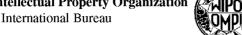
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[Continued on next page]

#### (54) Title: GAMING SYSTEM HAVING PROGRESSIVE JACKPOTS FLEXIBLY LINKED WITH COMMON PROGRESSIVE **POOL**

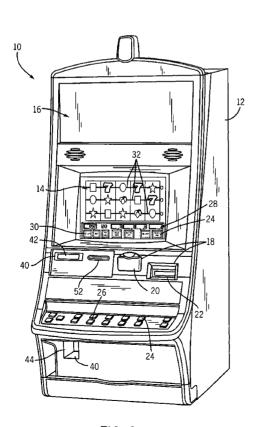


FIG. 1a

(57) Abstract: A linked progressive wagering system, comprises a first progressive wagering subsystem comprising X jackpots, each of the X jackpots displayed on a first meter. The system further comprises a second progressive wagering subsystem having Y jackpots, each of the Y jackpots displayed on a second meter. The system further comprises at least one wager input device, a progressive pool, and at least one controller. The at least one controller is operative to (i) receive a signal from the at least one wager input device of receipt of a first wager on the first progressive wagering subsystem, (ii) generate an increment, the increment comprising a portion of the first wager, (iii) transfer the increment into the progressive pool, (iv) add a first increase equal to the increment to the X jackpots, and (v) add a second increase equal to the increment to the Y jackpots.



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# GAMING SYSTEM HAVING PROGRESSIVE JACKPOTS FLEXIBLY LINKED WITH COMMON PROGRESSIVE POOL

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### FIELD OF THE INVENTION

[0002] The present invention relates generally to gaming machines, and methods for playing wagering games, and more particularly, to a gaming system having progressive jackpots flexibly linked with at least one common progressive pool.

#### BACKGROUND OF THE INVENTION

[0003] Gaming machines, such as slot machines, video poker machines and the like, have been a cornerstone of the gaming industry for several years. Generally, the popularity of such machines with players is dependent on the likelihood (or perceived likelihood) of winning money at the machine and the intrinsic entertainment value of the machine relative to other available gaming options. Where the available gaming options include a number of competing machines and the expectation of winning at each machine is roughly the same (or believed to be the same), players are likely to be attracted to the most entertaining and exciting machines. Shrewd operators consequently strive to employ the most entertaining and exciting machines attract frequent play and hence increase profitability to the operator. Therefore, there is a continuing need for gaming machine manufacturers to continuously develop new games and improved gaming enhancements that will attract frequent play through enhanced entertainment value to the player.

[0004] One concept that has been successfully employed to enhance the entertainment value of a game is the concept of a "secondary" or "bonus" game that may be played in conjunction with a "basic" game. The bonus game may comprise any type of game, either similar to or completely different from the basic game, which

is entered upon the occurrence of a selected event or outcome in the basic game. Generally, bonus games provide a greater expectation of winning than the basic game and may also be accompanied with more attractive or unusual video displays and/or audio. Bonus games may additionally award players with "progressive jackpot" awards that are funded, at least in part, by a percentage of coin-in from the gaming machine or a plurality of participating gaming machines. Because the bonus game concept offers tremendous advantages in player appeal and excitement relative to other known games, and because such games are attractive to both players and operators, there is a continuing need to develop gaming systems with new types of bonus games to satisfy the demands of players and operators.

Traditionally, gaming machines employing progressive jackpots utilize [0005] discreet progressive jackpot systems for one or more groups of gaming machines. For example, a first group of gaming machines may be configured to contribute to a first progressive jackpot, while a second group of gaming machines may be configured to contribute to a second progressive jackpot. The two systems traditionally operate independently such that if the first progressive jackpot is triggered, one of the gaming machines in the first group receives the jackpot award and the first progressive jackpot is reset. The gaming machines in the second group, and the second progressive jackpot are unaffected. One problem that arises with such a configuration is that the independently operated progressive jackpot systems are not coordinated and therefore require longer periods of time to amass large jackpots to be awarded. This dilemma in turn causes lower frequency of jackpot triggering events, thereby diminishing from the excitement and enjoyment of the gaming system. Another problem arises is that even traditional progressive systems which offer multi-level progressive awards fail to adequately entertain and cause excitement amongst players, often only awarding the lowest level progressive award. The present invention is directed to solving these and other problems.

#### **SUMMARY OF THE INVENTION**

[0006] According to one aspect of the present invention, a linked progressive wagering system, comprises a first progressive wagering subsystem comprising X jackpots, each of the X jackpots displayed on a first meter. The system further comprises a second progressive wagering subsystem having Y jackpots, each of the

Y jackpots displayed on a second meter. The system further comprises at least one wager input device, a progressive pool, and at least one controller. The at least one controller is operative to (i) receive a signal from the at least one wager input device of receipt of a first wager on the first progressive wagering subsystem, (ii) generate an increment, the increment comprising a portion of the first wager, (iii) transfer the increment into the progressive pool, (iv) add a first increase equal to the increment to the X jackpots, and (v) add a second increase equal to the increment to the Y jackpots.

**[0007]** According to another aspect of the invention, a method of operating linked progressive wagering games comprises displaying a first progressive wagering game comprising X jackpots, each of the X jackpots displayed on a first meter. The method further comprises displaying a second progressive wagering game having Y jackpots, each of the Y jackpots displayed on a second meter. The method further comprises linking a progressive pool to the first and second progressive wagering games, receiving a first wager on the first progressive wagering game, and transferring an increment into the progressive pool, the increment comprising a portion of the first wager. The method further comprises adding the increment to the X jackpots and adding the increment to the Y jackpots.

[0008] According to yet another aspect of the invention, a method of resetting jackpots of linked progressive wagering games comprises receiving a signal of a jackpot triggering event in a first progressive wagering game and awarding a first award comprising a selected jackpot of the first progressive wagering game. The method further comprises resetting the selected jackpot to a first reset value and decrementing at least one jackpot of a second progressive wagering game by a decrement amount equal to the first award less the first reset value.

[0009] According to yet another aspect of the invention, a computer readable storage medium is encoded with instructions for directing a gaming system to perform the above methods.

[0010] Additional aspects of the invention will be apparent to those of ordinary skill in the art in view of the detailed description of various embodiments, which is made with reference to the drawings, a brief description of which is provided below.

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#### BRIEF DESCRIPTION OF THE DRAWINGS

[0011] FIG. 1a is a perspective view of a free standing gaming machine embodying the present invention;

[0012] FIG. 1b is a perspective view of a handheld gaming machine embodying the present invention;

[0013] FIG. 2 is a block diagram of a control system suitable for operating the gaming machines of FIGS. 1a and 1b;

[0014] FIG. 3 is a block diagram of a plurality of traditional independent progressive systems;

[0015] FIG. 4 is a block diagram of an embodiment of a progressive wagering system flexibly linked to a common progressive pool; and

[0016] FIG. 5 is a flow chart of an example of operation of the progressive wagering system of FIG. 4.

#### **DETAILED DESCRIPTION**

[0017] While this invention is susceptible of embodiment in many different forms, there is shown in the drawings and will herein be described in detail preferred embodiments of the invention with the understanding that the present disclosure is to be considered as an exemplification of the principles of the invention and is not intended to limit the broad aspect of the invention to the embodiments illustrated.

[0018] Referring to FIG. 1a, a gaming machine 10 is used in gaming establishments such as casinos. With regard to the present invention, the gaming machine 10 may be any type of gaming machine and may have varying structures and methods of operation. For example, the gaming machine 10 may be an electromechanical gaming machine configured to play mechanical slots, or it may be an electronic gaming machine configured to play a video casino game, such as blackjack, slots, keno, poker, blackjack, roulette, etc.

[0019] The gaming machine 10 comprises a housing 12 and includes input devices, including a value input device 18 and a player input device 24. For output the gaming machine 10 includes a primary display 14 for displaying information about the basic wagering game. The primary display 14 can also display information about a bonus wagering game and a progressive wagering game. The gaming machine 10 may also include a secondary display 16 for displaying game events,

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game outcomes, and/or signage information. While these typical components found in the gaming machine 10 are described below, it should be understood that numerous other elements may exist and may be used in any number of combinations to create various forms of a gaming machine 10.

[0020] The value input device 18 may be provided in many forms, individually or in combination, and is preferably located on the front of the housing 12. The value input device 18 receives currency and/or credits that are inserted by a player. The value input device 18 may include a coin acceptor 20 for receiving coin currency (see FIG. 1a). Alternatively, or in addition, the value input device 18 may include a bill acceptor 22 for receiving paper currency. Furthermore, the value input device 18 may include a ticket reader, or barcode scanner, for reading information stored on a credit ticket, a card, or other tangible portable credit storage device. The credit ticket or card may also authorize access to a central account, which can transfer money to the gaming machine 10.

[0021] The player input device 24 comprises a plurality of push buttons 26 on a button panel for operating the gaming machine 10. In addition, or alternatively, the player input device 24 may comprise a touch screen 28 mounted by adhesive, tape, or the like over the primary display 14 and/or secondary display 16. The touch screen 28 contains soft touch keys 30 denoted by graphics on the underlying primary display 14 and used to operate the gaming machine 10. The touch screen 28 provides players with an alternative method of input. A player enables a desired function either by touching the touch screen 28 at an appropriate touch key 30 or by pressing an appropriate push button 26 on the button panel. The touch keys 30 may be used to implement the same functions as push buttons 26. Alternatively, the push buttons 26 may provide inputs for one aspect of the operating the game, while the touch keys 30 may allow for input needed for another aspect of the game.

[0022] The various components of the gaming machine 10 may be connected directly to, or contained within, the housing 12, as seen in FIG. 1a, or may be located outboard of the housing 12 and connected to the housing 12 via a variety of different wired or wireless connection methods. Thus, the gaming machine 10 comprises these components whether housed in the housing 12, or outboard of the housing 12 and connected remotely.

[0023] The operation of the basic wagering game is displayed to the player on the primary display 14. The primary display 14 can also display the bonus game

associated with the basic wagering game. The primary display 14 may take the form of a cathode ray tube (CRT), a high resolution LCD, a plasma display, an LED, or any other type of display suitable for use in the gaming machine 10. As shown, the primary display 14 includes the touch screen 28 overlaying the entire display (or a portion thereof) to allow players to make game-related selections. Alternatively, the primary display 14 of the gaming machine 10 may include a number of mechanical reels to display the outcome in visual association with at least one payline 32. In the illustrated embodiment, the gaming machine 10 is an "upright" version in which the primary display 14 is oriented vertically relative to the player. Alternatively, the gaming machine may be a "slant-top" version in which the primary display 14 is slanted at about a thirty-degree angle toward the player of the gaming machine 10.

[0024] A player begins play of the basic wagering game by making a wager via the value input device 18 of the gaming machine 10. A player can select play by using the player input device 24, via the buttons 26 or the touch screen keys 30. The basic game consists of a plurality of symbols arranged in an array, and includes at least one payline 32 that indicates one or more outcomes of the basic game. Such outcomes are randomly selected in response to the wagering input by the player. At least one of the plurality of randomly-selected outcomes may be a start-bonus outcome, which can include any variations of symbols or symbol combinations triggering a bonus game.

[0025] In some embodiments, the gaming machine 10 may also include a player information reader 52 that allows for identification of a player by reading a card with information indicating his or her true identity. The player information reader 52 is shown in FIG. 1a as a card reader, but may take on many forms including a ticket reader, bar code scanner, and RFID transceiver or computer readable storage medium interface. Currently, identification is generally used by casinos for rewarding certain players with complimentary services or special offers. For example, a player may be enrolled in the gaming establishment's loyalty club and may be awarded certain complimentary services as that player collects points in his or her player-tracking account. The player inserts his or her card into the player information reader 52, which allows the casino's computers to register that player's wagering at the gaming machine 10. The gaming machine 10 may use the secondary display 16 or other dedicated player-tracking display for providing the player with information about his or her account or other player-specific information. Also, in some

embodiments, the information reader 52 may be used to restore game assets that the player achieved and saved during a previous game session.

Depicted in FIG. 1b is a handheld or mobile gaming machine 110. Like [0026] the free standing gaming machine 10, the handheld gaming machine 110 is preferably an electronic gaming machine configured to play a video casino game such as, but not limited to, blackjack, slots, keno, poker, blackjack, and roulette. The handheld gaming machine 110 comprises a housing or casing 112 and includes input devices, including a value input device 118 and a player input device 124. For output the handheld gaming machine 110 includes, but is not limited to, a primary display 114, a secondary display 116, one or more speakers 117, one or more player-accessible ports 119 (e.g., an audio output jack for headphones, a video headset jack, etc.), and other conventional I/O devices and ports, which may or may not be player-accessible. In the embodiment depicted in FIG. 1b, the handheld gaming machine 110 comprises a secondary display 116 that is rotatable relative to the primary display 114. The optional secondary display 116 may be fixed, movable, and/or detachable/attachable relative to the primary display 114. Either the primary display 114 and/or secondary display 116 may be configured to display any aspect of a non-wagering game, wagering game, secondary games, bonus games, progressive wagering games, group games, shared-experience games or events, game events, game outcomes, scrolling information, text messaging, emails, alerts or announcements, broadcast information, subscription information, and handheld gaming machine status.

[0027] The player-accessible value input device 118 may comprise, for example, a slot located on the front, side, or top of the casing 112 configured to receive credit from a stored-value card (e.g., casino card, smart card, debit card, credit card, etc.) inserted by a player. In another aspect, the player-accessible value input device 118 may comprise a sensor (e.g., an RF sensor) configured to sense a signal (e.g., an RF signal) output by a transmitter (e.g., an RF transmitter) carried by a player. The player-accessible value input device 118 may also or alternatively include a ticket reader, or barcode scanner, for reading information stored on a credit ticket, a card, or other tangible portable credit or funds storage device. The credit ticket or card may also authorize access to a central account, which can transfer money to the handheld gaming machine 110.

[0028] Still other player-accessible value input devices 118 may require the use of touch keys 130 on the touch-screen display (e.g., primary display 114 and/or secondary display 116) or player input devices 124. Upon entry of player identification information and, preferably, secondary authorization information (e.g., a password, PIN number, stored value card number, predefined key sequences, etc.), the player may be permitted to access a player's account. As one potential optional security feature, the handheld gaming machine 110 may be configured to permit a player to only access an account the player has specifically set up for the handheld gaming machine 110. Other conventional security features may also be utilized to, for example, prevent unauthorized access to a player's account, to minimize an impact of any unauthorized access to a player's account, or to prevent unauthorized access to any personal information or funds temporarily stored on the handheld gaming machine 110.

[0029] The player-accessible value input device 118 may itself comprise or utilize a biometric player information reader which permits the player to access available funds on a player's account, either alone or in combination with another of the aforementioned player-accessible value input devices 118. In an embodiment wherein the player-accessible value input device 118 comprises a biometric player information reader, transactions such as an input of value to the handheld device, a transfer of value from one player account or source to an account associated with the handheld gaming machine 110, or the execution of another transaction, for example, could all be authorized by a biometric reading, which could comprise a plurality of biometric readings, from the biometric device.

[0030] Alternatively, to enhance security, a transaction may be optionally enabled only by a two-step process in which a secondary source confirms the identity indicated by a primary source. For example, a player-accessible value input device 118 comprising a biometric player information reader may require a confirmatory entry from another biometric player information reader 152, or from another source, such as a credit card, debit card, player ID card, fob key, PIN number, password, hotel room key, etc. Thus, a transaction may be enabled by, for example, a combination of the personal identification input (e.g., biometric input) with a secret PIN number, or a combination of a biometric input with a fob input, or a combination of a fob input with a PIN number, or a combination of a credit card input with a biometric input. Essentially, any two independent sources of identity, one of which is

secure or personal to the player (*e.g.*, biometric readings, PIN number, password, *etc.*) could be utilized to provide enhanced security prior to the electronic transfer of any funds. In another aspect, the value input device 118 may be provided remotely from the handheld gaming machine 110.

The player input device 124 comprises a plurality of push buttons on a [0031] button panel for operating the handheld gaming machine 110. In addition, or alternatively, the player input device 124 may comprise a touch screen mounted to a primary display 114 and/or secondary display 116. In one aspect, the touch screen is matched to a display screen having one or more selectable touch keys 130 selectable by a user's touching of the associated area of the screen using a finger or a tool, such as a stylus pointer. A player enables a desired function either by touching the touch screen at an appropriate touch key 130 or by pressing an appropriate push button 126 on the button panel. The touch keys 130 may be used to implement the same functions as push buttons 126. Alternatively, the push buttons may provide inputs for one aspect of the operating the game, while the touch keys 130 may allow for input needed for another aspect of the game. The various components of the handheld gaming machine 110 may be connected directly to, or contained within, the casing 112, as seen in FIG. 1b, or may be located outboard of the casing 112 and connected to the casing 112 via a variety of hardwired (tethered) or wireless connection methods. Thus, the handheld gaming machine 110 may comprise a single unit or a plurality of interconnected parts (e.g., wireless connections) which may be arranged to suit a player's preferences.

[0032] The operation of the basic wagering game on the handheld gaming machine 110 is displayed to the player on the primary display 114. The primary display 114 can also display the bonus game associated with the basic wagering game. The primary display 114 preferably takes the form of a high resolution LCD, a plasma display, an LED, or any other type of display suitable for use in the handheld gaming machine 110. The size of the primary display 114 may vary from, for example, about a 2-3" display to a 15" or 17" display. In at least some aspects, the primary display 114 is a 7"-10" display. As the weight of and/or power requirements of such displays decreases with improvements in technology, it is envisaged that the size of the primary display may be increased. Optionally, coatings or removable films or sheets may be applied to the display to provide desired characteristics (e.g., anti-scratch, anti-glare, bacterially-resistant and anti-microbial films, etc.). In at least

some embodiments, the primary display 114 and/or secondary display 116 may have a 16:9 aspect ratio or other aspect ratio (e.g., 4:3). The primary display 114 and/or secondary display 116 may also each have different resolutions, different color schemes, and different aspect ratios.

[0033] As with the free standing gaming machine 10, a player begins play of the basic wagering game on the handheld gaming machine 110 by making a wager (e.g., via the value input device 18 or an assignment of credits stored on the handheld gaming machine via the touch screen keys 130, player input device 124, or buttons 126) on the handheld gaming machine 110. In at least some aspects, the basic game may comprise a plurality of symbols arranged in an array, and includes at least one payline 132 that indicates one or more outcomes of the basic game. Such outcomes are randomly selected in response to the wagering input by the player. At least one of the plurality of randomly selected outcomes may be a startbonus outcome, which can include any variations of symbols or symbol combinations triggering a bonus game.

[0034] In some embodiments, the player-accessible value input device 118 of the handheld gaming machine 110 may double as a player information reader 152 that allows for identification of a player by reading a card with information indicating the player's identity (e.g., reading a player's credit card, player ID card, smart card, etc.). The player information reader 152 may alternatively or also comprise a bar code scanner, RFID transceiver or computer readable storage medium interface. In one presently preferred aspect, the player information reader 152, shown by way of example in FIG. 1b, comprises a biometric sensing device.

[0035] Turning now to FIG. 2, the various components of the gaming machine 10 are controlled by a central processing unit (CPU) 34, also referred to herein as a controller or processor (such as a microcontroller or microprocessor). To provide gaming functions, the controller 34 executes one or more game programs stored in a computer readable storage medium, in the form of memory 36. The controller 34 performs the random selection (using a random number generator (RNG)) of an outcome from the plurality of possible outcomes of the wagering game. Alternatively, the random event may be determined at a remote controller. The remote controller may use either an RNG or pooling scheme for its central determination of a game outcome. It should be appreciated that the controller 34 may include one or more

microprocessors, including but not limited to a master processor, a slave processor, and a secondary or parallel processor.

[0036] The controller 34 is also coupled to the system memory 36 and a money/credit detector 38. The system memory 36 may comprise a volatile memory (e.g., a random-access memory (RAM)) and a non-volatile memory (e.g., an EEPROM). The system memory 36 may include multiple RAM and multiple program memories. The money/credit detector 38 signals the processor that money and/or credits have been input via the value input device 18. Preferably, these components are located within the housing 12 of the gaming machine 10. However, as explained above, these components may be located outboard of the housing 12 and connected to the remainder of the components of the gaming machine 10 via a variety of different wired or wireless connection methods.

[0037] As seen in FIG. 2, the controller 34 is also connected to, and controls, the primary display 14, the player input device 24, and a payoff mechanism 40. The payoff mechanism 40 is operable in response to instructions from the controller 34 to award a payoff to the player in response to certain winning outcomes that might occur in the basic game or the bonus game(s). The payoff may be provided in the form of points, bills, tickets, coupons, cards, etc. For example, in FIG. 1a, the payoff mechanism 40 includes both a ticket printer 42 and a coin outlet 44. However, any of a variety of payoff mechanisms 40 well known in the art may be implemented, including cards, coins, tickets, smartcards, cash, etc. The payoff amounts distributed by the payoff mechanism 40 are determined by one or more pay tables stored in the system memory 36.

[0038] Communications between the controller 34 and both the peripheral components of the gaming machine 10 and external systems 50 occur through input/output (I/O) circuits 46, 48. More specifically, the controller 34 controls and receives inputs from the peripheral components of the gaming machine 10 through the input/output circuits 46. Further, the controller 34 communicates with the external systems 50 via the I/O circuits 48 and a communication path (e.g., serial, parallel, IR, RC, 10bT, etc.). The external systems 50 may include a gaming network, other gaming machines, a gaming server, communications hardware, or a variety of other interfaced systems or components. Although the I/O circuits 46, 48 may be shown as a single block, it should be appreciated that each of the I/O circuits 46, 48 may include a number of different types of I/O circuits.

[0039] Controller 34, as used herein, comprises any combination of hardware, software, and/or firmware that may be disposed or resident inside and/or outside of the gaming machine 10 that may communicate with and/or control the transfer of data between the gaming machine 10 and a bus, another computer, processor, or device and/or a service and/or a network. The controller 34 may comprise one or more controllers or processors. In FIG. 2, the controller 34 in the gaming machine 10 is depicted as comprising a CPU, but the controller 34 may alternatively comprise a CPU in combination with other components, such as the I/O circuits 46, 48 and the system memory 36. The controller 34 may reside partially or entirely inside or outside of the machine 10. The control system for a handheld gaming machine 110 may be similar to the control system for the free standing gaming machine 10 except that the functionality of the respective on-board controllers may vary.

The gaming machines 10,110 may communicate with external systems 50 [0040] (in a wired or wireless manner) such that each machine operates as a "thin client," having relatively less functionality, a "thick client," having relatively more functionality, or through any range of functionality there between. As a generally "thin client." the gaming machine may operate primarily as a display device to display the results of gaming outcomes processed externally, for example, on a server as part of the external systems 50. In this "thin client" configuration, the server executes game code and determines game outcomes (e.g., with a random number generator), while the controller 34 on board the gaming machine processes display information to be displayed on the display(s) of the machine. In an alternative "thicker client" configuration, the server determines game outcomes, while the controller 34 on board the gaming machine executes game code and processes display information to be displayed on the display(s) of the machines. In yet another alternative "thick client" configuration, the controller 34 on board the gaming machine 110 executes game code, determines game outcomes, and processes display information to be displayed on the display(s) of the machine. Numerous alternative configurations are possible such that the aforementioned and other functions may be performed onboard or external to the gaming machine as may be necessary for particular applications. It should be understood that the gaming machines 10,110 may take on a wide variety of forms such as a free standing machine, a portable or handheld device primarily used for gaming, a mobile telecommunications device such as a mobile telephone or personal daily assistant (PDA), a counter top or bar top gaming machine, or other personal electronic device such as a portable television, MP3 player, entertainment device, etc.

[0041] Turning now to FIG. 3, a plurality of traditional progressive wagering systems 300a,b,c,d are diagrammed. Each of the progressive systems 300a-d plays a separate and distinct progressive wagering game 360a,b,c,d. Thus, the four systems 300a-d may have wagering games 360a-d that may differ in theme, appearance, gameplay, betting structure, and may include any variety of mechanical, electromechanical or video displayed elements. Each progressive wagering system 300a-d is connected with a plurality of gaming machines or gaming devices 310. The first system 300a includes three gaming machines 310a,b,c. The second system 300b includes three gaming machines 310d,e,f. The third system 300c includes three gaming machines 310g,h,i. The fourth system 300d also includes three gaming machines 310j,k,l.

[0042] As seen in FIG. 3, each of the gaming machines are connected to only one of the four systems 300a,b,c,d. In this way, the gaming machines 310a,b,c of the first system 300a are separate, not connected with, and not in communication with the gaming machines 310d-I of the other three systems 300b,c,d. The gaming machines 310 of each system 300a-d are connected to separate controllers 334a-d of the system 300a-d via a network. Each controller 334a-d controls the execution of the progressive wagering game 360a-d played on that system 300a-d. Wagers which are input into the first system 300a for play on one of the gaming machines 310a,b,c of the system 300a are used to fund the first progressive wagering game 360a of that system 300a. However, since the systems 300a-d do not communicate with one another, none of the wager inputs in one system 300 are used to fund the games 360 of another system 300. In this way, there is no commingling of wagers or coin in between systems 300a-d.

[0043] In FIG. 4, a linked progressive system 400 is shown. The linked system 400 comprises a plurality of linked progressive gaming subsystems 402a-d, a common progressive pool 470, and at least one controller 434. Each of the progressive gaming subsystems 402a-d comprises a plurality of gaming devices 410. For example, a first progressive gaming subsystem 402a includes three gaming devices 410a,b,c which may be any combination of freestanding gaming machines (such as the one in FIG. 1a), handheld gaming devices (such as the one in FIG. 1b) or other wagering game devices. As described herein with reference to

FIGS. 1a, 1b and 2, each gaming device 410 has an associated wager input device for funding play. Each progressive wagering subsystem 402a-d executes at least one progressive wagering game 460a-d, which may be any variety of wagering game having at least one progressively increasing jackpot. The progressive wagering games 460a-d may include selection games, slot reel games, board games, competitions, group games, interactive games, or any other wagering game in which one or more of the awards or prizes are progressive jackpots. In addition, each of the gaming devices 410 may execute one or more basic wagering games that may be independent of the progressive wagering game 460a-d of the subsystem 402a-d to which the gaming device 410 is connected.

[0044] Each of the progressive wagering subsystems 402a-d further includes at least one meter 404a-d for displaying progressive jackpot information for the subsystem 402a-d to players. The various meters 404a-d display jackpot levels and current jackpot values, and may display other information as well. The meters 404a-d may be dynamically updated to show incremental increases or decreases in jackpot values. The meters 404a-d may be freestanding meters, or may be incorporated into other displays, such as the display of one or more of the gaming devices 410 of a particular subsystem 402a-d, a community display which is used to display other information, such as the execution and gameplay of the associated progressive wagering game 460a-d, or integrated with any other display.

[0045] The gaming subsystems 402a-d are in communication with the progressive pool 470 and the controller 434 via one or more networks which may comprise wired or wireless connections, or both. The progressive wagering subsystems 402a-d and the progressive pool 470 are under control of the controller 434. The controller 434 may comprises a single controller in communication with the progressive pool 470, or may comprise a plurality of controllers in communication with various parts of the system 400, including the gaming devices 410, the meters 404, and the pool 470. The controller 434 operates the transfer of money between the gaming machines 410 and the progressive wagering subsystems 402a-d. As shown in FIG. 4, for all coin-in received by the system 400, the controller 434 removes the corresponding increment (in this embodiment, 5% as seen in FIG. 5), and deposits the increment generated into the progressive pool 470 for further disbursement. The controller 434 further updates the meters 402a-d of the various progressive wagering subsystems 402a-d to reflect the addition of the increment

generated. The controller 434 monitors the play of the progressive wagering games 460a-d, and when a jackpot triggering event occurs, the controller 434 operates to (i) award the triggered jackpot from the winning progressive subsystem 402a-d to the proper gaming device 410 in the system 400, (ii) pull the appropriate increment amount from the remaining non-winning progressive subsystems 402a-d, (iii) update the meters of the winning progressive subsystem 402a-d by resetting the triggered jackpot to its reset value, and (iv) updating the meters 404a-d of the non-winning subsystems 402a-d by deducting or decrementing the pulled increment amount. This operation of the system 400 under control of the controller 434 is detailed further herein with relation to FIG. 5.

[0046] As seen in FIG. 4, the various progressive wagering subsystems 402a-d have differing numbers of progressive jackpots available to be won. A first subsystem 402a has only a single progressive jackpot (level 1), which has a reset value of \$10,000. A second subsystem 402b has two levels of progressive jackpots, having reset values of \$500 and \$2,000. A third subsystem 402c has four levels of progressive jackpots having reset values of \$10, \$150, \$1,000 and \$5,000 respectively. A fourth subsystem 402d also has four levels of progressive jackpots having reset values of \$20, \$100, \$800 and \$2,000 respectively. Each of the gaming devices 410 within, or associated with, a particular progressive wagering subsystem 402a-d participates in the associated progressive wagering game 460a-d, and is eligible to win the associated progressive jackpots displayed on the meter 404a-d.

[0047] Thus, for example, a player at a gaming device 410j associated with the fourth progressive wagering subsystem 402d plays the fourth progressive wagering game 460d and is eligible to win any of the four jackpots displayed on the fourth meter 404d. However, in an embodiment, that player is not eligible to win any of the jackpots displayed on the other three meters 404a-c. Moreover, in an embodiment, the player can only play the progressive wagering game 460d associated with the progressive wagering subsystem 402d with which his gaming device 410j is associated, and is unable to play the progressive wagering games 460a-c of the other three subsystems 402a-c. In this way, the various progressive wagering subsystems 402a-d may appear to a player to be independent of one another in that they execute differing wagering games 460a-d, and the jackpots of each subsystem 402a-d are available only to players of gaming machines 410 associated with such

subsystem 402a-d. However, the progressive subsystems 402a-d are linked as described herein.

[0048] The various progressive subsystems 402a-d may be arranged in a variety of ways. For example, the first subsystem 402a may be a progressive wagering game 460a played on a community display which is mounted above a bank of gaming devices including the three devices 410a,b,c of the subsystem 402a. In another embodiment, the second subsystem 402b, for example, may be a progressive wagering game 460b where the meter 404b id displayed on the displays of the individual gaming devices 410d,e,f, which may be handheld devices networked together to form the subsystem 402b. In yet another embodiment, the third subsystem 402c may comprise a plurality of free standing gaming machines 410g,h,I each having a progressive jackpots displayed on a meter 404c comprising separate LED displays mounted on each device 410g,h,i even though the devices 410g,h,i are not physically located proximate one another. Thus, the physical embodiments of the described progressive subsystems 402a-d and the components thereof can take on many different forms.

Turning to FIG. 5, an example of the operation of the linked progressive [0049] system 400 from FIG. 4 is shown. In FIG. 5, the four Progressive Link Configurations (or four "links") correspond to the four progressive wagering subsystems 402a-d displaying the various progressive wagering games 460a-d from FIG. 4. Thus, the term "links" is used herein interchangeably or synonymously with "progressive wagering games" and is also meant to signify the four subsystems 402 from FIG. 4. At step 500, the linked progressive system 400 is shown at a reset or start up state. Each of the four link configurations includes meter values for the various levels of progressive jackpots on that link. At step 500, the meter values display reset values for the various jackpots. Thus, for Link 1, the level 1 reset value is \$10,000.00. For Link 2, the level 1 reset value is \$500 and the level 2 reset value is \$2,000. For Link 3, the level 1 reset value is \$10, the level 2 reset value is \$150, the level 3 reset value is \$1,000 and the level 4 reset value is \$5,000. For Link 4, the level 1 reset value is \$20, the level 2 reset value is \$100, the level 3 reset value is \$800 and the level 4 reset value is \$2,000.

[0050] Moreover, each link includes configuration data comprising specific information relating to the hit frequency, reset expected value (reset E.V.) and increment for each of the links, and the jackpots on such link. Thus, as seen in FIG.

5, for the level 1 jackpot, the only jackpot on link 1, the hit frequency is 0.00001, which means that particular jackpot will be awarded or triggered on average once every 100,000 plays of the wagering game. The reset EV for the same level 1 jackpot is 0.100. The reset EV is a function of the reset value and the hit frequency, and is given by the formula in Equation 1:

#### Equation 1

Reset EV = Reset Value x Hit Frequency =  $$10,000 \times 0.00001 = 0.100$ 

[0051] The increment is the percentage of coin-in received that is added to the meter value. Thus, in this embodiment, the increment has been designated as five percent (5%), meaning that five percent of all wagers received into the system are added to the meter values of the system. The increment may be received from primary wagers, secondary wagers, or any other monetary inputs into the system.

[0052] For Links 2, 3, and 4, the various hit frequencies, reset EVs and increments are shown in FIG. 5. Because these links are multi-level jackpot links, each level jackpot has its own hit frequency, reset EV and increment. However, the total reset EV for all of the jackpots on Link 2 is equal to 0.100. Similarly, the total reset EV for Links 3 and 4 is also 0.100. Moreover, each jackpot on Links 2, 3, and 4 has its own increment value. However, the total increment for Link 2 is five percent (5%). Similarly, the total increment for Links 3 and 4 is also five percent (5%). Thus, all four links, regardless of how many levels of jackpots are on the link, have the same total reset EV and the same total increment.

[0053] At step 502, the system 400 is shown after \$2,500 of coin in has been received into the system. The coin in can be received at any wager input device or any of the gaming devices connected to the system 400. The meters are incremented by an amount equal to the coin in received times the increment percentage, which in this instance is \$2,500 multiplied by five percent (5%) which is \$125 of increment to be added to the meters of the system. As seen in step 502, \$125 is added to the meters of each link. Since link 1 is a single level progressive jackpot, the entirety of the \$125 is added to the level 1 jackpot such that the meter reads \$10,125. For link 2, the \$125 is added in part to the level 1 jackpot and in part to the level 2 jackpot. Specifically, fifty dollars (\$50) is added to the level 1 jackpot

and seventy-five dollars (\$75) is added to the level 2 jackpot, such that the updated meter values reflect \$550 and \$2075, respectively. The increment amount of \$125 is divided between the two jackpot levels in proportion to the jackpot increment percentage relative to the total increment percentage for that link. For example, of the five percent (5%) increment for link 2, three percent (3%) goes to the level 2 jackpot and two percent (2%) goes to the level 1 jackpot. Thus, in relative proportion, for every dollar of increment received by link 2, sixty percent (3%/5%) is added to the level 2 jackpot, and forty percent (2%/5%) is added to the level 1 jackpot. Thus, in this instance, when \$125 of increment is received by link 2, \$75 goes to the level 2 jackpot and \$50 goes to the level 1 jackpot.

Similarly, link 3 is a multi-level jackpot progressive, which in this [0054] embodiment has four levels of jackpots. The increment percentages for levels 1 through 4 on link 3 are 1.8%, 1.2%, 1.0% and 1.0%, respectively. Like the other links, the increment amount of \$125 is also added to link 3, and distributed among the four levels of jackpots in proportion to their relative increment percentages as compared to the overall increment percentage of 5%. Thus, of the \$125 to be added to the link 3 meters, \$45 [\$125 x (1.8%/5%)] is added to the level 1 jackpot, \$30  $[$125 \times (1.2\%/5.0\%)]$  is added to the level 2 jackpot, \$25  $[$125 \times (1.0\%/5.0\%)]$  is added to the level 3 jackpot and \$25 [\$125 x (1.0%/5.0%)] is added to the level 4 jackpot. The meter reflects these added amounts in step 502 showing values of \$55, \$180, \$1,025, and \$5,025, respectively, for the four jackpot levels on link 3. In similar fashion, the four jackpot levels of link 4 are updated to reflect the addition of the \$125 increment. Of the \$125 added, \$45 [\$125 x (2.0%/5.0%)] is added to the level 1 jackpot, \$30 [\$125 x (1.2%/5.0%)] is added to the level 2 jackpot, \$25 [\$125 x (1.0%/5.0%)] is added to the level 3 jackpot, and \$20 [\$125 x (0.8%/5.0%)] is added to the level 4 jackpot. The meter reflects these added amounts in step 502 showing values of \$70, \$130, \$825, and \$2,020, respectively, for the four jackpot levels on link 4.

[0055] In step 504, a triggering event has caused the \$55 jackpot (the level 1 jackpot on link 3) to be awarded. Thus, the \$55 award is awarded to one of the players of the system as a result of the triggering event. Because the jackpot that was triggered has a reset value of \$10, and was triggered at \$55, the amount that must be removed is the difference between the trigger value and the reset value, which in this case is \$45. Therefore, \$45 is removed or "pulled" from each link as

seen in step 504. On link 1, since there is only one jackpot level, the entire \$45 is pulled from the level 1 meter, and the updated meter shows a value of \$10,080 for the level 1 jackpot. On link 2, the \$45 increment to be pulled is first pulled from the lowest level jackpot (level 1) if available, and then any remainder is pulled from consecutively higher level jackpots if necessary. This is done to ensure that none of the meters is permitted to be decremented below its reset value. In this instance, the entire \$45 can be pulled off of the level 1 jackpot without decrementing the level 1 meter below its reset value. Thus, the \$45 is removed from level 1, and the updated meter shows a value of \$505 for the level 1 jackpot. On link 3 (the jackpot winning link), the entire \$45 is pulled from the level 1 jackpot (the triggered jackpot) which causes the level 1 meter to be reset to its reset value of \$10. On link 4, the \$45 increment to be pulled is removed from the level 1 jackpot, and the updated meter shows a value of \$25 for the level 1 jackpot.

In step 506, an additional \$1,000 of coin in is received into the system. [0056] Again, the total increment is calculated by multiplying the coin in by the total increment percentage (5%). Thus, in this instance an additional \$50 of increment is received, and each link in the system is updated to reflect the additional increment received from the additional coin in. As seen in step 506, on link 1 the level 1 meter receives the entire \$50 and shows an updated amount of \$10,030. On link 2, the \$50 is divided between the two jackpot levels with the level 1 meter receiving \$20, the level 2 meter receiving \$30, and the updated meter showing \$525 and \$2,105 for the two levels, respectively. On link 3, the \$50 is divided among the four jackpot levels with the level 1 meter receiving \$18, the level 2 meter receiving \$12, the level 3 meter receiving \$10, the level 4 meter receiving \$10, and the updated meter showing \$28, \$192, \$1,035, and \$5,035 for the four levels, respectively. On link 4, the \$50 is divided among the four jackpot levels with the level 1 meter receiving \$20, the level 2 meter receiving \$12, the level 3 meter receiving \$10, the level 4 meter receiving \$8, and the updated meter showing \$45, \$142, \$835, and \$2,028 for the four levels, respectively.

[0057] Later, at step 508, the \$2,105 jackpot (level 2 on link 2) is awarded in response to another jackpot triggering event. Thus, the \$2,105 award is awarded to one of the players of the system as a result of the triggering event. Because the jackpot that was triggered has a reset value of \$2,000, and was triggered at \$2,105, the amount of the increment that must be pulled is the difference between the trigger

value and the reset value, which in this case is \$105. Therefore, \$105 is removed or pulled from each link as seen in step 508. On link 1, since there is only one jackpot level, the entire \$105 is pulled from the level 1 meter, and the updated meter shows a value of \$10,025 for the level 1 jackpot. On link 2 (the jackpot winning link), the entire \$105 is pulled from the level 2 jackpot (the triggered jackpot) which causes the level 2 meter to be reset to its reset value of \$2,000. The level 1 jackpot is not disturbed because all of the increment on link 2 is pulled from the level of the triggered jackpot.

On link 3, the \$105 increment to be pulled is first pulled from the lowest [0058] level jackpot (level 1) if available, and then any remainder is pulled from consecutively higher level jackpots if necessary. In this instance, the entire \$105 cannot be pulled off of the level 1 jackpot without decrementing the level 1 meter below its reset value. Thus, only \$18 of the \$105 is removed from level 1, causing the level 1 jackpot to be decremented to its reset value of \$10. This leaves \$87 to still be decremented from the other jackpot levels on link 3. Next, the level 2 meter is decremented down to its reset value. In this instance, only \$42 can be removed from the level 2 jackpot before it reaches its reset value or \$150. Thus, \$45 remains to be decremented. Next, the level 3 meter is decremented down to its reset value. In this instance, only \$35 can be removed from the level 3 jackpot before it reaches it reset value of \$1,000. This leaves a remainder of \$10 of the \$105 amount to be decremented from the level 4 meter. After the \$10 is removed from the level 4 jackpot, all of the \$105 increment to be pulled has been removed, and the meter shows the updated values of \$10, \$150, \$1000, and \$5,025, respectively, for the four jackpot levels on link 3. On link 4, the same process is used to pull first from the level 1 jackpot, then any remainder from levels 2, 3, and 4 successively until the entire \$105 is pulled. Thus, in step 508, after the \$105 is pulled from the four jackpot levels, the meter shows updated values of \$20, \$100, \$800 and \$2,025 for the four jackpot levels.

[0059] In step 510, another \$1,500 of coin in is received by the system. Five percent (5%) of this amount comprises the increment amount, which in this instance is \$75 to be added to the meters of all four links. As before, since link 1 only has one jackpot, the entirety of the \$75 is added to the level 1 jackpot and the updated meter reflects the new jackpot value of \$10,100. On link 2, the \$75 is divided between the two jackpot levels with the level 1 meter receiving \$30, the level 2 meter receiving

\$45, and the updated meter showing \$555 and \$2,045 for the two levels, respectively. On link 3, the \$75 is divided among the four jackpot levels with the level 1 meter receiving \$27, the level 2 meter receiving \$18, the level 3 meter receiving \$15, the level 4 meter receiving \$15, and the updated meter showing \$37, \$168, \$1,015, and \$5,040 for the four levels, respectively. On link 4, the \$75 is divided among the four jackpot levels with the level 1 meter receiving \$30, the level 2 meter receiving \$18, the level 3 meter receiving \$15, the level 4 meter receiving \$12, and the updated meter showing \$50, \$118, \$815, and \$2,037 for the four levels, respectively.

In step 512, the \$10,100 jackpot (level 1 on link 1) is awarded in response [0060] to yet another jackpot triggering event. Thus, the \$10,100 award is awarded to one of the players of the system as a result of the triggering event. Because the jackpot that was triggered has a reset value of \$10,000, and was triggered at \$10,100, the amount of increment that must be pulled is the difference between the trigger value and the reset value, which in this case is \$100. Therefore, \$100 is removed or pulled from each link as seen in step 512. On link 1 (the jackpot winning link), the entire \$100 is pulled from the level 1 jackpot (the triggered jackpot) which causes the level 1 meter to be reset to its reset value of \$10,000. On link 2, the \$100 increment to be pulled is first pulled from the lowest level jackpot (level 1) if available, and then any remainder is pulled from consecutively higher level jackpots if necessary. In this instance, the entire \$100 cannot be pulled off of the level 2 jackpot without decrementing the level 2 meter below its reset value. Thus, only \$55 of the \$100 is removed from level 1, causing the level 1 jackpot to be decremented down to its reset value of \$500. This leaves \$45 to still be decremented from the other jackpot levels on link 2. Next, the level 2 meter is decremented down to its reset value. In this instance, the entire remainder of \$45 can be, and is, decremented from the level 2 jackpot meter, causing it to be decremented to its reset value of \$2,000.

[0061] Continuing in step 512, on link 3, the \$100 increment to be pulled is first pulled from the lowest level jackpot (level 1) if available, and then any remainder is pulled from consecutively higher level jackpots if necessary. In this instance, the entire \$100 cannot be pulled off of the level 1 jackpot without decrementing the level 1 meter below its reset value. Thus, only \$27 of the \$100 is removed from level 1, causing the level 1 jackpot to be decremented to its reset value of \$10. This leaves \$73 to still be decremented from the other jackpot levels on link 3. Next, the level 2

meter is decremented down to its reset value. In this instance, only \$18 can be removed from the level 2 jackpot before it reaches its reset value or \$150. Thus, \$55 remains to be decremented. Next, the level 3 meter is decremented down to its reset value. In this instance, only \$15 can be removed from the level 3 jackpot before it reaches it reset value of \$1,000. This leaves a remainder of \$40 of the \$100 amount to be decremented from the level 4 meter. After the \$40 is removed from the level 4 jackpot, it reaches its reset value of \$5,000, all of the \$100 increment to be pulled has been removed, and the meter shows the updated values of \$10, \$150, \$1000, and \$5,000, respectively, for the four jackpot levels on link 3. On link 4, the same process is used to pull first from the level 1 jackpot, then any remainder from levels 2, 3, and 4 successively until the entire \$100 is pulled. Thus, in step 508, after the \$100 is pulled from the four jackpot levels, the meter shows updated values of \$20, \$100, \$800 and \$2,000 for the four jackpot levels. Thus, in an embodiment, when the triggered jackpot is on a link having only a single jackpot level, the result is that all of the jackpots on all of the links of the system are reset to their reset values. In operation, the various subsystems 402, or "links" may be activated or [0062] deactivated such that some, one, all, or none of them are operational at any time. If one of the subsystems 402 is activated while others are operational, the then current total increment of the progressive pool 470 must be allocated to the reset values of the jackpots on the newly added link. This causes those jackpots on the newly added link to be "synchronized" or "brought up to speed" with the current increment generated in the system 400. For example, in the embodiment shown in FIG. 4-5, if links 1, 3, and 4 are operational and link 2 is added, link 2 should not be activated with the jackpots at the reset levels. Instead, the proper levels of the jackpots on link 2 depend on the total increment of the pool at that time. For example, if the total increment of the pool is \$100, then a portion of the total increment must be added to each jackpot in similar fashion as described above herein. Thus, for the level 1 jackpot on link 2, the meter value should be the reset value plus the proper portion of the \$100 increment, which in this case is  $500 + [100 \times (2.0\%/5.0\%)] = 540$ . Similarly, the meter value of the level 2 jackpot on link 2 should be \$2,000 + [\$100 x (3.0%/5.0%)] = \$2,060. Thus, in this example, if link 2 is activated at a point when links 1, 2 and 4 have been previously operational and the progressive pool holds \$100 of increment, the proper values of the level 1 and level 2 jackpots on link 2

should be \$540 and \$2,060, respectively. Other links activated at other points in time should be set to proper meter values in similar fashion.

It should be understood that the steps in FIG. 5 are shown in discrete [0063] moments of time after certain amounts of coin in have been accumulated by the system. In operation, the coin in is not typically accumulated in lump sum fashion, but rather gradually and incrementally over time. Thus, for example, in step 502 when indicated that \$2,500 of coin in has been accumulated, it should be understood that the \$2,500 may be accumulated by multiple wagers on multiple gaming devices of the system, and the that increment of 5% represents a portion of each wager input, which has accumulated for a time period to be a coin in of \$2,500 and an increment of \$125. Additionally, the meters of the various jackpots are incremented gradually as well to reflect the stream of coin-in and increment being pulled Thus, in an embodiment, the meters may be relatively constantly therefrom. changing and increasing as increment is collected from the coin in. The steps in FIG. 5 are to be understood as time captures of certain moments of time during operation of the example embodiment described.

[0064] It should also be understood that when a certain amount of coin in is received, and a corresponding amount of increment is generated, the increment is added to each of the links on the system. Thus, at least one jackpot (and possibly more) on each link is increased in response to the generation of the increment. It is appropriate to add the generated increment to each link because when a jackpot triggering event causes a jackpot to be awarded, a corresponding increment amount is pulled or deducted from each non-winning link. In other words, the increment collected is added to all of the links, and when a jackpot is won, it is pulled from the remaining non-winning links, as described herein with relation to FIG. 5. In this way, the correct amount of money is both added and subtracted from the progressive pool so as to be consistent with the actual coin in and increment generated.

[0065] The linked progressive system 400 of the present invention offers a number of benefits and advantages over traditional independently operated progressive systems. Because an increment amount generated by coin in is added to all of the links of the system 400, the meters displaying the jackpot amounts all increment simultaneously which adds to the players excitement and enjoyment. Moreover, the jackpots of the system 400 may be configured to be triggered more frequently as a result of the configuration of the system 400. The system 400 also

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allows increment from coin in received at any of the gaming devices in the system to fund a plurality or even all of the progressive wagering games. Thus, a player playing one progressive wagering game funds the progressive jackpots of multiple wagering games thereby allowing the jackpots to grow more rapidly. Moreover, when a jackpot is awarded, the increment pulled or decremented from the non-winning progressive jackpots is relatively small so as to be relatively inconsequential to the enjoyment of players.

[0066] Each of these embodiments and obvious variations thereof is contemplated as falling within the spirit and scope of the claimed invention, which is set forth in the following claims.

#### **CLAIMS:**

What is claimed is:

1. A linked progressive wagering system, comprising

a first progressive wagering subsystem comprising X jackpots, each of the X jackpots displayed on a first meter;

a second progressive wagering subsystem having Y jackpots, each of the Y jackpots displayed on a second meter;

at least one wager input device;

a progressive pool; and

at least one controller operative to:

- receive a signal from the at least one wager input device of receipt of a first wager on the first progressive wagering subsystem;
- (ii) generate an increment, the increment comprising a portion of the first wager;
- (iii) transfer the increment into the progressive pool;
- (iv) add a first increase equal to the increment to the X jackpots; and
- (v) add a second increase equal to the increment to the Y jackpots.
- 2. The system of claim 1, wherein X does not equal Y.
- 3. The system of claim 1, wherein upon the occurrence of a jackpot triggering event on the first progressive wagering subsystem, the controller is further operative to award a first award comprising a selected one of the X jackpots.
- 4. The system of claim 3, wherein the controller is further operative to reset the selected one of the X jackpots to a reset value.
- 5. The system of claim 4, wherein the controller is further operative to calculate a pulled amount and subtract the pulled amount from the second meter.
- 6. The system of claim 5, wherein the pulled amount equals the first award minus the reset value.

- 7. The system of claim 6, wherein the pulled amount is subtracted first from a lowest one of the Y jackpots on the second meter, and at least a portion of any remainder of the pulled amount is then subtracted from a second lowest one of the Y jackpots on the second meter.
- 8. The system of claim 1, wherein first progressive wagering subsystem displays a first progressive wagering game and the second progressive wagering subsystem displays a second progressive wagering game.
- 9. A method of operating linked progressive wagering games, comprising:

displaying a first progressive wagering game comprising X jackpots, each of the X jackpots displayed on a first meter;

displaying a second progressive wagering game having Y jackpots, each of the Y jackpots displayed on a second meter;

linking a progressive pool to the first and second progressive wagering games;

receiving a first wager on the first progressive wagering game;

transferring an increment into the progressive pool, the increment comprising a portion of the first wager;

adding the increment to the X jackpots; and adding the increment to the Y jackpots.

- 10. The method of claim 9, further comprising incrementing the first meter by the increment amount and incrementing the second meter by the increment amount.
- 11. The method of claim 9, further comprising awarding a first award comprising a selected one of the X jackpots upon the occurrence of a jackpot triggering event in the first progressive wagering game.
- 12. The method of claim 11, further comprising resetting the selected one of the X jackpots to a reset value, calculating a pulled amount, and subtracting the pulled amount from the second meter.

- 13. The method of claim 12, wherein the pulled amount equals the first award amount minus the reset value.
- 14. The method of claim 13, wherein the pulled amount is subtracted from a lowest one of the Y jackpots on the second meter until a second reset value of the lowest one is reached, and if so, a remainder of the pulled amount is calculated.
- 15. The method of claim 14, wherein at least a portion of the remainder is subtracted from a second lowest one of the Y jackpots on the second meter.
- 16. A method of resetting jackpots of linked progressive wagering games, comprising:

receiving a signal of a jackpot triggering event in a first progressive wagering game;

awarding a first award comprising a selected jackpot of the first progressive wagering game;

resetting the selected jackpot to a first reset value; and

decrementing at least one jackpot of a second progressive wagering game by a decrement amount equal to the first award less the first reset value.

- 17. The method of claim 16, wherein the second progressive wagering game comprises at least a first jackpot and a second jackpot, the first jackpot being a lower level than the second jackpot.
- 18. The method of claim 17, wherein the decrementing step comprises subtracting the decrement amount first from the first jackpot until a second reset value of the first jackpot is reached, and if so, subtracting at least a portion of any remainder of the decrement amount from the second jackpot.
- 19. The method of claim 18, wherein the first progressive wagering game comprises X jackpots and the second progressive wagering game comprises Y jackpots, wherein X is not equal to Y.

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20. A computer readable storage medium encoded with instructions for performing the method of claim 16.

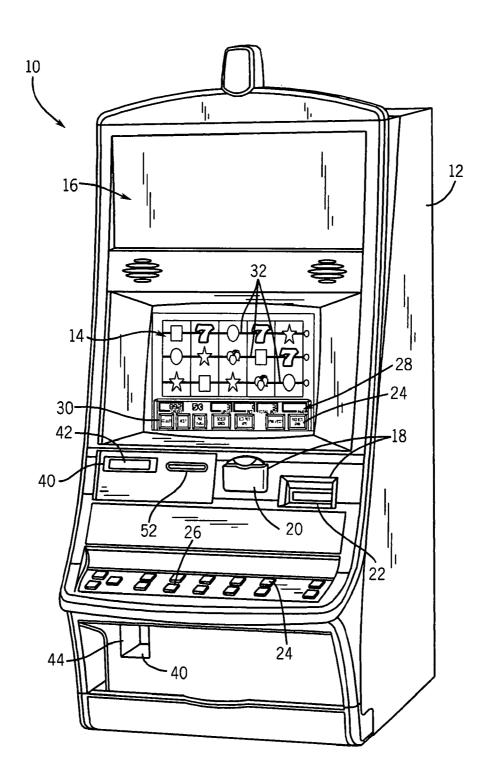


FIG. 1a

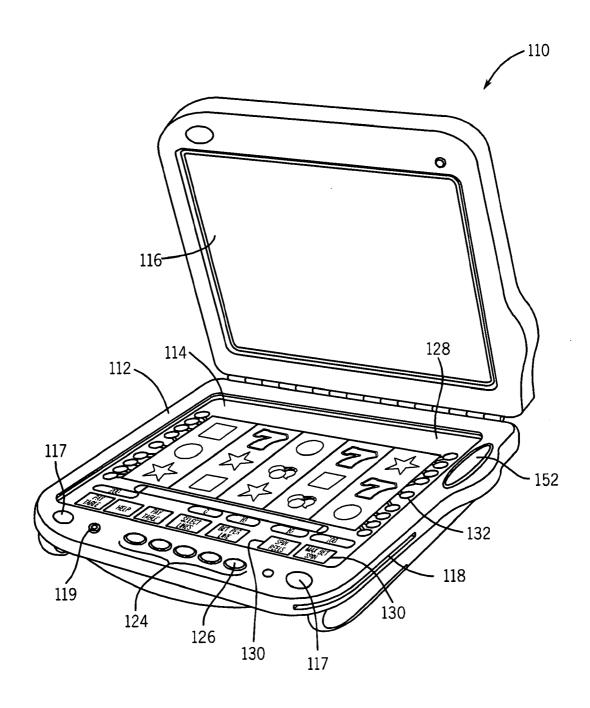


FIG. 1b

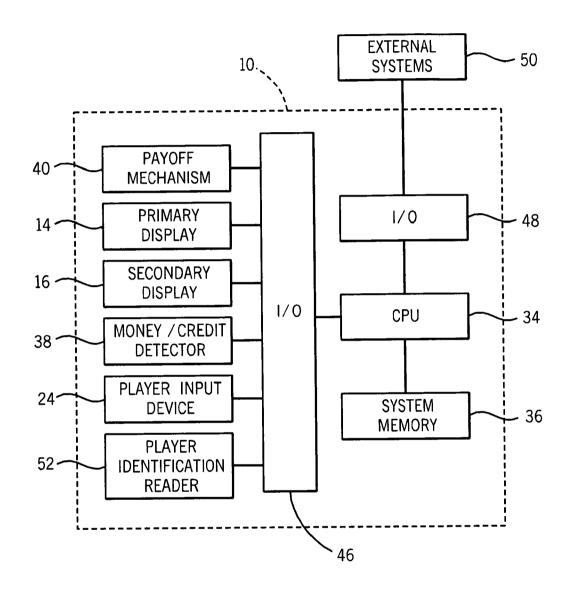
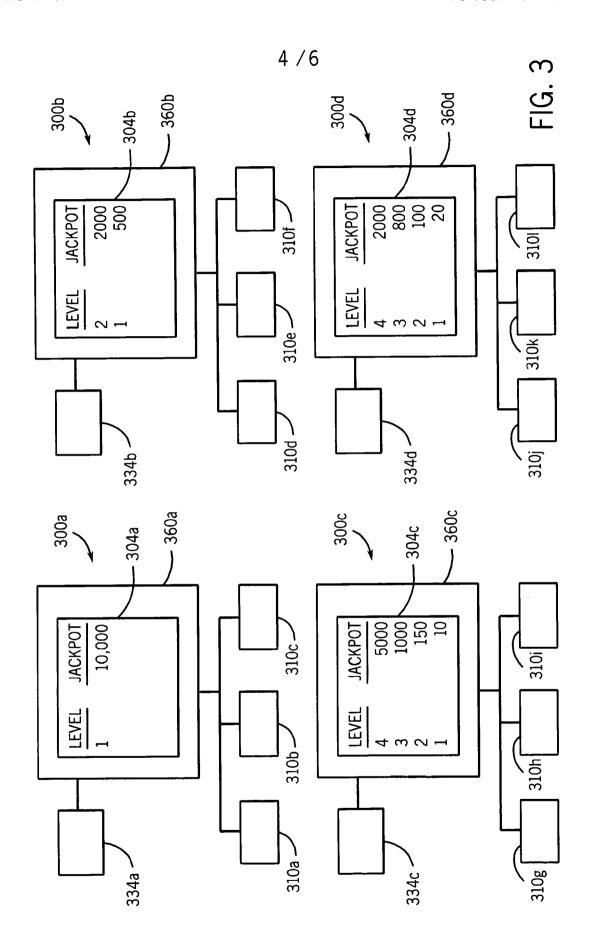
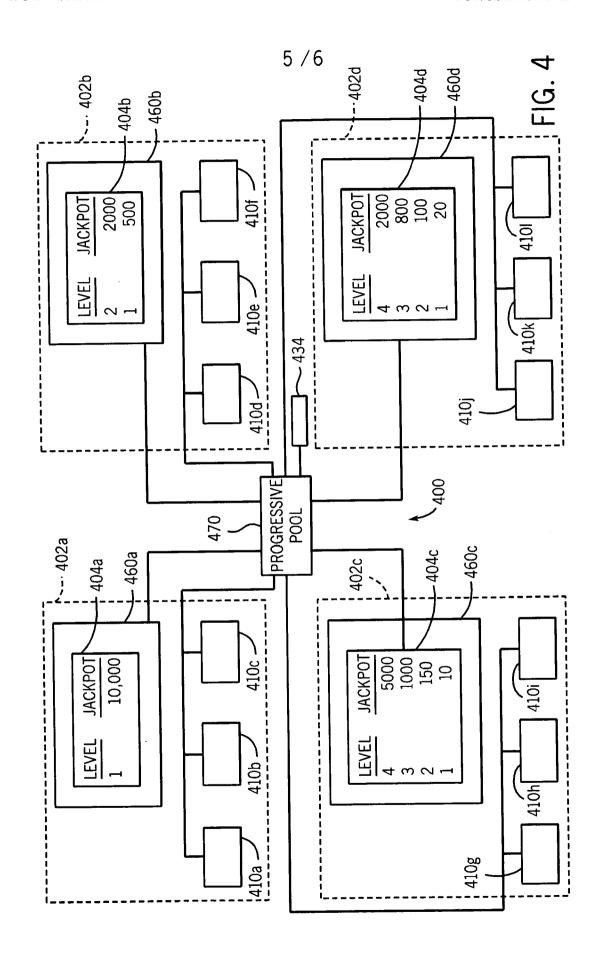


FIG. 2

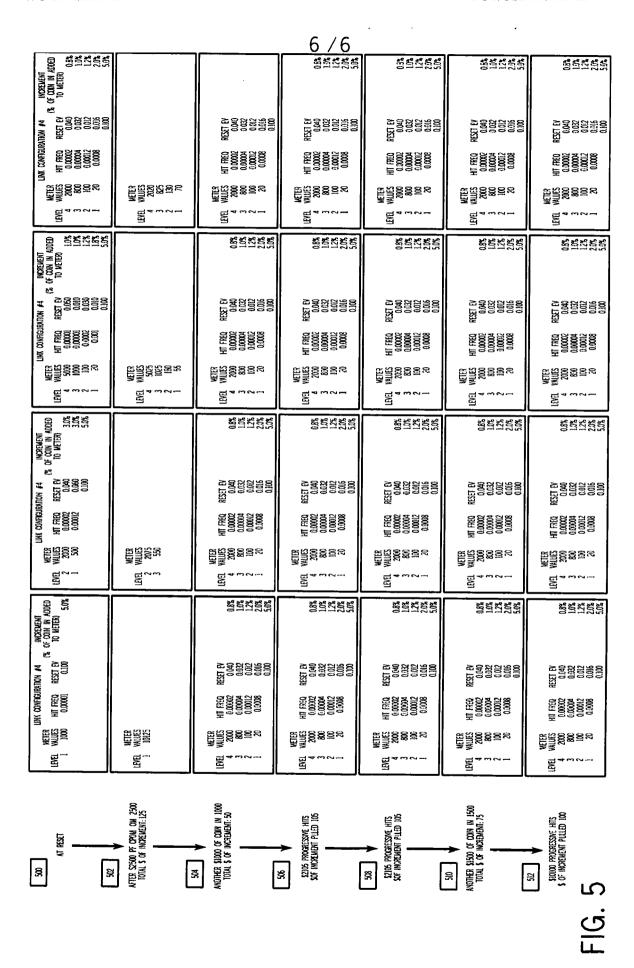
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**SUBSTITUTE SHEET (RULE 26)** 

#### INTERNATIONAL SEARCH REPORT

International application No PCT/US2008/005025

A. CLASSIFICATION OF SUBJECT MATTER INV. G07F17/32

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

#### B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)  ${\tt G07F}$ 

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 2006/039349 A (WMS GAMING INC [US]; GAGNER MARK B [US]; THOMAS ALFRED [US]) 13 April 2006 (2006-04-13) abstract	1-20
	paragraphs [0020] - [0022], [0032] - [0035]; figures 1-4	
X	US 2007/060321 A1 (VASQUEZ JAMES A [US] ET AL) 15 March 2007 (2007-03-15) abstract	1–20
	paragraphs [0006], [0007], [0009], [0025] - [0028], [0039], [0051] - [0054], [0065], [0066], [0115] - [0139]; figures 1-10	
X	US 2005/239542 A1 (OLSEN ERIC B [US]) 27 October 2005 (2005-10-27) the whole document	1-20
	-/ ,	

X Further documents are listed in the continuation of Box C.	X See patent family annex.
* Special categories of cited documents :  *A* document defining the general state of the art which is not considered to be of particular relevance  *E* earlier document but 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)  *O* document referring to an oral disclosure, use, exhibition or other means  *P* document published prior to the international filing date but later than the priority date claimed	<ul> <li>"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</li> <li>"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone</li> <li>"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.</li> <li>"&amp;" document member of the same patent family</li> </ul>
Date of the actual completion of the international search	Date of mailing of the international search report
2 September 2008	09/09/2008
Name and mailing address of the ISA/  European Patent Office, P.B. 5818 Patentlaan 2  NL – 2280 HV Rijswijk  Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,  Fax: (+31-70) 340-3016	Authorized officer  Kling, Jonas

## INTERNATIONAL SEARCH REPORT

International application No PCT/US2008/005025

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT								
	Citation of document, with indication, where appropriate, of the relevant passages	· · ·	Relevant to claim No.					
Category*								
X	US 2006/142079 A1 (IKEHARA CLYDE [US] ET AL) 29 June 2006 (2006-06-29) the whole document	·	1-20					
(	US 2006/287077 A1 (GRAV TED [CA] ET AL) 21 December 2006 (2006-12-21) the whole document		1-20					
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## INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No PCT/US2008/005025

Patent document cited in search report	.   F	Publication date		Patent family member(s)	Publication date
WO 2006039349	A 1	3-04-2006	NONE	·	
US 2007060321	A1 1	5-03-2007	US	2008020846 A1	24-01-2008
US 2005239542	A1 2	27–10–2005	WO	2005106702 A2	10-11-2005
US 2006142079	A1 2	29-06-2006	AU GB US US	2005248973 A1 2422942 A 2008020830 A1 2008020831 A1	13-07-2006 09-08-2006 24-01-2008 24-01-2008
US 2006287077	A1 2	21–12–2006	NONE	·	