheels of numbers or symbols, operated based on a random number generator, that are displayed on a video screen. Other types of video gaming machines have the desired display and the components to play the game. It would be desirable to enable such gaming machines to play other types of games so that play would not be limited to only the native game. This would enhance the casino revenue stream.

BRIEF DESCRIPTION OF THE INVENTION

[0003] The present invention expands the versatility of such video gaming machines by making them useful for playing games on a live and interactive basis with games, such as roulette, poker, baccarat and craps, being played at the casino. In accordance with the invention, the conventional video gaming machine is modified or new machines manufactured so as to serve a second purpose, that of a remote terminal for viewing and interactively placing wagers on a live game played at a casino or some other location.

[0004] The multi-use gaming machine of the invention has the conventional apparatus that permits it to operate to play the native video game in the normal fashion. The machine is also provided with the capability of certain its components being switched so as, for example, receive and display video and play audio of a live table or other type of game played at a casino or similar location. The machine can either be on the casino premises or at a remote location. To be capable of being switched over from its normal native game operating mode to one of interactive play with a live casino type game, the video gaming machine is provided with a touch screen to serve as a grid for placing wagers. The machine when operating in the interactive mode permits wagering which can utilize some or all of the principles of the wagering system and method disclosed in U.S. Pat. No. 6,575,834, which is assigned to the assignee of this application and whose disclosure is incorporated in its entirety herein by reference.

[0005] The modified video gaming machine has a microprocessor that is programmed to perform various computation functions. It also can store data such as a table of odds corresponding to the casino type game to be played at the machine. This can be the same microprocessor used to operate the machine native game that is suitably programmed or a separate microprocessor. A communication link is provided between the casino game and the machine and the machine receives video of the live table action and displays this using the video display provided for the machine's native game.

[0006] The machine also preferably receives a signal from the table game which opens a time period during which a wager can be placed and a signal which closes the betting period. The player at the machine watches actual bets being placed at the table by the live participants and watches the game being played. Upon the proper time of a game result being generated at the table game, such as the ball in a roulette game dropping into the number pocket, the game result is transmitted to the remote machine. If the game result is a win, the machine microprocessor will compute the winning amount. If the game is odds related the computation is based on a stored odds table.

[0007] The microprocessor operates such that winning amounts are credited to the player's account and losing wagers are deducted and an account balance for the machine is kept on a running basis. In the case of a multi-stage game, such as poker or blackjack, a result is transmitted at each outcome time at which a wager can be placed. Additional wagers made during game play are deducted from the player's account at the machine and the player's account credited with winning and losing amounts at the close of the game.

[0008] The multi-use machine of the invention can be used on a stand alone basis. It also can be used in tournament type play in which a plurality of players each have a machine at which wagers are placed as all of the tournament players watch the live games. For tournament play, the machines participating in the tournament are in communication with a data processing unit that serves as a manager by determining the balances of the accounts of all of the tournament players, locking out play of any player whose account has a zero balance and declaring the winning player when only one of the account balances is positive and/or at the end of a series of a predetermined number of games. In a preferred embodiment of tournament play, the data processor provides all of the machines in the tournament with information of the amount that is currently in the lead so as to give players information to develop a betting strategy.

BRIEF DESCRIPTION OF THE DRAWINGS

[0009] Other objects and advantages of the present invention will become more apparent upon reference to the following specification and annexed drawings in which:

[0010] FIG. **1** is a front plan view of the multi-use video gaming machine of the invention;

[0011] FIG. **2** is a schematic diagram of game play apparatus at the casino;

[0012] FIG. **3** is a schematic diagram of the arrangement of a plurality of machines for tournament play; and

[0013] FIG. **4** is a flow chart illustrating the tournament play.

DETAILED DESCRIPTION OF THE INVENTION

[0014] FIG. **1** shows an embodiment of the multi-use gaming machine **100** of the invention. There is a cabinet or

housing **102** that is either of the stand-alone or table mounted type. The machine is illustratively one that has a native game of video slot machine playing. A mechanical lever arm **106** is mounted to the outside of the housing for actuation by the player to play a game. A video display screen **104** is mounted in the housing that displays the native. In the video slot machine example being described, this would be a display of three or more video reels. Other types of video gaming machines would have the appropriate displays and necessary electronic components, for example, black jack, poker, wheel of fortune, Texas Tea, or any other conventional game played at a casino. FIG. **1** shows the display **104** with the machine in interactive play mode, which is described below.

[**0015**] The housing **102** contains the necessary conventional electronics for playing the native game and operating the video display **104** therefore. This includes, in the case of a video slot machine, a microprocessor and random number generator (not shown) for generating the results of a play on the display screen **104** and for controlling slot machine play and payoff. Machines having other types of native games would contain the necessary compatible apparatus, usually including a suitably programmed microprocessor.

[**0016**] Also shown is a slot **124** for a coin mechanism by which the player deposits coins and a bill (currency) acceptor **122**, which also can accept bar coded vouchers having monetary value. The player deposits coins, currency or vouchers sequentially and plays a game after each deposit either by operating the lever **106** or using electronic access to play a new game by pressing a button **128**. There can be other buttons, such as to signal an attendant and for other standard functions. The machine also can be configured to accept a bill or voucher that establishes a balance in the machine against with the player draws as he plays.

[**0017**] The machine has an output tray **126** which gives the player the payoff when the play is a win. The machine also can be provided with the capability to track awards such as the player making a certain number of plays or betting or winning a certain amount. Many machines have a separate reader (not shown here) to accept a card issued by the casino that is inserted into the reader to keep track of game play. The machine also can issue coupons, such as by a printer, for complimentary awards based on game play at the machine. All of the above is well known and conventional.

[**0018**] Added to the conventional machine so far described is a communication link and interface **39** to the casino game play, as described below with respect to FIG. **2**. There also is a touch screen **130** that will enable the player to place wagers on the live game that is being played interactively. The touch screen has a betting grid section **130***a* that corresponds to the table betting grid of the live casino game. For example, if the game is roulette, the touch screen grid **130***a* corresponds to the roulette table. It is preferred that the touch screen be replaceable to accommodate a variety of casino type games, such as poker, baccarat, wheel of fortune, etc. The touch screen also has a key pad section **130***b* for numerical entry of an amount of a wager as well as Enter and erase touch pad keys **130***c* and **130***d*. Operation of the touch screen for interactive game play is described below. Keys of the touch screen **130** also can be configured to be used for various aspects of normal slot machine play, such as activation of play of a game, in place of the standard push buttons. A conventional common grid type touch screen combined with or having an integrated programmable and electronically controllable video overlay for the different game betting grids and other features and functions can be used and is preferred.

[**0019**] The machine **100** also has a switch **142** by which the player selects use of the machine either for standard video slot machine play or for live interactive play. The machine preferably also has a card reader **146** of the magnetic or optical type, or a combination of both, into which the player inserts and removes a debit or credit card or a voucher to add funds to his account and to make other account transactions. The card reader **146** preferably also can accept a player unique identification card if this feature is to be used.

[**0020**] The machine **100** can be used at any location on or off the casino premises. Suitable communication between the casino and the machine is provided by any conventional communication medium such as hard wired cable, DSL telephone line, wireless or satellite. The communication medium has the necessary bandwidth to carry the video, including digital high definition televison (HDTV), the betting status signals, game result data and audio if this is used. The machine input interface **39** splits video and audio information and one or more betting status signals received from the casino into two streams for use as described below.

[**0021**] FIG. **2** shows the setup at the location, such as a casino game floor, with which a machine **100** is to communicate when in the interactive play mode. There is illustratively shown a conventional roulette table **10** that is in common use at a casino. The table also could be another game, such as poker, blackjack, baccarat or craps. Here, for purposes of illustration, the roulette table **10** has the usual wheel **12** that is spun by a croupier and into which a ball is dropped at the beginning of the game. A betting grid **13** is on the table, the grid containing the usual format of squares or rectangles with a number in each and other bet areas such as odd/even numbers, and red/black. A number of players stand or sit around the table **10**. A player makes one or more bets by placing one or more chips of a given denomination on a number, intersection of corners, on red/black, combinations, etc. All of this is conventional.

[**0022**] Shown located above the table is a video input **14**, which can be one or more cameras preferably of the full color type. The cameras can be hidden, as are many cameras in a casino used for surveillance purposes, or can be of the stand alone visible type if, for example, the presence of the remote play feature is to be advertised. The field of view of each camera can be set to be limited to any part of the table and participants and/or can be remotely controlled by an operator. It is preferred that the cameras do not show the chips of the players at the table since this might influence the wagering of the remote players. The output cable **16** of the video section is shown. A microphone **15** having an output cable **17** are shown to pick up sounds around the table **10**.

[**0023**] Also associated with the table **10** is a control box **18**. This is to be used to indicate specific status points of a game during its play, such as start and the close of betting for a game or a wager point in a card game. The control box can be actuated in a suitable manner such as manually or voice actuated by the croupier or card dealer. It also can be actuated from a remote location such as by an operator who

monitors play at a table. In a preferred embodiment the control box **18** can be associated with physical devices such as, for example in the case of roulette game, a box or tray sensor T in which the game ball B is placed and which has a sensor such as micro switch, optical device, or other type of sensor. In use, for example, placing the ball in the box **18** triggers a signal that indicates the start of betting for a new game and removing the ball from the box to place it in the wheel triggers a signal that the betting for the game is terminated.

[**0024**] There also is a result input device **21** that supplies result data of the game, such as the winning number and color in a roulette game or card play data in a card game, this data preferably provided in digital format. The game result data is input into the distribution device **20** by a suitable input device **21** This can be any one or more of a croupier or dealer actuated voice recognition system, keyed into a keypad at the table or from a remote location. In another alternative, a camera is focused on the roulette or other type of spinning wheel that converts the ball or wheel pointer winning number into digital format such as by optical character type recognition. Card play data at various play points of the card game also can be recognized by a camera and converted to digital format.

[**0025**] The video and audio output cables **16** and **17** and the outputs of the control device **18** and result input device **21** are connected at the location to the type of broadcast distribution facility device or system **20** that is to be used for the system. For example, if the interactive game play is to be used only with machines on the casino premises or nearby, then this would be the input to a closed circuit TV system. For machines at remote locations, if the video and other signal outputs are to be broadcast over the Internet, then there would be a suitable transmitter such as by "streaming video", or if to be by satellite or wireless then there would be communication such as by digital transmission including that suitable for HDTV. All of this is conventional.

[**0026**] Returning to FIG. **1**, the machine **100** includes the necessary devices for interacting with the play taking place at the casino as shown in FIG. **2**. The machine **100** communication input interface device **39** receives the video and data signals originating from the table **10** by way of the casino distribution device or system **20**. When the machine **100** is switched over for interactive play, the video display **104** displays the video of the pictures of the game, illustratively here the roulette table, broadcast from the camera **16**. The machine **100** already has or preferably is provided with an audio module that has a speaker to play the sounds picked up from the casino table microphone **15** and other audio information, as described below, when the machine is in the interactive play mode. The picture of the game being played at the table and the table sounds are features that add to more realism for the player who is playing the game remote from the casino table.

[**0027**] Machine **100** also includes a computer module **148** which has an internal microprocessor and a memory. The computer module **148** preferably is of the type that makes the terminal self-contained. Module **148** can be used for both play of the machine native game as well as interactive play or there can be a separate computer module for each, the latter being preferred. That is, module **148** microprocessor has an application program that can perform the necessary computation for winning and losing game wagers and for keeping a running account of the wins and losses of the player. If the interactive game has an odds based payoff, then an odds table of one or more games is stored in the microprocessor memory to be used in computing a winning amount.

[**0028**] Machine **100** has a communication interface **39** having an input/output connection **149**. The connection **149** and interface **39** achieve reception of the various signals from the distribution system **20** as described above and preferably also permits bidirectional communication for other purposes, an example of which is described below.

[**0029**] The touch type screen **130** has a grid **130***a* that corresponds to the grid at the betting grid at the casino table. For example, if the table game is roulette, the touch screen would be a corresponding grid. The touch screen also has a numeric keypad **130***b* with the usual 0-9 numbers, an Enter key **130***c* and a cancel key **130***d*. The touch screen grid **130***a* permits the selection of the type of bet, that is, straight number, combination of numbers, red/black and odd/even, by touching the appropriate spot or spots on the grid. When the player touches the desired one or more places on the touch screen this is converted using conventional technology into digital information for use by the computer microprocessor **148**. The player places the amount of the wager using the keypad **130***b* and confirms it by the enter key **130***c*. The amount of the wager permitted from a machine can be less than the limit amount set at the table. That is, remote players are nor restricted from playing in and can play along with high stakes games.

[**0030**] The machine video display **104** basically comprises several sections achieved by conventional video technology such as PIP (picture in a picture) or frame splitting, super-positioning or other conventional video technology. The display **104** has a section **104***a* that can display information such as the odds for various bets and bet combinations. The latter type of information is available from the microprocessor **148** and can be displayed continuously or only on demand. Video display **104** also has a section **104***b* that displays wagering data entered on the touch screen **130**. A third section **104***c* displays the account balance of the player.

[**0031**] The audio module of machine **100** also interacts with the computer module **148**. The audio module can be used to play information to help the player place his bets. For example, it can give messages of a new game starting, place your bet on grid number(s), place amount of bet, and betting closed. Instead of the audio messages, the messages can be displayed on any one of the sections of the video display **104** and there can be a combination of audio and visual messages.

[**0032**] In the operation of the machine **100** when switched to the interactive play mode, a player inserts money into bill acceptor **122** or inserts a credit or debit card or bar coded voucher corresponding to an amount of currency into the card reader **146**. The voucher can be of the type obtained from an authorized source that controls distribution, such as described in co-pending U.S. applications Ser. No. 10/941, 541 filed Sep. 15, 2004 and Ser. No. 960.147 filed Oct. 7, 2004, both of which are assigned to the assignee of the subject application. This opens the machine for play and the amount deposited is stored in the machine microprocessor

148 to establish an account and displayed on display section **104***c*. The player then goes to the touch screen **130** and selects a preferred wager, such as a number or numbers from the grid **130***a* and an amount from keypad **130***b*. The player touches the Enter key **130***c* and the selection data is entered into the microprocessor **148** memory. The player can make multiple wagers, such as different numbers on the roulette table grid **130**. Any part or all of a wager transaction can be erased or cancelled via the key **130***d* before the machine receives a close of betting signal from the casino table. If the game is of the sequence type, such as blackjack or poker, the player can place additional wagers at the appropriate betting points as the card game progresses.

[**0033**] To enhance playing, the base amount of a wager would correspond to a casino chip. For example, if a player opens an account for $100 and a preferred wager amount of $5, he would have the equivalent of twenty $5 chips if actually playing at the table. A stack or stacks of virtual electronic chips of the proper amount and values also can be displayed by the display **104** whose amounts and positions change as wagers are placed and the games are played.

[**0034**] The casino transmits the video and audio of the game play. It also transmits the betting status signals, these being the start and closing of the betting or intermediate betting points in a card game and the result data of the winning number or intermediate result data. This is received over machine communication connection **149** and by the machine communication interface device **39** and split into the appropriate streams with the audio and video going to the audio output and machine video display **104** and the betting status signals and game result data to the microprocessor **148**. The player is advised that a new game is to start and to place his bet. This message, either audio or visual, is triggered from the control box **18** associated with the casino table **10**.

[**0035**] The player views the progress of the actual table wagering and the play in process at the casino table on the display **104**. The player enters his bet via the touch screen **130**. That is, he selects whether it is a straight number, combination or other type of bet. The type of bet selected is displayed in display section **104***b*. The player next enters the number or grid intersection numbers if the bet is a combination. This is also displayed. The number, intersection, red/black or odd/even bet also is displayed. The player then enters on touch screen pad **130***b* the amount of the bet, which also is displayed. The amount of the bet also can be displayed by showing the stacking of chips of the selected amount at the proper location of grid **130**. The chips that are bet are removed from the player's stack of electronic chips.

[**0036**] The complete bet is displayed in display window **104***b*. If it is acceptable, the player touching the Enter key **130***c*. At this time the bet data is entered in the memory of the terminal computer module **148**. If the wager is not acceptable to the player, the bet is cancelled by touching the key **130***d*. Keys **130***c* and **130***d* can be a part of the main keypad **130***b*.

[**0037**] The player can place additional bets for the game, or part of a sequential game, until a signal from the control box **18** at the casino signals that the betting is closed for the game. In response to the close of betting signal, the computer **148** at the terminal **100** is locked out from accepting any more bets. During the time allotted for making bets the player at the terminal can watch the live action of the players at the table **10**.

[**0038**] The game is played at the casino table **10** and the result, that is, for roulette game the winning number of the pocket into which the ball dropped and its color, is sent from the casino distribution system **20** to the individual machines. The microprocessor computer **148** at a machine **100** uses the result information to compute whether there was a loss or a win. If a loss, the computer subtracts the amount of the bet from the player's account. If there was a win, the computer **148** computes the amount of the win. If the game has an odds based payout, this is based on the stored table of odds in accordance with the odds of the type of bet. That is, each of straight number and number combination have different odds and red/black and odd/even have the same odds but different from the number bets. The computer has a program that provides for this calculation. The calculated win amount is then credited to the player's account. The current account amount balance is displayed in the display section **114***c*.

[**0039**] FIG. **3** shows use of the machines **100** in a tournament play scenario. In such a situation, and based on a set of rules, a number of players make an entrance fee purchase, play a specified number of games on which they place wagers and compete against each other as to the outcome. The entrance fee can be deducted from an account amount existing on a machine or can be a separate amount placed in the account in the manner previously described. The machine microprocessor also can maintain a separate account section used only for tournament play. In tournament play the player having the highest money or point score, as the case may be, remaining in his account at the end of the specified number of games is the winner. Often times the tournament winner receives a certain portion of the total entry fees and even a bonus amount if the tournament is a sponsored event, that is, a third party makes a prize available.

[**0040**] In FIG. **3**, a number of machines **100** are shown which can be at the same or different locations. Each of the machines **100** can be used for play in a tournament and/or some of the machines can be spectators that view the tournament but do not participate in the game wagering. There can be as many of the machines as needed or desired. Each machine has a unique identification such as a number that is programmed into its microprocessor. All of the machines **100** can communicate with a central communication link **300**, which can be real or virtual or a combination of these two. This can be by any suitable interface, such as cable, telephone line, wireless, Internet or any other suitable medium.

[**0041**] Each machine active in the tournament receives the video, wager status signals and result data from the casino as described with respect to FIGS. **1-2**. This can be accomplished through the link **300** or direct connection between the casino distribution system **20** and each machine **100** such as by wireless, Internet based or any other conventional communication method, as previously described. There can be a combination of both direct communication between the casino and the machines and communication via the link **300**. That is, the communication link **300** can be an individual communication link for each machine **100** to the casino audio/video output distribution system **20** or the

casino can communicate only with a common link **300** and the terminals in turn are all connected to the link. In the case of direct communication between the casino distribution system **20** and each machine, the link **300** principally is used for tournament management by a data processor **310**. Here also the link can be real or virtual.

[**0042**] There is a central data processor **310**, which is a suitably programmed computer or microprocessor, that has two way communication with each of the machines **100**. This can be direct communication between the data processor **310** and each of the machines **100** or a common connection over the link **300**. The data processor **310** manages the play of the machines **100** participating in the tournament. Data processor **310** includes or is connected to a game counter in which is set, preferably from an external source, the number of games for a tournament and also of the number of games played in the tournament. The counter keeps count of and preferably provides data to each machine of the number of games played/remaining. This data is displayed on the machine video section **104** and/or used by the machine audio module to announce the game play numbers. As an alternative, the microprocessor of each of the machines is provided with a signal from processor **310** that sets a counter in the microprocessor with the number of games in the tournament and this counter is updated after each game is completed to keep count of the tournament games played/remaining. Game counters can be provided at both the data processor **310** and at each machine. The game count preferably is made available at the casino and displayed for viewing.

[**0043**] Data processor **310** also obtains the running balances, which can be a money amount or point score, from of all of the machines entered in the tournament after each game of the tournament is played. The processor has a storage section in which all of the account balances are maintained, similar to a ledger. The data processor **310** is programmed to perform all necessary functions and computations such as to determine the winner of a tournament. This is done, as the case may be, based on determining when only one machine in the tournament has a running account with a positive balance or point score prior to the completion of the predetermined number of tournament games or the machine having the highest balance or point score after the predetermined number of games has been completed.

[**0044**] After each game the data processor **310** preferably also transmits to all of the machines in the tournament the highest account balance or point score among the accounts of all of the machines. This can be displayed on the video display of each machine.

[**0045**] For tournament play with only remote machines, there are no players at the casino table or people shown in the video of the table are only spectators. Players at the casino table **10** also can participate in the tournament either in a local group of only the players at the table or included with all of the players at the remote machines **100**. In the local group case, each player at the table starts with a given amount of chips and his account balance is shown by the chips remaining after each game is completed. Here, the tournament of the local group is separate from that of the remote machines. In the latter case, the balance of each player is determined after each game and provided to the data processor This can be accomplished manually. However, a suitable device for automatically accomplishing this is shown in U.S. Pat. No. 5,765,875 in which the number in each of stacks of different denomination chips of a player is counted. From this count the balance of a player can be computed and provided to the data processor **310** in digital format. Therefore, the accounts of players at the table will be considered in the determination of the tournament winners. The description that follows includes the case of players at the table participating in the tournament with the remote players.

[**0046**] If desired, there can be spectators to the tournament play via machines **100**. The players at such spectator machines may decide only to watch a tournament and not participate. In this case, such spectator machines would view the game play. To increase interest, the spectator machines are preferably provided with the data of the highest current winning account after each game and the winning tournament amount or point score. However, such spectator machines would not be able to place wagers once the tournament starts.

[**0047**] FIG. **4** is a flow chart of tournament play. In S**401** a machine enters the tournament. This is accomplished by the player at the machine signing on to the tournament and establishing communication with the data processor **310** and the casino distribution system **20**. The player at a machine pays the tournament entry fee, this being deducted from the machine account or a new amount deposited, as described above. The unique identity of each machine that enters is set into the processor **310**. Each machine **100** entering the tournament follows this procedure. A player at the table pays the fee and enters in the same manner.

[**0048**] The data processor **310** confirms the entry with the machine. In a preferred embodiment, the processor also sets up an account for each machine and table player and credits such account with a starting balance of an agreed starting amount of money or predetermined number of points. The processor also can send the starting account balance to each machine, preferably by communicating with the machine and writing this into the machine's microprocessor memory. Each tournament player pays the same entry fee and receives the same number of money or points credited to his account. Each machine **100** that is to participate in the tournament signs in the same way. The data processor **310** can close the entry based on any given criteria such as time or number of players that have entered.

[**0049**] In S**402** a counter is programmed with the number of game plays that is to comprise the tournament. This counter can be at the data processor **310** and the game count information provided to each machine entered in the tournament. Alternatively, each machine can have its own counter.

[**0050**] In S**403** a player at a machine interactively plays a game in the manner described with respect to FIGS. **1-2** and in S**405** receives the winning result data.

[**0051**] In S**407** the machine account is updated by its microprocessor based on the winning information received from the casino. That is, if the game result is a loss, the amount of funds or points wagered is deducted from the account at the machine. If the result is a win, then the winning amount of money or points is credited. If the game is odds based, the winning amount credit is calculated based

on the odds table stored in the machine's microprocessor and this amount of money or points is credited to the account. If the game being played does not have a winning payoff based on odds, then the machine microprocessor need not have an odds table or if it has one it is not used. The amount available to wager at each terminal is displayed and is available to wager in the next succeeding game of the tournament.

[0052] In S409 the data processor **310** polls all of the machines **100** active in the tournament after the end of each game or at an appropriate wagering point in a sequential type game, for its account balance data. Alternatively, each machine is programmed to send this data back to the data processor **310**. The data processor **310** keeps a running account of the running balances of the accounts of all the tournament active machines including the table players.

[0053] After completion of a game, such as after the polling by processor **310**, or upon the data processor receiving the account balance data from all active machines, the counter of S402 decrements the established number of games in the tournament by one. If the game count is locally kept at the machine, then its counter is decremented upon its updated account balance data being polled or transmitted to the data processor **310**.

[0054] In S411 the processor **310** sends data to all of the active terminals of the tournament current leader, that is, the current highest outstanding winning money amount or point score. This will guide the tournament players in making wagers in subsequent games. That is, a player will be kept apprised of what he has to bet against in order to win the tournament. This is basically equivalent to having players at a table viewing the number and amount of chips available to each player. The machine microprocessor **148** is programmed so that a wager greater than the running balance of funds or points cannot be placed. This step is optional but is desirable. As previously described, the highest score data can be provided to spectator machines and also can be displayed at the casino.

[0055] In S413, with the tournament play still in progress, any player that has played the allotted amount of money or points is locked out from placing any further wagers. This is automatically done by the machine microprocessor **148** when the running account balance amount of a machine reaches zero. The data of the account balances of the machines kept at the processor **310** also will show this and the processor will declare such account to be inactive. Players that have a positive data processor ledger balance remain active in the tournament play.

[0056] In S415 the data processor determines from the stored account balances if there is more than one active player remaining. If there is a YES determination, then the play continues and steps S403 through S413 are repeated. After each game, the account ledger at the data processor is updated, the most recent and current highest winning amount communicated to all of the machines, the game play number status decremented and any machine that has a zero account balance locked out from placing further wagers. If the determination in S415 is NO and there is only one player left, then that player is declared to be the winner in S417.

[0057] S419 determines from the counter S402 if the number of tournament games has been completed, that is the counter S402 is zero. If there is still more than one player remaining active, the data processor **310** determines the highest account balance or point score from its stored account of balances and declares the winner in S417. The data processor **310** declares the tournament winner by notifying the winning machine and preferably all of the other machines involved in the tournament and also gives the winning amount or point score. The information also can be transmitted or made available to the spectator machines and/or an outside agency, such as the tournament sponsor.

[0058] Tournament play at the remote machines can be used with a number of games that are played at the casino, such as roulette, craps, poker, etc. The machine touch screen **130** would be changed physically or electronically to have the betting grid corresponding to the game being played. The microprocessors at each machine would have an odds table as needed for each of the games.

[0059] The tournament play described with respect to FIGS. **3-4** can be accomplished using dedicated terminals or machines other than the dual purpose machine **100** of FIG. **1**. This is indicated in FIG. **3** by the designation of the item **100** being either a terminal or machine. Interactive tournament play also can be accomplished using the set top box configuration described in the aforementioned U.S. Pat. No. 6,575,834 in which a television set provides a video display and a set top box the computer or microprocessor based wagering and account functions, this combination forming a terminal. The term machines is intended to include all of the foregoing insofar as tournament play is concerned.

[0060] An alternative embodiment of tournament play is for the data processor **310** to maintain a separate account for each machine entered in the tournament. The players view the game play at the casino as previously described. Wagers made by a player at a machine are transmitted to the data processor and kept in the player's account. The data processor would compute the wins and losses after each game of the tournament, update each player's account and preferably transmit the balance data back to each machine. This process could be duplicated at each machine if desired. The balance of each account is available at the data processor so that the highest account balance can be determined after each game, a player with a zero balance locked out from further play and declaring the tournament winner. In this embodiment, only the data processor really needs to receive winning result data from the casino but it can be provided to each machine.

[0061] Specific features of the invention are shown in one or more of the drawings for convenience only, as each feature may be combined with other features in accordance with the invention. Alternative embodiments will be recognized by those skilled in the art and are intended to be included within the scope of the claims. Accordingly, the above description should be construed as illustrating and not limiting the scope of the invention. All such obvious changes and modifications are within the patented scope of the appended claims.

We claim:

1. A multi-use gaming machine for play of a game native to the machine and interactive play of a game taking place at a location remote from said machine, comprising:

a video display for displaying the play and results of the native game played by a player at the machine;

means for switching said video display to display the progress of a game being played at a location remote from said machine; and

means for wagering on the game being remotely played.

2. The multi-use gaming machine as claimed in claim 1 wherein said remote location comprises:

a camera to view the game action and means at the location for producing game result data; and

distribution means for broadcasting from the location to the machine the output of the camera view, said game result data of a game played at the location;

and said machine further comprises:

(a) a receiver for receiving the output broadcast from said distribution mean of said location of said camera view which is displayed on said machine video display and said game result data; and

(b) touch screen means for displaying an electronic representation of the game being played at the remote location and for placing wagers on the game being played.

3. The multi-use gaming machine as claimed in claim 2 wherein said machine further comprises:

(c) computer means responsive to a wager made from said touch screen and for managing the account of the player in response to the received game result data for computing losing and winning amounts.

4. The multi-use gaming machine as claimed in claim 3 wherein said machine computer means also updates the account of the player at the machine based on computed losses and winning amounts and maintains a current account balance for the player at the machine.

5. The multi-use gaming machine as claimed in claim 3 wherein said machine computer means includes a memory for storing data of a table of betting odds and computes a winning amount based on the amount of the wager placed on the game being played and betting odds data stored.

6. The multi-use gaming machine as claimed in claim 1 wherein said machine further comprises a means for establishing a betting account for the player at the machine without communication from the machine to the remote location.

7. The multi-use gaming machine as claimed in claim 6 wherein said means for establishing a betting account includes one of a currency acceptor and a compatible reader means for any one of a credit card, debit card or voucher.

8. The multi-use gaming machine as claimed in claim 3 and further comprising:

means at the location for producing wagering status signals representing the close of wagering on a game and the start of playing of a new game which are broadcast to said machine and received by said receiver of said machine, the received wagering status signals used by said machine computer means to control said means for wagering.

9. The multi-use gaming machine as claimed in claim 3 wherein said distribution means for broadcasting from the location to a machine includes one of cable, wired communication, wireless, satellite and the Internet.

10. The multi-use gaming machine as claimed in claim 3 wherein there are a plurality of said machines, and further comprising:

data processor means; and

a communication link for providing communication between said plurality of machines and said data processor means by which after completion of a game the amount in the player's account of each of said machines is obtained and stored by said data processor means.

11. The multi-use gaming machine as claimed in claim 10 further comprising:

counter means for setting a predetermined number of games for tournament play between said plurality of machines; wherein

said data processor means further comprises means for determining from said ledger the machine having the highest account balance after each game and for determining the tournament winner based on only one machine having a running account with a positive balance prior to the completion of said predetermined number of games or the machine having the highest balance after said predetermined number of games has been completed.

12. The multi-use gaming machine as claimed in claim 10 wherein said data processor means includes means to determine the highest account balance among the account balances of all of said plurality of machines and communicates to all of said plurality of machines the highest account balance for display on the said machine video display of a said machine.

13. The multi-use gaming machine as claimed in claim 12 further comprising:

counter means for setting a predetermined number of games for tournament play between said plurality of machines; wherein

said data processor means further comprises means for determining from said ledger the machine having the highest account balance after each game and for determining the tournament winner based on only one machine having a running account with a positive balance prior to the completion of said predetermined number of games or the machine having the highest balance after said predetermined number of games has been completed.

14. A system for tournament play between a plurality of machines located remotely from the place at which the game is being played, wherein said remote location comprises:

a camera to view the game action;

means for producing game result data;

distribution means for broadcasting from the location to said plurality of machines the output of the camera view and said game result data;

and each said machine comprises:

(a) receiver means for receiving the output broadcast from said distribution mean of said location of said camera view and said game result data;

(b) display means for displaying said location camera view; and

(c) means for wagering on the game being remotely played; and

(d) computer means;

said system further comprising:

a data processor means; and

a communication link connecting said plurality of machines to said data processor means; wherein at least one of said data processor means and said machine computer means is responsive to a wager made at a machine and in response to the received game result data compute losses and winning amounts and manages the account of the machine to maintain a running balance for the machine; wherein

said data processor means obtains the running account balance of each of said plurality of machines after completion of a game; and

said data processor means further comprising means for determining the machine having the highest account balance after each game.

15. The systems as claimed in claim 14 and further comprising:

counter means for setting a predetermined number of games for a tournament; and

wherein said means for determining is responsive to said counter means and declares the tournament winner based on only one machine having a running account with a positive balance prior to the completion of said predetermined number of games or the machine having the highest balance after said predetermined number of games has been completed.

16. The system as claimed in claim 14 wherein said data processor means for determining also communicates the highest account balance among the account balances of all of said plurality of machines to all of said plurality of machines for display on the said video display of a machine.

17. The system as claimed in claim 15 wherein said data processor means for determining also communicates the highest account balance among the account balances of all of said plurality of machines to all of said plurality of machines for display on the said video display of a machine.

18. The system as claimed in claim 14 wherein each said machine further comprises touch screen means for displaying an electronic representation of the game being played for placing a wager on the game being played.

19. The system as claimed in claim 14 and further comprising:

means at the location for producing wagering status signals representing the close of wagering on a game and the start of playing of a new game which are broadcast; and wherein at least one of to said machine computer means and said data processing means is responsive to received wagering status signals to control said means for wagering of a said machine.

20. The system as claimed in claim 14 wherein at least one of said plurality of machines further comprises:

means for playing a game native to the machine; and

means for switching said means for playing and said video display of said at least one machine between playing the native game and displaying its progress and results and playing a game at a location remote from said machine; and displaying its progress.

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