DYNAMIC JACKPOT ENROLLMENT

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ABSTRACT
Information communicated about progressive wagering games to backend systems in response to game play can be utilized to dynamically enroll gaming machines being used to play the progressive wagering games into an instance of a progressive jackpot. When a wager is submitted for a progressive wagering game, information that at least identifies the wager amount, gaming machine, and progressive wagering game is transmitted from the gaming machine to one or more backend systems (e.g., accounting and routing systems). A backend system, or a component of a backend system, tracks ongoing progressive jackpots. The backend system or system component at least records data that tracks funding of the progressive jackpot instances from gaming machines.

Red: $5,638.00
White: $364.00
Blue: $10.75

update meters in accordance with funding

progressive wagering game
backend system

dynamically enroll the electronic gaming machine into the progressive jackpots responsive to wager submission
update meters in accordance with funding

Progressive Jackpot Award Meters

progressive jackpots

dynamically enroll the electronic gaming machine into the progressive jackpots responsive to wager submission
**FIG. 2**

### PROGRESSIVE JACKPOT IDENTIFIER RATE RESET IDENTIFIER JACKPOTS

<table>
<thead>
<tr>
<th>Identifier</th>
<th>Rate</th>
<th>Reset</th>
</tr>
</thead>
<tbody>
<tr>
<td>Red</td>
<td>3%</td>
<td>$100</td>
</tr>
<tr>
<td>White</td>
<td>2%</td>
<td>$20</td>
</tr>
<tr>
<td>Blue</td>
<td>1%</td>
<td>$5</td>
</tr>
</tbody>
</table>

### PROGRESSIVE JACKPOTS

- Born to Lose: Red, White
- Phat Chance: White, Blue

### PROGRESSIVE GAMES TABLE

#### PROGRESSIVE JACKPOT DYNAMIC ENROLLMENT UNIT

- A) Receive message with game play information that indicates wager amount, gaming machine, and game
- B) Read to determine progressive jackpots for game
- C) Read to determine information about progressive jackpots
- D) Create entries to dynamically enroll EGMS into progressive jackpots or update records of already enrolled EGMS

<table>
<thead>
<tr>
<th>EGM ID</th>
<th>Fund Accumulation</th>
<th>Progressive Jackpot</th>
</tr>
</thead>
<tbody>
<tr>
<td>12W</td>
<td>$20</td>
<td>Blue</td>
</tr>
<tr>
<td>12W</td>
<td>$20</td>
<td>White</td>
</tr>
<tr>
<td>14E</td>
<td>$100</td>
<td>Red</td>
</tr>
<tr>
<td>14E</td>
<td>$100</td>
<td>White</td>
</tr>
<tr>
<td>21N</td>
<td>$10</td>
<td>Blue</td>
</tr>
<tr>
<td>21N</td>
<td>$60</td>
<td>White</td>
</tr>
<tr>
<td>21N</td>
<td>$50</td>
<td>Red</td>
</tr>
</tbody>
</table>
READ DATA THAT INDICATES EGM, GAME, AND WAGER AMOUNT

DETERMINE PROGRESSIVE JACKPOTS FOR THE GAME

IS THE EGM ALREADY ENROLLED IN INSTANCES OF THE PROGRESSIVE JACKPOTS?

NO

WRITE DATA THAT ASSOCIATES THE EGM WITH INSTANCES OF THE PROGRESSIVE JACKPOTS ASSOCIATED WITH THE INDICATED GAME

WRITE DATA TO INDICATE FUNDING OF THE INSTANCES OF THE PROGRESSIVE JACKPOTS FROM THE EGM

YES

LOCATE DATA THAT REPRESENTS ENROLLMENT OF THE EGM INTO INSTANCES OF THE PROGRESSIVE JACKPOTS

FIG. 3
A) RECEIVE NOTIFICATION THAT WHITE PROGRESSIVE JACKPOT INSTANCE WON

C) RECEIVE MESSAGE THAT INDICATES $50 WAGER AT EGM 12W IN PHAT CHANCE GAME

D) UPDATE ENTRY IN BLUE FOR 12W AND CREATE WHITE ENTRY FOR 12W

B) REMOVE ENTRIES FOR THE WHITE JACKPOT INSTANCE

<table>
<thead>
<tr>
<th>PROGRESSIVE JACKPOT</th>
<th>EGM ID</th>
<th>FUND ACCUMULATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>RED</td>
<td>14E</td>
<td>$100</td>
</tr>
<tr>
<td></td>
<td>21N</td>
<td>$50</td>
</tr>
<tr>
<td>WHITE</td>
<td>12W</td>
<td>$20</td>
</tr>
<tr>
<td></td>
<td>14E</td>
<td>$100</td>
</tr>
<tr>
<td></td>
<td>21N</td>
<td>$60</td>
</tr>
<tr>
<td>BLUE</td>
<td>12W</td>
<td>$20 → $70</td>
</tr>
<tr>
<td></td>
<td>21N</td>
<td>$10</td>
</tr>
<tr>
<td>WHITE</td>
<td>12W</td>
<td>$50</td>
</tr>
</tbody>
</table>

FIG. 4
FIG. 5
DYNAMIC JACKPOT ENROLLMENT

RELATED APPLICATIONS

[0001] This application claims the priority benefit of U.S. Provisional Application Ser. No. 60/986,889 filed Nov. 9, 2007.

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FIELD

[0003] Embodiments of the inventive subject matter relate generally to wagering game systems, and more particularly to dynamically enrolling a gaming machine into an instance of a progressive jackpot.

BACKGROUND

[0004] Wagering game 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 depends 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 wagering game 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, features, and enhancements available because such machines attract frequent play and hence increase profitability to the operator. Therefore, there is a continuing need for wagering game machine manufacturers to continuously develop new games and gaming enhancements that will attract frequent play.

SUMMARY

[0005] In some embodiments, a method comprises reading data that indicates an electronic wagering game machine, a wager amount, and a wagering game; determining that the wagering game is associated with a progressive jackpot; determining that the electronic wagering game machine is not enrolled to participate in an instance of the progressive jackpot; and automatically enrolling the electronic wagering game machine in the instance of the progressive jackpot associated with the wagering game.

[0006] In some embodiments, the automatically enrolling comprises writing data that associates the electronic wagering game machine with the instance of the progressive jackpot; and writing data that indicates funding of the instance of the progressive jackpot from the electronic wagering game machine based on the wager amount.

[0007] In some embodiments, the method further comprises writing data to reflect subsequent funding accumulation for the instance of the progressive jackpot from the electronic wagering game machine and from a second electronic wagering game machine.

[0008] In some embodiments, the data that associates the electronic wagering game machine with the instance of the progressive jackpot is written into a structure that tracks funding of the instance of the progressive jackpot from a plurality of electronic wagering game machines in addition to the electronic wagering game machine.

[0009] In some embodiments, the method further comprises receiving notification that the instance of the progressive jackpot has been won; and removing from the structure the data that corresponds to the instance of the progressive jackpot.

[0010] In some embodiments, the method further comprises exporting the data removed from the structure for accounting.

[0011] In some embodiments, the method further comprises receiving a message with the data that indicates the wager amount, the electronic wagering game machine, and the wagering game.

[0012] In some embodiments, the message further indicates a paytable, a game theme, and a denomination.

[0013] In some embodiments, the method further comprises determining that the wagering game is also associated with a second progressive jackpot; if the electronic wagering game machine is not enrolled in an instance of the second progressive jackpot, automatically enrolling the electronic wagering game machine in the instance of the second progressive jackpot; writing data that indicates funding accumulation for the instance of the second progressive jackpot from the electronic wagering game machine based on the wager amount.

[0014] In some embodiments, an apparatus comprises a message parsing unit operable to parse a message to determine an electronic wagering game machine, a wagering game, and a wager amount; a progressive jackpot lookup unit coupled with the message parsing unit, the progressive jackpot lookup unit operable to determine a set of one or more progressive jackpots associated with the wagering game; and an enrollment data manager unit coupled with the progressive jackpot lookup unit, the enrollment data manager unit operable to write data that associates the electronic wagering game machine with the set of one or more progressive jackpots and to write data that indicates participation of the electronic wagering game machine in the set of one or more progressive jackpots based on the wager amount.

[0015] In some embodiments, the apparatus further comprises a network interface coupled with the message parsing unit, the network interface operable to transmit and to receive messages; and a set of one or more processing units.

[0016] In some embodiments, the apparatus further comprises a progressive jackpot instance termination unit operable to clear data written by the enrollment data manager unit for an instance of one of the set of one or more progressive jackpots that has been won.

[0017] In some embodiments, the progressive jackpot instance termination unit is further operable to export cleared data.

[0018] In some embodiments, the message comprises an electronic wagering game machine identifier, a wager amount, a wagering game identifier, a game theme identifier, a paytable identifier, and a denomination.
In some embodiments, one or more machine-readable media having instructions encoded therein, the instructions, when executed by a set of one or more processors, causing the set of processors to perform operations that comprise reading data that indicates an electronic wagering game machine, a wager amount, and a wagering game; determining that the wagering game is associated with a progressive jackpot; determining that the electronic wagering game machine is not enrolled to participate in an instance of the progressive jackpot; and automatically enrolling the electronic wagering game machine in the instance of the progressive jackpot associated with the wagering game.

In some embodiments, the operations further comprise determining that the wagering game is also associated with a second progressive jackpot; if the electronic wagering game machine is not enrolled in an instance of the second progressive jackpot, automatically enrolling the electronic wagering game machine in the instance of the second progressive jackpot; writing data that indicates funding accumulation for the instance of the second progressive jackpot from the electronic wagering game machine based on the wager amount.

In some embodiments, the automatically enrolling operation comprises writing data that associates the electronic wagering game machine with the instance of the progressive jackpot; and writing data that indicates funding of the instance of the progressive jackpot from the electronic wagering game machine based on the wager amount.

In some embodiments, the operations further comprise writing data to reflect subsequent funding accumulation for the instance of the progressive jackpot from the electronic wagering game machine and from a second electronic wagering game machine.

In some embodiments, the operations further comprise parsing a message with the data that indicates the wager amount, the electronic wagering game machine, and the wagering game.

In some embodiments, the data of the message further indicates a paytable, a denomination, and a game theme.

**BRIEF DESCRIPTION OF THE FIGURES**

Embodiments of the invention are illustrated in the Figures of the accompanying drawings in which:

- **FIG. 1** is a conceptual diagram that depicts an example scenario of a gaming machine being dynamically enrolled into progressive jackpot instances based on game play.
- **FIG. 2** is a conceptual diagram of example structures for dynamically enrolling a gaming machine into a progressive jackpot.
- **FIG. 3** depicts a flowchart of example operations for dynamic enrollment.
- **FIG. 4** is a conceptual diagram that illustrates an example of managing enrollment data.
- **FIG. 5** depicts a conceptual example of a progressive jackpot enrollment unit.
- **FIG. 6** is a block diagram illustrating a wagering game machine architecture, according to example embodiments of the invention.

**FIG. 7** is a block diagram illustrating a wagering game network 700, according to example embodiments of the invention.

**DESCRIPTION OF THE EMBODIMENTS**

The description that follows includes exemplary systems, methods, techniques, instruction sequences and computer program products that embody techniques of the present inventive subject matter. However, it is understood that the described embodiments may be practiced without these specific details. For instance, although examples depict electronic gaming machines as cabinet type machines, an electronic game machine may be a different type of gaming machine, such as a portable gaming machine. In other instances, well-known instruction instances, protocols, structures and techniques have not been shown in detail in order not to obfuscate the description.

Information communicated about progressive wagering games to backend systems in response to game play can be utilized to dynamically enroll gaming machines being used to play the progressive wagering games into an instance of a progressive jackpot. When a wager is submitted for a progressive wagering game, information that at least identifies the wager amount, gaming machine, and progressive wagering game is transmitted from the gaming machine to one or more backend systems (e.g., accounting and routing systems). One of the backend systems, or a component of a backend system, tracks ongoing progressive jackpots ("progressive jackpot instances"). The backend system or system component at least records data that tracks funding of the progressive jackpot instances from gaming machines. An entity (e.g., casino, game developer, etc.) can use the data recorded by the backend system or system component to comply with gambling regulations and to monitor/evaluate performance of wagering games and/or gaming machines (e.g., relationship between location in a casino and funding).

**FIG. 1** is a conceptual diagram that depicts an example scenario of a gaming machine being dynamically enrolled into progressive jackpot instances based on game play. Progressive jackpot award meter 109s (e.g., an electronic billboard or flashing sign with award amounts for different progressive jackpots) display current award amounts for instances of progressive jackpots. An "instance" of a progressive jackpot is a currently accumulating progressive jackpot. After an instance of the progressive jackpot is won, a new instance of the progressive jackpot begins to accumulate funds. The progressive jackpot award meters 109 display award amounts of $5,638.00, $364.00, and $10,75 for an instance of a Red progressive jackpot, a White progressive jackpot, and a Blue progressive jackpot, respectively. A progressive wagering game backend system(s) 107 reads data about game play at electronic gaming machines 101 and 103, and performs operations to cause the progressive jackpot award meters 109 to be updated accordingly.

Electronic gaming machines (EGMs) 101 and 103 have already been enrolled to participate in corresponding ones of the progressive jackpot instances. In response to a user makes bets ("game play" or "submits wagers") at the EGM 101, the user's game play funds instances of the corresponding progressive jackpots (or instance of the corresponding progressive jackpot). Examples of progressive wagering games include progressive wagering games in the Jackpot Party Progressive® series by WMS Gaming Inc. For this example, assume that the user at the EGM 101 is playing...
progressive wagering games “Born to Lose” and “Phat Chance.” The user may be playing the games concurrently, switching back and forth, etc. Games may be hosted entirely or partially on the EGM 101. For instance, the game logic can be implemented in the backend system(s) with results presented at the EGM 101 ("portal games"). If the wagering game “Born to Lose” is participating in the Red and the White progressive jackpot instances, then bets at the EGM 101 fund both instances. If the progressive wagering game “Phat Chance” has been enrolled to participate in the instances of the White and Blue progressive Jackpots, then wagers at the EGM 101 made in “Phat Chance” will be recorded as funding those instances of the White and Blue progressive Jackpots.

[0037] The EGM 105 has not been enrolled to participate in any of the progressive jackpot instances. A user begins to play at the EGM 105. Assuming the user plays “Phat Chance” at the EGM 105, the EGM 105 sends data that will cause the EGM 105 to be dynamically enrolled into the instances of the progressive Jackpots White and Blue. In an embodiment, the EGM 105 creates and transmits a message to the backend system(s) 107 that indicates wager amount, identifies the EGM 105, identifies a game theme, identifies a pay table, and identifies a denomination. Various embodiments communicate more or less information. For example, an embodiment can transmit data that indicates wager amount, identifies a gaming machine, and identifies a progressive wagering game. Another embodiment can transmit data that indicates a wager amount, gaming machine, and one or more progressive Jackpots associated with a game being played at the gaming machine.

[0038] The progressive wagering game backend system 107 reads data of the message from the EGM 105. Various embodiments can deliver the data to the backend system 107 differently (e.g., the message can be delivered directly to the system 107, the message can be delivered via an accounting and routing system, the message may be parsed and the parsed data delivered to the system 107, etc.). After reading the data, the progressive wagering game backend system 107 dynamically enrolls the EGM 105 into the instances of the progressive Jackpots White and Blue. The progressive wagering game backend system 107 then causes the progressive jackpot award meters 109 to be updated accordingly.

[0039] FIG. 2 is a conceptual diagram of example structures for dynamically enrolling a gaming machine into a progressive jackpot. FIG. 2 depicts an example progressive jackpot dynamic enrollment unit 201. The progressive jackpot dynamic enrollment unit 201 may be implemented as a component of a backend system, as a backend subsystem, etc. The progressive jackpot dynamic enrollment unit 201 receives a message with game play information at a stage A. The game play information indicates a wager amount, a gaming machine, and a game.

[0040] At a stage B, the progressive jackpot dynamic enrollment unit 201 reads a progressives game table 205 based on the game indicated in the game play information. The progressive games table 205 indicates games and progressive Jackpots associated with the indicated games. The progressive games table 205 in FIG. 2 indicates that a progressive wagering game “Born to Lose” is associated with progressive Jackpots Red and White, and that a progressive wagering game “Phat Chance” is associated with progressive Jackpots White and Blue. For this illustration, the game play information identifies the game “Born to Lose.”

[0041] After determining that the game “Born to Lose” is associated with the progressive Jackpots Red and White, the progressive jackpot dynamic enrollment unit 201 reads the progressive Jackpots table 203 at a stage C. The progressive jackpot dynamic enrollment unit 201 reads the progressive Jackpots table 203 to determine information about the progressive Jackpots. In this illustration, the progressive Jackpots table 203 indicates progressive Jackpot identifiers Red, White, and Blue. Of course, progressive Jackpots can be identified with various values including hash values, numerical identifiers, text strings, etc. The progressive Jackpots table 203 indicates that the Red progressive Jackpot has a progression rate of 3% and a reset of $100. The progressive Jackpots table 203 indicates that the White progressive Jackpot has a progression rate of 2% and a reset of $20. The progressive Jackpots table 203 indicates that the Blue progressive Jackpot has a progression rate of 1% and a reset of $5. The progressive jackpot dynamic enrollment unit 201 determines that the Red progressive Jackpot has a progression rate of 3% and a reset of $100. The progressive jackpot dynamic enrollment unit 201 also determines that the White progressive Jackpot has a progression rate of 2% and a reset of $20. Embodiments can dynamically enroll a gaming machine into a progressive Jackpot without determining information, such as progression rate and reset. Embodiments can delay reading data that represents information about the progressive Jackpots until a later time (e.g., when computing an award amount).

[0042] After determining information about the progressive Jackpots, the progressive jackpot dynamic enrollment unit 201 either updates a progressive Jackpot enrollment table 207 or creates entries in the table 207 at a stage D. Funding of progressive Jackpots by gaming machine can be tracked with the data in the progressive Jackpots enrollment table 207. In this illustration, the progressive Jackpots table 207 indicates the following:

<table>
<thead>
<tr>
<th>EGM ID</th>
<th>FUND ACCUMULATION</th>
<th>PROGRESSIVE JACKPOT</th>
</tr>
</thead>
<tbody>
<tr>
<td>12W</td>
<td>$20</td>
<td>BLUE</td>
</tr>
<tr>
<td>12W</td>
<td>$20</td>
<td>WHITE</td>
</tr>
<tr>
<td>14E</td>
<td>$100</td>
<td>RED</td>
</tr>
<tr>
<td>14E</td>
<td>$100</td>
<td>WHITE</td>
</tr>
<tr>
<td>21N</td>
<td>$10</td>
<td>BLUE</td>
</tr>
<tr>
<td>21N</td>
<td>$60</td>
<td>WHITE</td>
</tr>
<tr>
<td>21N</td>
<td>$50</td>
<td>RED</td>
</tr>
</tbody>
</table>

One or more users have wagered $20 at an EGM 12W in the progressive wagering game “Phat Chance,” so the table 207 indicates fund accumulation of $20 for an instance of the progressive Jackpots Blue and White. One or more users have wagered $100 at an EGM 14E in the progressive wagering game “Born to Lose,” so the table 207 indicates fund accumulation of $100 for an instance of the progressive Jackpots Red and White. One or more users have wagered $10 at an EGM 21N in the progressive wagering game “Phat Chance,” so the table 207 indicates fund accumulation of $10 for an instance of the progressive Jackpot Blue. One or more users have wagered $50 at an EGM 21N in the progressive wagering game “Born to Lose,” so the table 207 indicates fund accumulation of $50 for an instance of the progressive Jackpot Red. Since one or more users have played both progressive wagering games at the EGM 21N and the progressive wagering games have an intersecting progressive jackpot,
which is the White progressive jackpot, the table 207 indicates fund accumulation of $60 at the EGM 21N for the instance of the White progressive jackpot.

The operations depicted in FIG. 3 are meant to aid in understanding embodiments and should not be used to limit embodiments. Additional operations may be performed, different operations may be performed, the operations may be performed in parallel or a different order, etc. For instance, additional operations may be performed that write additional data, organize the data differently, maintain the data, etc.

0050 FIG. 4 is a conceptual diagram that illustrates an example of managing enrollment data. At a stage A, a progressive jackpot dynamic enrollment unit 401 receives notification that an instance of the White progressive jackpot has been won. At a stage B, the progressive jackpot dynamic enrollment unit 401 removes entries from a progressive jackpot enrollment table 407 since this instance of the White progressive jackpot has been won. The data removed from the table can be archived, written into another database, added to a store of data maintained for data mining, exported into a report for tracking to comply with gaming regulations, etc.

0051 At a stage C, the progressive jackpot dynamic enrollment unit 401 receives a message that indicates a $50 wager amount at an EGM 12W in the progressive wagering game “Phat Chance.” At a stage D, the progressive jackpot dynamic enrollment unit 401 updates the progressive jackpot instance table 407 to reflect funding at the EGM 12W for the Blue progressive jackpot instance, thus increasing the fund accumulation from $20 to $70. The progressive jackpot dynamic enrollment unit 401 also adds an entry to the table 407 for an instance of the White progressive jackpot, which was previously removed due to a win. The progressive jackpot dynamic enrollment unit 401 adds an entry that indicates enrollment of the EGM 12W into an instance of the White progressive jackpot with an initial funding of $50. Although FIG. 4 depicts complete removal of the entry for the White progressive jackpot from the table, the illustration should not be used to limit embodiments. Embodiments can remove the data that indicates gaming machine and fund accumulation for a won progressive jackpot while leaving an entry for the progressive jackpot. In this illustration, an entry would not be added to the table 407 for White, but the White entry would be updated to enroll the EGM 12W (e.g., data would be written that indicates the EGM 12W and the funding of $50 into the White progressive jackpot. The progressive jackpots enrollment table 407 is depicted differently than the progressive jackpots enrollment table 207 depicted in FIG. 2 as an example of a different technique for organizing the data.

0052 FIG. 5 depicts a conceptual example of a progressive jackpot enrollment unit. A progressive jackpot dynamic enrollment unit 501 includes a message parsing unit 511, a network interface 503, a progressive jackpot lookup unit 509, a progressive jackpot instance termination unit 505, and an enrollment data manager unit 507. The network interface 503 and the units 505, 507, 509, and 511 are coupled with a bus 513.

0053 The message parsing unit 511 parses messages received over the network interface 503. The message parsing unit 511 parses a message into values that indicate a gaming machine, a wager amount, a progressive wagering game, etc. If the progressive jackpot dynamic enrollment unit 501 receives messages for non-progressive wagering games, the message parsing unit 501 can also be operable to discard these messages or forward these messages to an appropriate unit, subsystem, or system.

0054 The progressive jackpot lookup unit 509 takes the values parsed from a message, and determines progressive
jackpots and information about the determined progressive jackpots (e.g., progression rate, reset, etc.). [0055] The enrollment data manager unit 507 writes data to reflect enrollment of a gaming machine into an instance of a progressive jackpot. The enrollment data manager unit 507 also updates data to reflect fund accumulation from a gaming machine for a progressive jackpot.

[0056] The progressive jackpot instance termination unit 505 removes data for a progressive jackpot instance that has been won. The data, however, is not destroyed. The progressive jackpot instance termination unit 505 is operable to cause the removed data to be written or exported to a database and/or storage unit, perhaps on a different machine.

Wagering Game Machine Architectures

[0057] FIG. 6 is a block diagram illustrating a wagering game machine architecture, according to example embodiments of the invention. As shown in FIG. 6, the wagering game machine architecture 600 includes a wagering game machine 606, which includes a central processing unit (CPU) 626 connected to main memory 628. The CPU 626 can include any suitable processor, such as an Intel® Pentium processor, Intel® Core 2 Duo processor, AMD Opteron™ processor, or UltraSPARC processor. The main memory 628 includes a wagering game unit 862. In one embodiment, the wagering game unit 862 can present wagering games, such as video poker, video black jack, video slots, video lottery, progressive wagering games, etc., in whole or part.

[0058] The CPU 626 is also connected to an input/output (I/O) bus 622, which can include any suitable bus technologies, such as an AGTL+frontside bus and a PCI backside bus. The I/O bus 622 is connected to a payout mechanism 608, primary display 610, secondary display 612, value input device 614, player input device 616, information reader 618, and storage unit 620. The player input device 616 can include the value input device 614 to the extent the player input device 616 is used to place wagers. The I/O bus 622 is also connected to an external system interface 624, which is connected to external systems 604 (e.g., wagering game networks).

[0059] In one embodiment, the wagering game machine 606 can include additional peripheral devices and/or more than one of each component shown in FIG. 6. For example, in one embodiment, the wagering game machine 606 can include multiple external system interfaces 624 and/or multiple CPUs 626. In one embodiment, any of the components can be integrated or subdivided.

[0060] Any component of the architecture 600 can include hardware, firmware, and/or machine-readable media including instructions for performing the operations described herein. The described embodiments may be provided as a computer program product, or software, that may include a machine-readable medium having stored thereon instructions, which may be used to program a computer system (or other electronic device(s)) to perform a process according to embodiments, whether presently described or not, since every conceivable variation is not enumerated herein. A machine readable medium includes any mechanism for storing or transmitting information in a form (e.g., software, processing application) readable by a machine (e.g., a computer). The machine-readable medium may include, but is not limited to, magnetic storage medium (e.g., floppy diskette); optical storage medium (e.g., CD-ROM); magneto-optical storage medium; read only memory (ROM); random access memory (RAM); erasable programmable memory (e.g., EPROM and EEPROM); flash memory; or other types of medium suitable for storing electronic instructions. In addition, embodiments may be embodied in an electrical, optical, acoustical or other form of propagated signal (e.g., carrier waves, infrared signals, digital signals, etc.), or wireline, wireless, or other communications medium.

[0061] While FIG. 6 describes an example wagering game machine architecture, this section continues with a discussion of wagering game networks.

Wagering Game Networks

[0062] FIG. 7 is a block diagram illustrating a wagering game network 700, according to example embodiments of the invention. As shown in FIG. 7, the wagering game network 700 includes a plurality of casinos 712 connected to a communications network 714.

[0063] Each casino 712 includes a local area network 716, which includes an access point 704, a wagering game server 706, and wagering game machines 702. The access point 7304 provides wireless communication links 710 and wired communication links 708. The wired and wireless communication links can employ any suitable connection technology, such as Bluetooth, 802.11, Ethernet, public switched telephone networks, SONET, etc. In some embodiments, the wagering game server 706 can serve wagering games and distribute content to devices located in other casinos 712 or at other locations on the communications network 714.

[0064] The wagering game machines 702 described herein can take any suitable form, such as floor standing models, handheld mobile units, bartop models, workstation-type console models, etc. Further, the wagering game machines 702 can be primarily dedicated for use in conducting wagering games, or can include non-dedicated devices, such as mobile phones, personal digital assistants, personal computers, etc. In one embodiment, the wagering game network 700 can include other network devices, such as accounting servers, wide area progressive servers, player tracking servers, and/or other devices suitable for use in connection with embodiments of the invention. The functionality for dynamic enrollment may be embodied in the wagering game server 706, another server, multiple servers, the accounting servers, etc.

[0065] In some embodiments, wagering game machines 702 and wagering game servers 706 work together such that a wagering game machine 702 can be operated as a thin, thick, or intermediate client. For example, one or more elements of a game play may be controlled by the wagering game machine 702 (client) or the wagering game server 706 (server). Game play elements can include executable game code, lookup tables, configuration files, game outcome, audio or visual representations of the game, game assets or the like. In a thin-client example, the wagering game server 706 can perform functions such as determining game outcome or managing assets, while the wagering game machine 702 can present a graphical representation of such outcome or asset modification to the user (e.g., player). In a thick-client example, the wagering game machines 702 can determine game outcomes and communicate the outcomes to the wagering game server 706 for recording or managing a player's account.

[0066] In some embodiments, either the wagering game machines 702 (client) or the wagering game server 706 can provide functionality that is not directly related to game play. For example, account transactions and account rules may be managed centrally (e.g., by the wagering game server 706) or
locally (e.g., by the wagering game machine 702). Other functionality not directly related to game play may include power management, presentation of advertising, software or firmware updates, system quality or security checks, etc.  

Any of the wagering game network components (e.g., the wagering game machines 702) can include hardware and machine-readable media including instructions for performing the operations described herein.  

This detailed description refers to specific examples in the drawings and illustrations. These examples are described in sufficient detail to enable those skilled in the art to practice the inventive subject matter. These examples also serve to illustrate how the inventive subject matter can be applied to various purposes or embodiments. Other embodiments are included within the inventive subject matter, as logical, mechanical, electrical, and other changes can be made to the example embodiments described herein. Features of various embodiments described herein, however essential to the example embodiments in which they are incorporated, do not limit the inventive subject matter as a whole, and any reference to the invention, its elements, operation, and application are not limiting as a whole, but serve only to define these example embodiments. This detailed description does not, therefore, limit embodiments of the invention, which are defined only by the appended claims. Each of the embodiments described herein are contemplated as falling within the inventive subject matter, which is set forth in the following claims.

We claim:  
1. A method comprising:  
- reading data that indicates an electronic wagering game machine, a wager amount, and a wagering game;  
- determining that the wagering game is associated with a progressive jackpot;  
- determining that the electronic wagering game machine is not enrolled to participate in an instance of the progressive jackpot; and  
- automatically enrolling the electronic wagering game machine in the instance of the progressive jackpot associated with the wagering game.  
2. The method of claim 1, wherein the automatically enrolling comprises:  
- writing data that associates the electronic wagering game machine with the instance of the progressive jackpot; and  
- writing data that indicates funding of the instance of the progressive jackpot from the electronic wagering game machine based on the wager amount.  
3. The method of claim 2 further comprising writing data to reflect subsequent funding accumulation for the instance of the progressive jackpot from the electronic wagering gaming machine and from a second electronic wagering game machine.  
4. The method of claim 2, wherein the data that associates the electronic wagering gaming machine with the instance of the progressive jackpot is written into a structure that tracks funding of the instance of the progressive jackpot from a plurality of electronic wagering game machines in addition to the electronic wagering game machine.  
5. The method of claim 4 further comprising:  
- receiving notification that instance of the progressive jackpot has been won; and  
- removing from the structure the data that corresponds to the instance of the progressive jackpot.  
6. The method of claim 5 further comprising exporting the data removed from the structure for accounting.  
7. The method of claim 1 further comprising receiving a message with the data that indicates the wager amount, the electronic wagering game machine, and the wagering game.  
8. The method of claim 7, wherein the message further indicates a payable, a game theme, and a denomination.  
9. The method of claim 1 further comprising:  
- determining that the wagering game is also associated with a second progressive jackpot;  
- if the electronic wagering game machine is not enrolled in an instance of the second progressive jackpot, automatically enrolling the electronic wagering game machine in the instance of the second progressive jackpot;  
- writing data that indicates funding accumulation for the instance of the second progressive jackpot from the electronic wagering game machine based on the wager amount.  
10. An apparatus comprising:  
- a message parsing unit operable to parse a message to determine an electronic wagering game machine, a wagering game, and a wager amount;  
- a progressive jackpot lookup unit coupled with the message parsing unit, the progressive jackpot lookup unit operable to determine a set of one or more progressive jackpots associated with the wagering game; and  
- an enrollment data manager unit coupled with the progressive jackpot lookup unit, the enrollment data manager operable to write data that associates the electronic wagering game machine with the set of one or more progressive jackpots and to write data that indicates participation of the electronic wagering game machine in the set of one or more progressive jackpots based on the wager amount.  
11. The apparatus of claim 10 further comprising:  
- a network interface coupled with the message parsing unit, the network interface operable to transmit and to receive messages; and  
- a set of one or more processing units.  
12. The apparatus of claim 10 further comprising a progressive jackpot instance termination unit operable to clear data written by the enrollment data manager unit for an instance of one of the set of one or more progressive jackpots that has been won.  
13. The apparatus of claim 12, wherein the progressive jackpot instance termination unit is further operable to export cleared data.  
14. The apparatus of claim 10, wherein the message comprises an electronic wagering game machine identifier, a wager amount, a wagering game identifier, a game theme identifier, a payable identifier, and a denomination.  
15. One or more machine-readable media having instructions encoded therein, the instructions, when executed by a set of one or more processors, causing the set of processors to perform operations that comprise:  
- reading data that indicates an electronic wagering game machine, a wager amount, and a wagering game;  
- determining that the wagering game is associated with a progressive jackpot;  
- determining that the electronic wagering game machine is not enrolled to participate in an instance of the progressive jackpot; and
automatically enrolling the electronic wagering game machine in the instance of the progressive jackpot associated with the wagering game.

16. The machine-readable media of claim 15, wherein the operations further comprise:

determining that the wagering game is also associated with a second progressive jackpot;

if the electronic wagering game machine is not enrolled in an instance of the second progressive jackpot, automatically enrolling the electronic wagering game machine in the instance of the second progressive jackpot;

writing data that indicates funding accumulation for the instance of the second progressive jackpot from the electronic wagering game machine based on the wager amount.

17. The machine-readable media of claim 15, wherein the automatically enrolling operation comprises:

writing data that associates the electronic wagering game machine with the instance of the progressive jackpot;

writing data that indicates funding of the instance of the progressive jackpot from the electronic wagering game machine based on the wager amount.

18. The machine-readable media of claim 17, wherein the operations further comprise writing data to reflect subsequent funding accumulation for the instance of the progressive jackpot from the electronic wagering gaming machine and from a second electronic wagering game machine.

19. The machine-readable media of claim 15, wherein the operations further comprise parsing a message with the data that indicates the wager amount, the electronic wagering game machine, and the wagering game.

20. The machine-readable media of claim 19, wherein the data of the message further indicates a paytable, a denomination, and a game theme.

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