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Smurfit et al.

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(54) **NETWORK GAMING SYSTEM AND CASINO MANAGEMENT SYSTEM LINK**

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(73) Assignee: **GameAccount Network PLC**, London (GB)

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(51) **Int. Cl.**
G06F 17/00 (2006.01)

(52) **U.S. Cl.**
USPC **463/42**

(58) **Field of Classification Search**
USPC 463/16–25, 40–42
See application file for complete search history.

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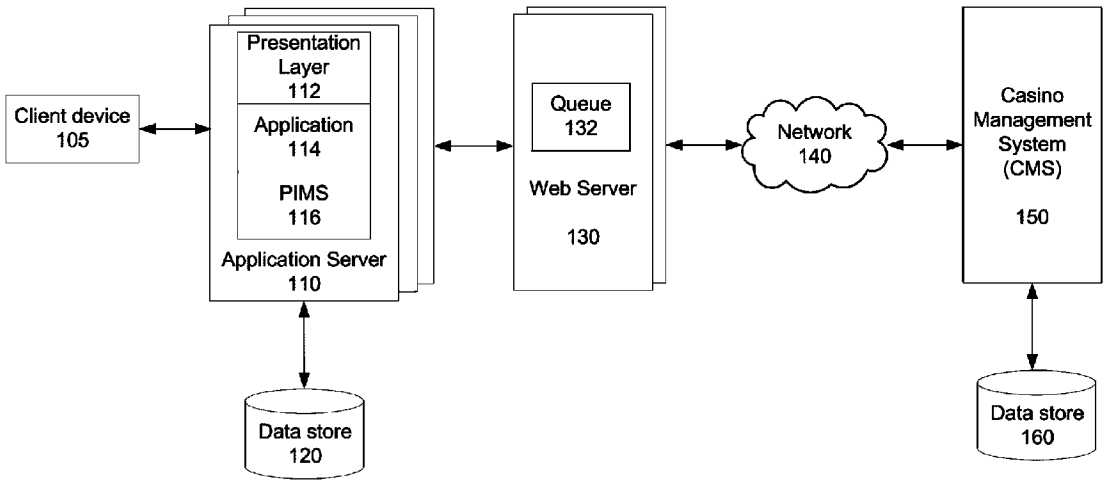
(57) **ABSTRACT**

A network (e.g., Internet) based gaming system and one or more casino management systems (CMS) are connected to manage patron data, loyalty programs, and other data. The connection may be implemented as an abstracted integration. As such, the connection mechanism may be used to connect the network based gaming system to a variety of proprietary and other CMS types. The connection mechanism may be synchronous, such as for example via a web service using XML over SOAP, or asynchronous, such as for example using a message sender/listener system such as system-2-system (S2S).

20 Claims, 9 Drawing Sheets



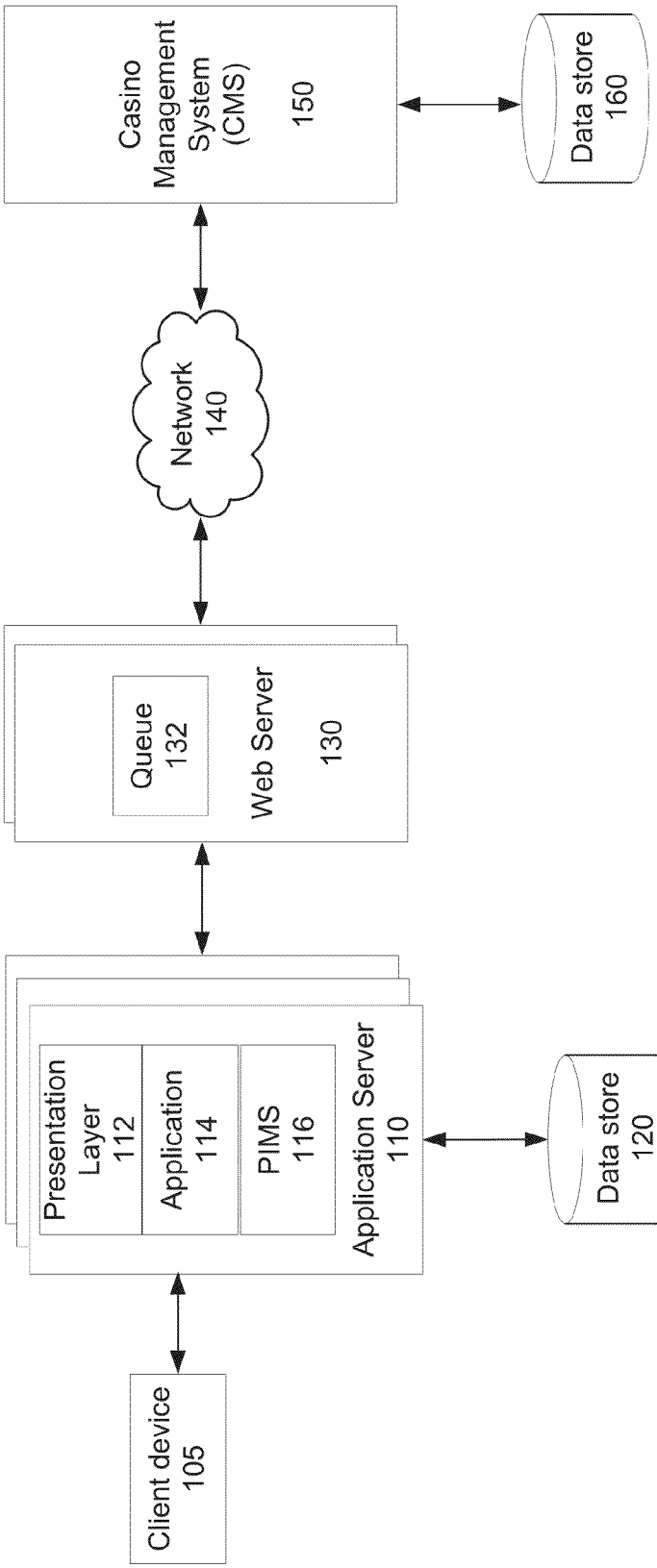

Casino Management System (CMS) 150
Data store 160
Network 140
Queue 132
Web Server 130
Presentation Layer 112
Application 114
PIMS 116
Application Server 110
Data store 120
Client device 105

FIGURE 1

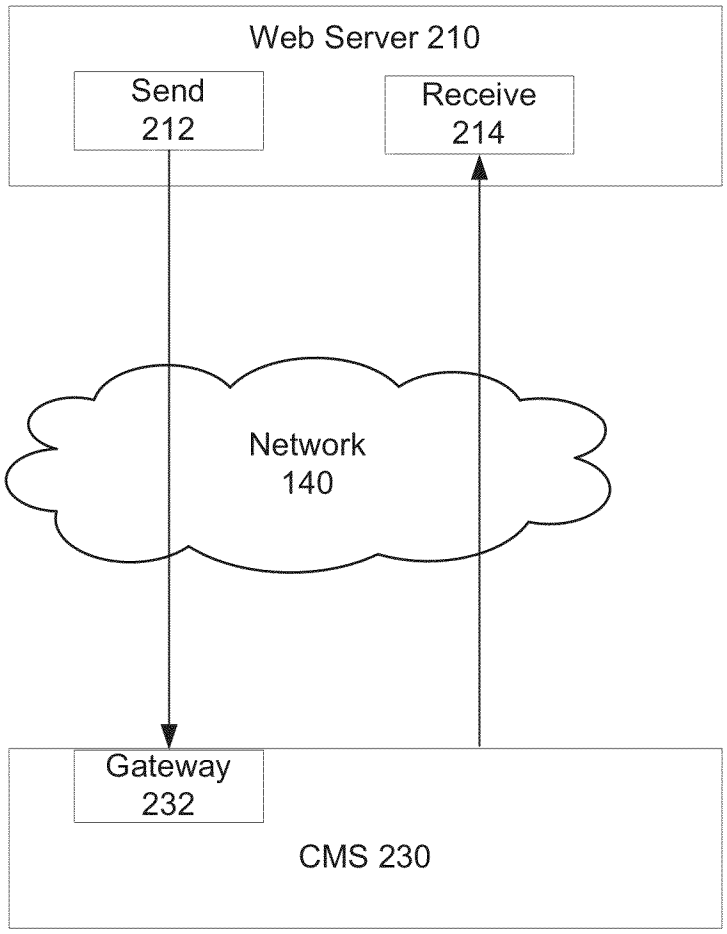

Web Server 210
Send
212
Receive
214
Network
140
Gateway
232
CMS 230

FIGURE 2

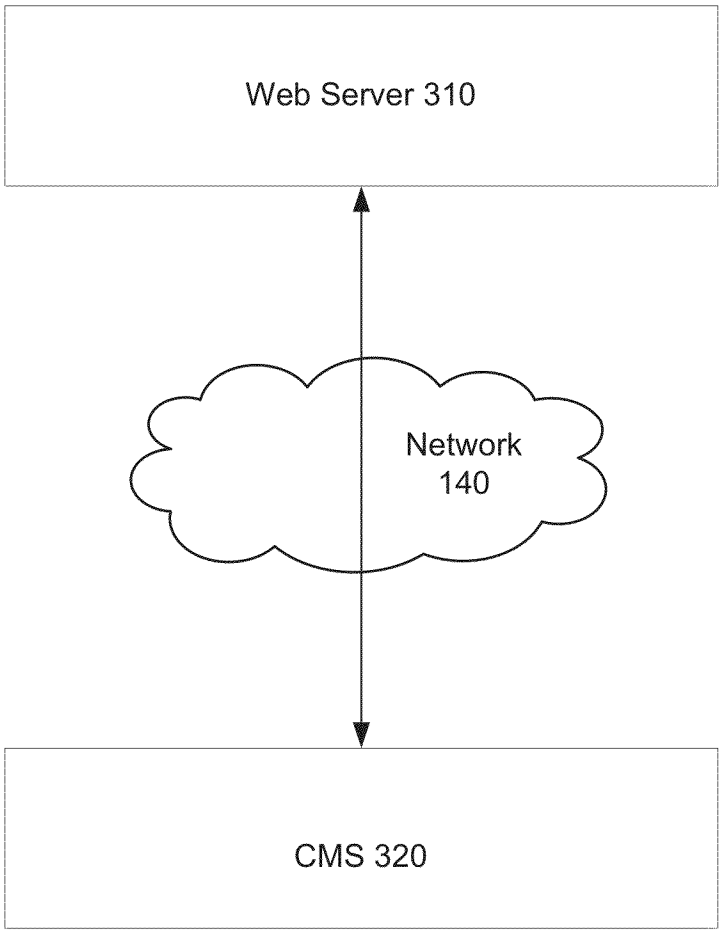


FIGURE 3

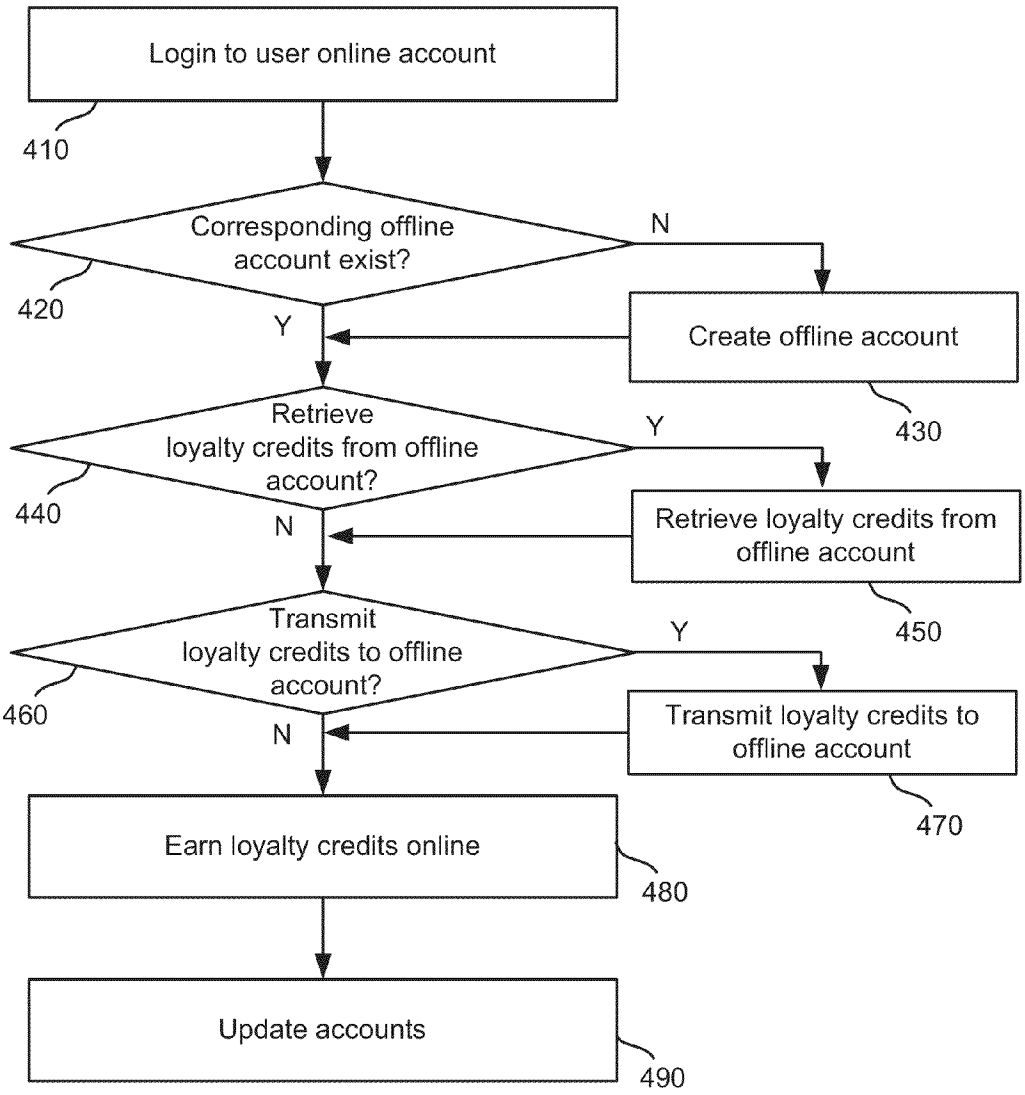

Login to user online account
410
Corresponding offline account exist?
420
N
Y
Create offline account
430
Retrieve loyalty credits from offline account?
440
Y
N
Retrieve loyalty credits from offline account
450
Transmit loyalty credits to offline account?
460
Y
N
Transmit loyalty credits to offline account
470
Earn loyalty credits online
480
Update accounts
490

FIGURE 4

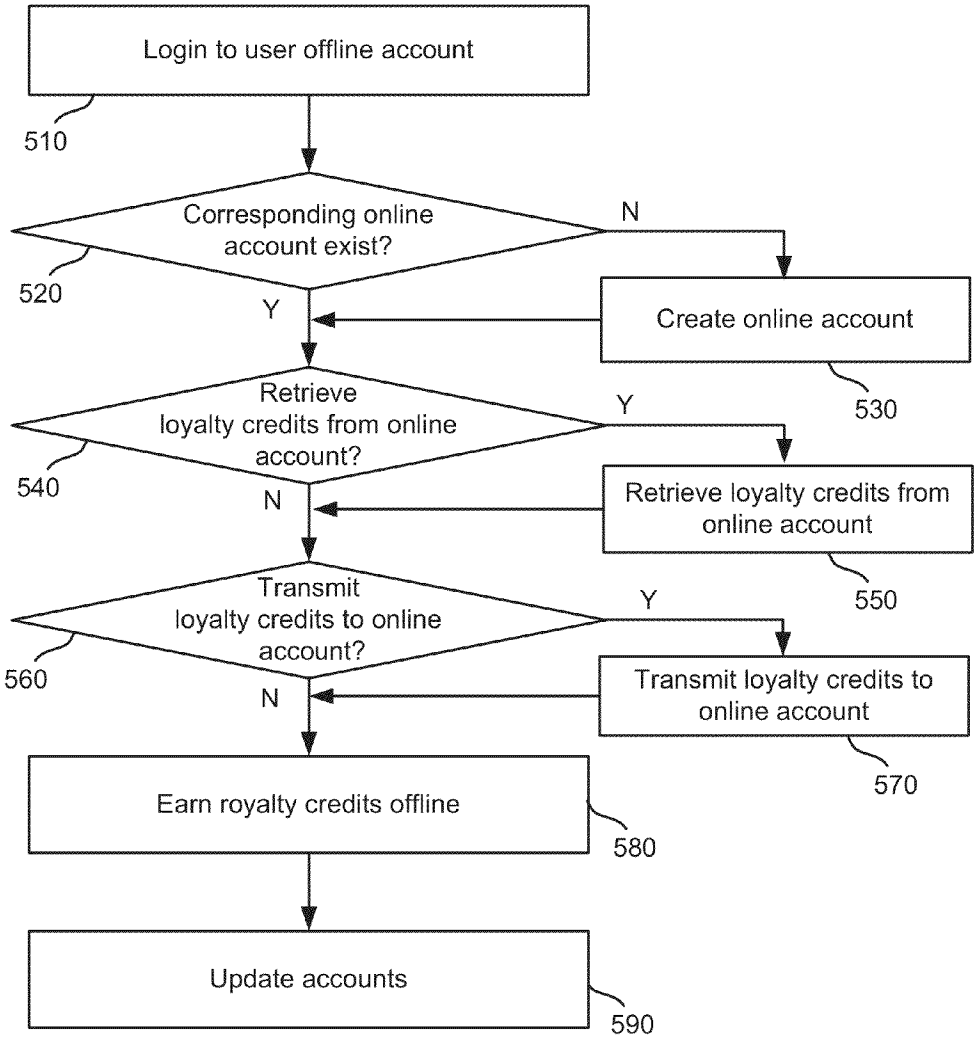

Login to user offline account
510
Corresponding online account exist?
520
N
Y
Create online account
530
Retrieve loyalty credits from online account?
540
Y
N
Retrieve loyalty credits from online account
550
Transmit loyalty credits to online account?
560
Y
N
Transmit loyalty credits to online account
570
Earn royalty credits offline
580
Update accounts
590

FIGURE 5

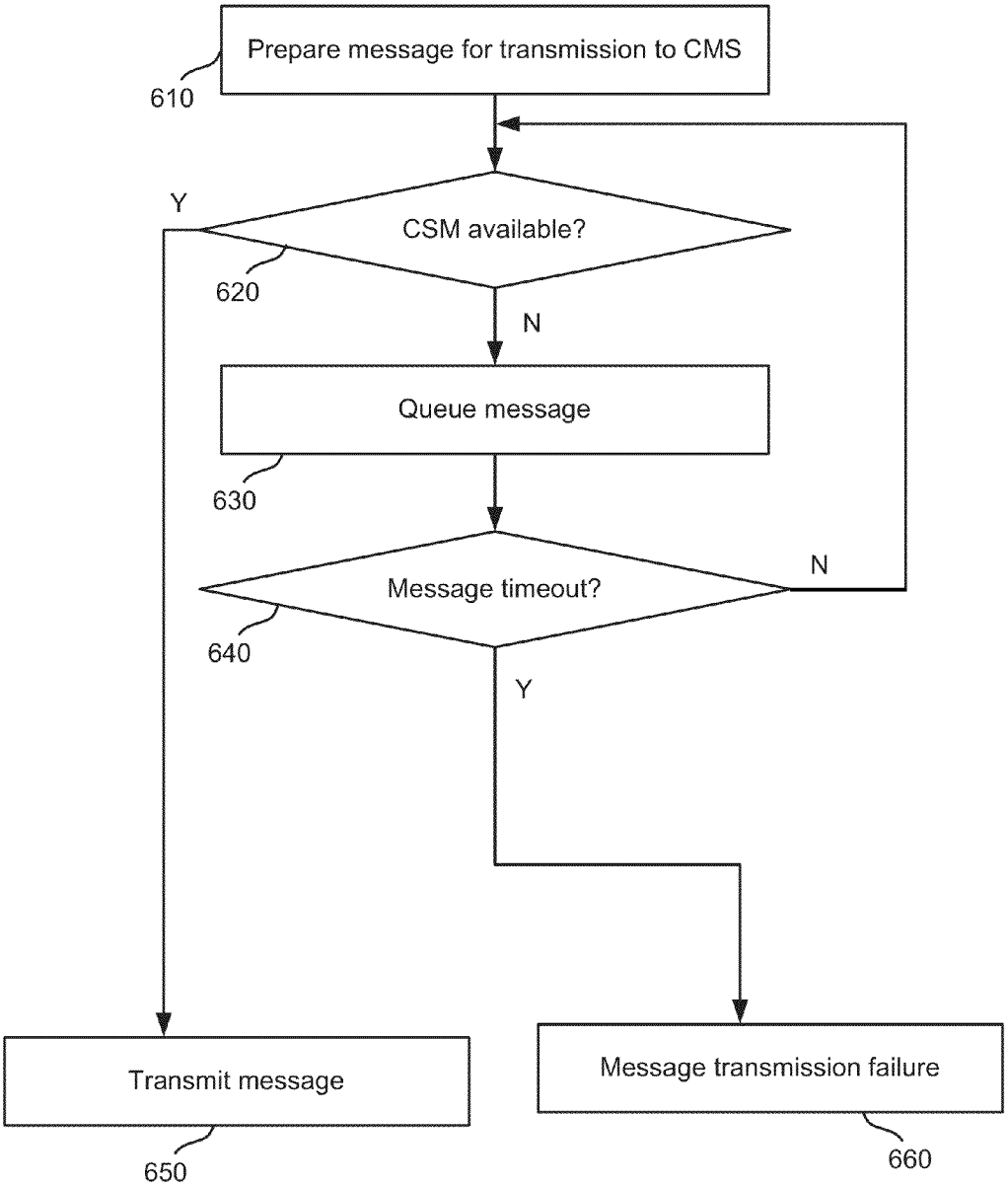

Prepare message for transmission to CMS
610
CSM available?
Y
620
N
Queue message
630
Message timeout?
N
640
Y
Transmit message
650
Message transmission failure
660

FIGURE 6

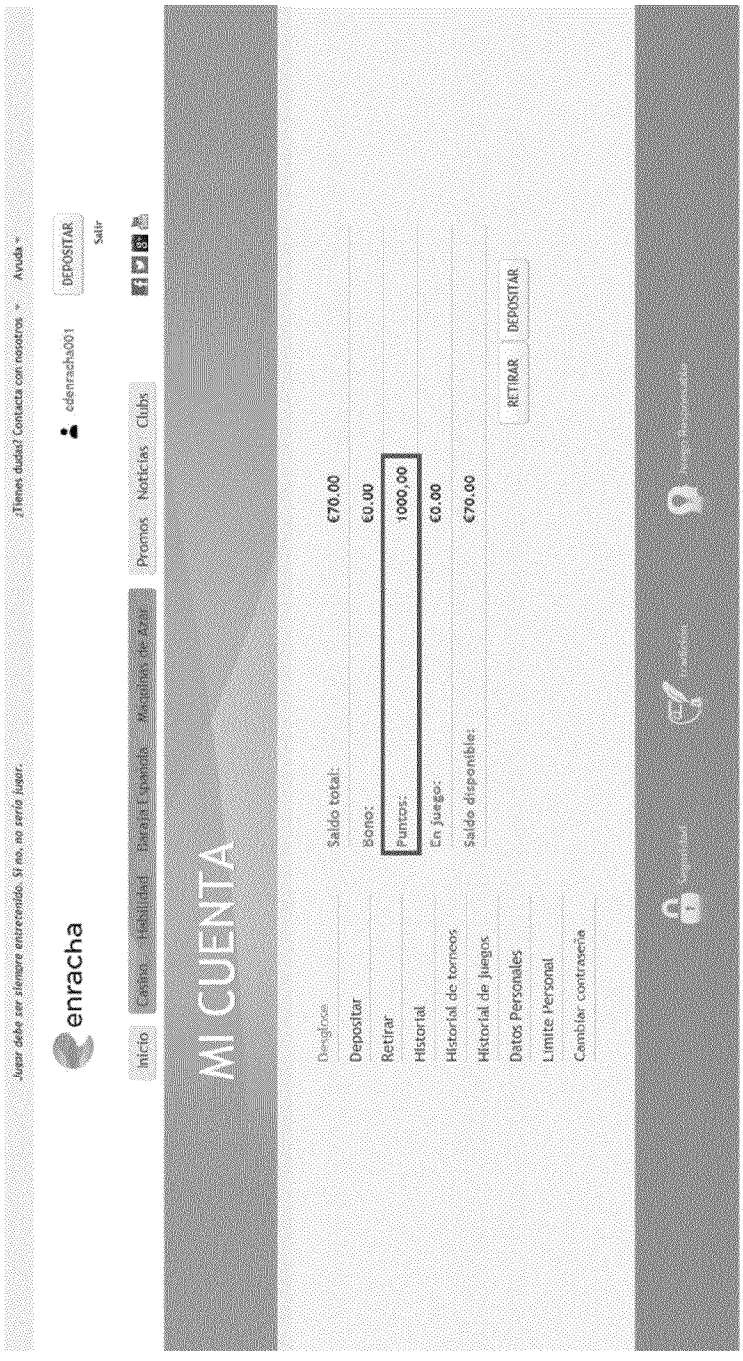

Jugar debe ser siempre entretenido. Si no, no sería lúdor.
¿Tienes dudas? Contacta con nosotros
Ayuda
enracha
cdenracha001
DEPOSITAR
Salir
Inicio
Casino
Habilidad
Bingo
Juegos de Azar
Promos
Noticias
Clubs
MI CUENTA
Depósitos
Depositar
Retirar
Historial
Historial de torneos
Historial de juegos
Datos Personales
Límite Personal
Cambiar contraseña
Saldo total:
€70.00
Bono:
€0.00
Puntos:
1000,00
En juego:
€0.00
Saldo disponible:
€70.00
RETIRAR
DEPOSITAR
Navegación
Inicio
Juegos A-Z
Mapa Web
Nosotros
Quienes Somos
Privacidad
Contacto
Email
Chat
Call
Normas
Normas de Conducta
Términos y Condiciones
Juego Responsable

FIGURE 7

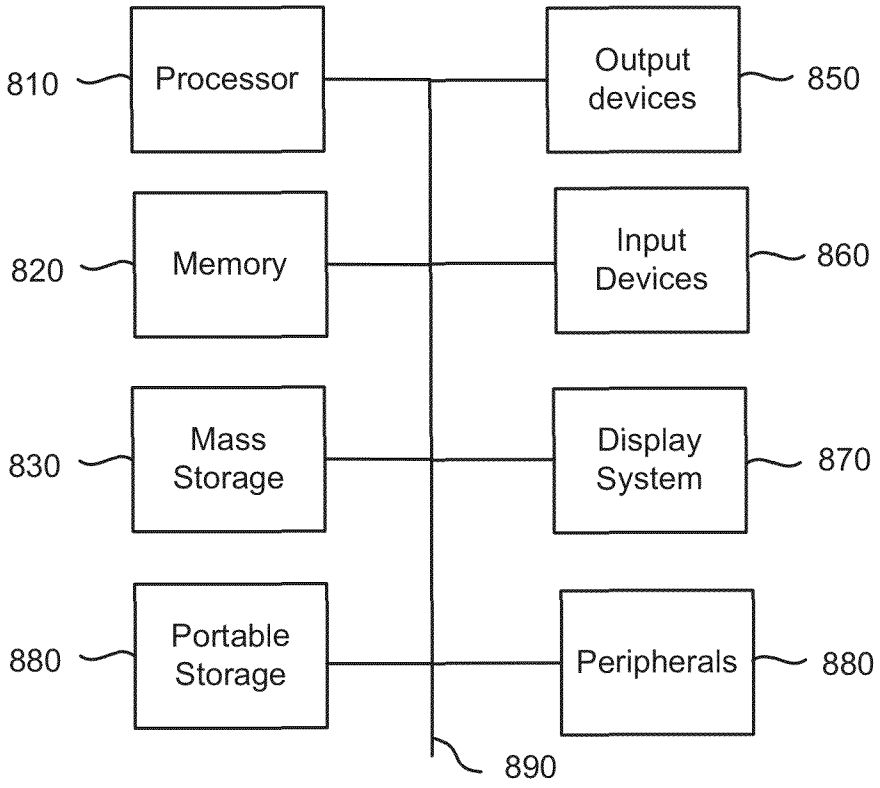

810
Processor
820
Memory
830
Mass Storage
880
Portable Storage
Output devices
850
Input Devices
860
Display System
870
Peripherals
880
890

FIGURE 8

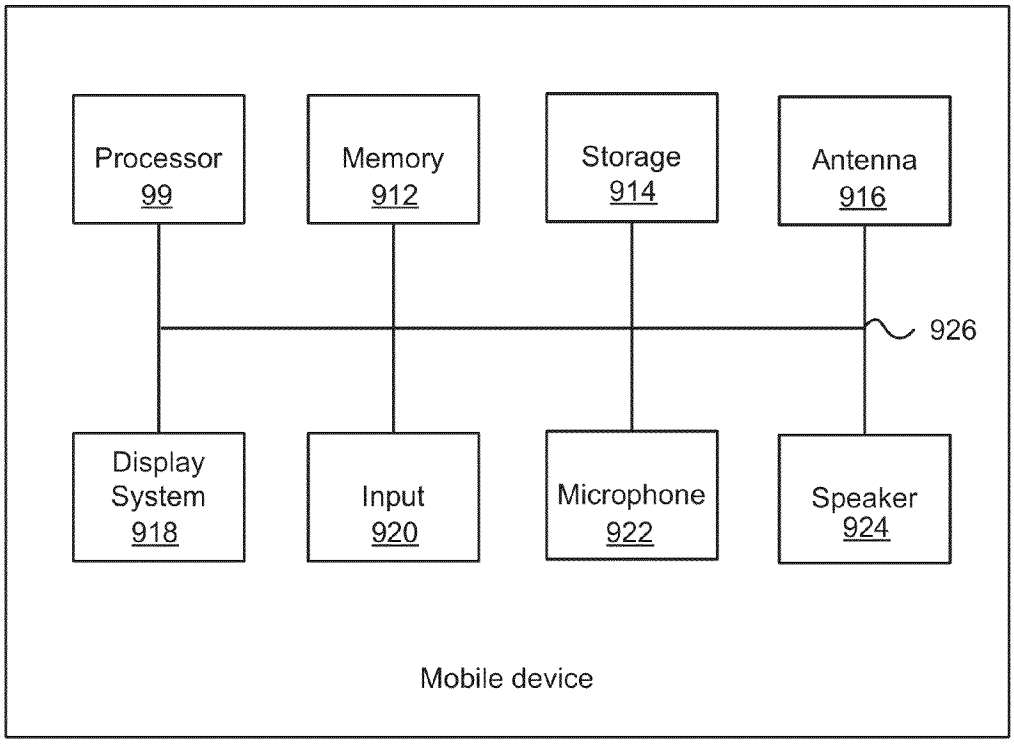

Processor
99
Memory
912
Storage
914
Antenna
916
926
Display
System
918
Input
920
Microphone
922
Speaker
924
Mobile device

FIGURE 9

NETWORK GAMING SYSTEM AND CASINO MANAGEMENT SYSTEM LINK

CROSS-REFERENCE TO RELATED APPLICATIONS

This application claims the priority benefit of U.S. Provisional Application Ser. No. 61/816,125, titled "Network Gaming System and Casino Management System Link," filed Apr. 25, 2013, the disclosure of which is incorporated herein by reference.

BACKGROUND

Casinos have existed for decades and are very popular. Casinos typically offer games of chance for patrons who wish to gamble. Often times, casinos may offer a reward or loyalty program to patrons. As a patron spends more money at a casino, that casino may offer points, perks, or other credits to the patron. Casino loyalty programs are typically managed by an offline system that tracks where a user has been, what a user has done, and the credits available to the user.

Online gaming has gained in popularity in recent years. Online gaming allows users in many locations to participate in gaming in an online environment. Each user may login to the online service, access their user account, and participate in the online gaming provided by a particular service provider.

Casino loyalty programs and online gaming services are two separate entities with no way to communicate with each other. They are typically owned and operated by separate entities. What is needed is an improved manner for enjoying a combined online gaming experience and an offline casino loyalty program.

SUMMARY

The present technology connects a network (e.g., Internet) based gaming system and one or more casino management systems (CMS) for managing patron data, loyalty programs, and other data. The connection may be implemented as an abstracted integration. As such, the connection mechanism may be used to connect the network based gaming system to a variety of proprietary and other CMS types. The connection mechanism may be synchronous, such as for example via a web service using XML over SOAP, or asynchronous, such as for example using a message sender/listener system such as system-2-system (S2S).

In an embodiment, a method may for communicating player information may begin with accessing user login information for an online gaming service. Patron account information may be accessed from a casino loyalty system. The patron may be associated with the user. Information may be communicated between a server providing the online gaming service and a device associated with the casino loyalty system.

A system for communicating player information may include a server, a management system and one or more modules. The server may provide a web-based gaming service to a first player. The server may have access to a first account associated with the web-based gaming service for the first player. The management system may manage a reward for the first player and may be associated with a gaming facility. The management system may have access to a second account associated with the management system for the first player. The one or more modules may be stored on a second server and executed by a processor to communicate data between the first server and the management system.

BRIEF DESCRIPTION OF DRAWINGS

FIG. **1** illustrates a system for linking a network gaming service to a casino management system.

FIG. **2** illustrates a system for providing asynchronous communication between a network gaming system and a casino management system.

FIG. **3** illustrates a system for providing synchronous communication between a network gaming system and a casino management system.

FIG. **4** is a method for accessing an offline loyalty program from an online gaming account.

FIG. **5** is a method for accessing an online gaming account from an offline loyalty program.

FIG. **6** is a method for communicating between an online gaming account and an offline casino management system.

FIG. **7** is an interface for an online gaming account.

FIG. **8** illustrates an exemplary computing system that may be used to implement a computing device for use with the present technology.

FIG. **9** illustrates an exemplary mobile device that may be used to implement the present technology.

DETAILED DESCRIPTION

The present technology connects a network based gaming system and one or more casino management systems (CMS) for managing patron data, loyalty programs, and other data. The connection may be implemented as an abstracted integration. As such, the connection may be used to connect the network based gaming system to a variety of proprietary and other CMS types. The connection mechanism may be synchronous, such as for example via a web service using XML over SOAP, or asynchronous, such as for example using a message sender/listener system such as system-2-system (S2S).

The connection mechanism may utilize a persistent message store and queue technology, such as for example Apache ActiveMQ, to guarantee delivery to third party CMS systems. A proprietary integration may be utilized to handle the triggering of messages to a remote system and caching of responses, so that the solution is scalable and the results are available to any applications providing the network service.

The system may be used with a queuing mechanism so that, optionally, the system can be operated without the CMS needing to be online and available. The data may be queued and synchronized when the CMS becomes available

FIG. **1** illustrates a system for linking a network gaming service to a casino management system. The system of FIG. **1** includes application servers **110**, data store **120**, web server **130**, network **140**, casino management system **150**, and data store **160**. Application server **110** may include one or more executable modules which implement presentation layer **112**, applications **114**, and partner integration management system (PIMS) **116**.

Presentation layer **112** may provide content such as web pages over the Internet or other networks. The web pages may provide information to a user, for example through a web browser, and receive information from the user. A user at client device **105** may access the network service provided by application server **110** through a web page rendered at a web browser at client device **105**.

Data store **120** may store data for users having an account with the web service provided by application servers **110**. The

user account fields may include username, email, login information such as password, first and last name, birth date, address, city and state, promotional code information, phone number, marketing information, loyalty credit information, and other data. The user account may also include a user identifier for use by the web service, and may include a patron account identifier for referencing a corresponding patron account for the same individual with CMS **150**.

Applications **114** may include one or more modules which implement logic connecting the web-based network service of application server **110** and the land based system of CMS **150**. The logic may include accessing, managing and modifying a user account associated with the web based service, or accessing, managing and modifying a patron account associated with the land based service provided by CMS **150**.

PIMS **116** may generate requests to be sent to a particular CMS associated with a particular user. For example, applications **114** may request that PIMS **116** retrieve patron account information, access loyalty credits, or perform other actions with respect to CMS **150**. PIMS **116** may receive the abstract request from application **114**, determine the communication preference of the particular CMS associated with the user associated with the request, and instruct web server **130** to submit a request to the CMS associated with the user of the web service.

Web server **130** may be implemented as one or more machines configured to send and receive messages over the Internet or other network (collectively displayed as network **140**). The messages to transmit (and received messages) may be provided by PIMS **116** via an SSL connection, VPN or other connection.

Web server **130** may include queue **132**. Messages to be sent to CMS **150** may be queued in queue **132** before they are sent over network **140** to CMS **150**. In some embodiments, if a CMS **150** is not available, a message to be sent may be stored in queue **132** until the CMS is determined to be available.

Network **140** may be implemented as the Internet. In embodiments, network **140** may be implemented as one or more private networks, public network, local area networks, wide area networks, the Internet, an intranet, a wireless network, a cellular network, and/or a combination of these networks.

CMS **150** may implement a management system for a land-based casino or other gaming facility. CMS **150** may implement and provide communications between different aspects of the casino, such as gaming machines, accounting, reservations, patron account creation and management, and other casino operations. Examples of different types of CMS communications are discussed in more detail below with respect to FIGS. **2-3**.

Data store **180** may store data for patrons having an account with the land-based casino associated with CMS **150**. Each patron account may include fields for a patron of the casino. The patron account fields may include username, email, login information such as password, first and last name, birth date, address, city and state, promotional code information, phone number, marketing information, loyalty credit information, and other data. The patron account may include a patron account identifier, as well as a user account number for an individual's account with the web based gaming service.

The mechanism for linking a web-based system and land-based casino system is extensible, and may include functionality such as creating patron accounts for a land-based CMS, retrieving patron information from land-based CMS, querying loyalty points for a patron, merging multiple patron records in the internet-based system once notified by CMS, and updating patrons in the internet-based system and CMS.

In some embodiments, an exemplary workflow of the present technology may proceed as follows. A customer may register online via the internet-based system. The system may then look up the customer in the CMS via the present technology. If they already exist, a patron number will be returned and tagged to the player in the internet-based system. If the player does not exist in the CMS that matches the received registration information, a new patron is created and a new patron ID is returned to the internet-based system.

In embodiments, the CMS may transmit the internet-based system a list of all player accounts which it considers to be duplicates and require merging. The internet-based system will keep a backup of these patrons and merge them together based on the CMS instructions. The merging may occur based on an event or request, or occur periodically, such as twice a day.

In embodiments, upon login, if a player has an existing CMS Patron ID (e.g., has an account with a land-based casino), the internet-based system will request the current loyalty points balance for the player. This will be then be returned and cached by the internet-based system and shown on Account Management/Balance pages for the player.

FIG. **2** illustrates a system for providing asynchronous communication between a network gaming system and a casino management system. Web server **210**, which may be part of the web-based gaming system of FIG. **1** (e.g., web server **130**), may communicate asynchronously with CMS **230** over network **140**, which may be implemented as the Internet. Web server **210** may include a send module **212** and a receive module **214**. Send module **212** may be implemented as one or more executable modules for transmitting a message to a CMS **230**. A message may be transmitted by send module **212** over the Internet via a transport mechanism such as XML. In embodiments, each message may be transmitted to gateway **232**. The gateway may receive communications in the form of an S2S protocol.

CMS **2230** may send messages to receive module **214**. The messages sent to receive module **214** may be sent asynchronously with respect to send module **212**. For example, send module **212** may transmit a request to gateway **232** of CMS **230**. Subsequently, CMS may send a message to receive module **214** without any reference to the received message. As such, receive module **214** may 'listen' for incoming messages as a service implemented separately from the message transmission service provided by send module **212**.

FIG. **3** illustrates a system for providing synchronous communication between a network gaming system and a casino management system. FIG. **3** includes a web server **310** and a CMS **320** communicating over network **140**, which may be implemented as the Internet. The web service may be coded in WSDL and may form a connection with CMS **320** using an SSL connection, VPN connection, or other connection. The messages transmitted between web server **310** and CMS **320** are synchronized, such that for each request transmitted a corresponding response is transmitted in return. The messages may be sent in SOAP, XML and HTTP protocols.

FIG. **4** is a method for accessing an offline loyalty program from an online gaming account. The method of FIG. **4** may be implemented by one or more applications on an application server such as application server **110**. A user may login to an online account at step **410**. User login may include providing a username and password through a computing device, which transmits the received login information to a remote server. The remote server may confirm the login information

matches stored login information (or create a new account for the user) and provide an online gaming service to the user.

A determination may be made as to whether an offline account exists for the user at step **420**. For example, the online service may prompt the user to provide input to the online service with login information for the offline service, such as a patron identifier, username or password. If the user does have an offline account with a casino, the user login information for the offline casino is received from the user and the method continues to step **460**. If the user does not have an offline account with a particular casino, a patron account with the offline casino is created at step **430**. The offline account may be created based on the user contact information stored with the online account. The method of FIG. **4** may then continue to step **440**.

A determination may be made as to whether loyalty credits from the offline account should be retrieved at step **440**. A user may have loyalty credits for use as a patron of the casino that the user may use with the online account. If no loyalty credits should be retrieved, the method continues to step **460**. If loyalty credits should be retrieved, the loyalty credits are retrieved at step **450**. To retrieve the loyalty credits, the online service may contact the CMS system with the patron identifier and any required login information. The online service may first determine how many credits are available, and may then retrieve a number of available credits. In some instances, the online service may provide the user with the number of available credits, and then retrieve a number of available credits based on user input. In embodiments, a message from the online service to the CMS system may be queued if the CMS is not available. Transmission and queuing of messages from the online service to the CMS is discussed in more detail with respect to the method of FIG. **6**.

A determination may be made as to whether loyalty credits should be transferred from the online account to the offline account at step **450**. A user may have loyalty credits as a user of the online service which may be used as a patron of the casino. If no loyalty credits should be transferred, the method continues to step **480**. If loyalty credits should be transferred, the loyalty credits are transferred at step **470**. To transfer the loyalty credits, the online service may contact the CMS system with the patron identifier and any required login information. The online service may then determine how many credits are available and transmit a number of the available credits, based on user input.

A user may earn more loyalty credits online at step **480**. The user may earn loyalty credits or other credits by participating in the gaming service. For example, a user may earn a loyalty point for each $10 wagered in a game provided by the online gaming service. When a user terminates an online gaming session, the online gaming account and corresponding offline account may be updated at step **490**. The account update may include the number and type of games played, the loyalty points earned, and other data.

FIG. **5** is a method for accessing an online gaming account from an offline loyalty program. The method of FIG. **5** may be implemented by CMS **150** of the system of FIG. **1**. A patron may login to an offline account at step **510**. Patron login may include providing a patron name and password, an identifier, a gaming card, or other data input to a gaming machine in a casino, which transmits the received login information to a CMS. The CMS may confirm the login information matches stored login information (or create a new account for the patron) and provide the user with actual money credit and loyalty credits on the gaming device used by the patron.

A determination may be made as to whether an online account exists for the patron at step **520**. For example, an offline casino gaming device may prompt the patron to provide input to the offline service with login information for the offline service, such as a user identifier, user name or password. If the patron does have an online account with an online gaming service, the user login information for the online gaming service is received from the patron and the method continues to step **540**. If the patron does not have an online account with an online gaming service provider, a user account with the online gaming service is created at step **530**. The online account may be created based on the patron contact information stored with the offline account. The method of FIG. **5** may then continue to step **540**.

A determination may be made as to whether loyalty credits from the online account should be retrieved by the CMS at step **540**. A patron may have loyalty credits for use as a user of the online gaming service that the patron may use with the offline account. If no loyalty credits should be retrieved, the method continues to step **560**. If loyalty credits should be retrieved, the loyalty credits are retrieved from the online gaming service at step **550**. To retrieve the loyalty credits, the offline service may contact the online gaming service server with user login information. The offline service may first determine how many credits are available with the user's account of the online gaming service and may then retrieve a number of available credits. In embodiments, a message from the offline CMS to the online gaming service may be queued if the online service is not available. Transmission and queuing of messages from the offline CMS to the online gaming service is discussed in more detail with respect to the method of FIG. **6**.

A determination may be made as to whether loyalty credits should be transferred from the offline CMS to the online gaming service at step **550**. A patron may have loyalty credits as a patron of the casino facility which may be used as a user of the online gaming service. If no loyalty credits should be transferred, the method continues to step **580**. If loyalty credits should be transferred, the loyalty credits are transferred at step **570**. To transfer the loyalty credits, the offline CMS may contact the online gaming service with the user login information. The offline CMS may then determine how many credits are available and transmit a number of the available credits, based on patron input.

A patron may earn more loyalty credits at the casino at step **580**. The patron may earn loyalty credits or other credits by participating in the casino games and other activities at the casino. For example, a patron may earn a loyalty point for each $10 wagered in a casino game. When a patron stops playing a casino game, the offline account and corresponding online gaming service may be updated at step **590**. The account update may include the number and type of games played, the loyalty points earned, and other data.

FIG. **6** is a method for communicating between an online gaming account and an offline casino management system. The method of FIG. **6** may be performed at least in part by queue **132** of web server **130** of FIG. **1**. Though message transmission from an online gaming service to a CMS is discussed with reference to FIG. **6**, it is within the scope of the present invention to implement a similar queuing system for messages sent from CMS to an online gaming service.

A message for transmission to a CMS is prepared at step **610**. A determination is then made as to whether the CMS is available at step **620**. The CMS availability may be determined by pinging the CMS or sending some other message to the CMS to determine if CMS response indicates it is available to receive a message. If the CMS response indicates it is available to receive a message, the message may be sent to the CMS at step **650**.

If the CMS response indicates the CMS is not available, the message may be queued at step **630**. A determination may be made at step **640** as to whether the queued message has timed out. A message may have a particular time out period associated with the message, and different messages may have a different time out period. For example, a message requesting special offers offered by a particular casino may have a longer timeout period than a message requesting confirmation of a patron account. In some instances, a message may not be queued at all, for example if the message is related to a transmission of financial data—the effective timeout would be immediately. If a message timeout has expired, then the message transmission is a failure at step **660**. If the message timeout has not expired, the method returns to step **620** to again determine if the CMS is available.

FIG. **7** is an interface for an online gaming account. The interface of FIG. **6** provides a content page which confirms that a user having an account with an online gaming service also has an account with an offline casino. The portion of the interface highlighted by the rectangular box indicates that the user of the online service has 1000 loyalty points with a particular casino that are accessible from the online service.

FIG. **8** illustrates an exemplary computing system **800** that may be used to implement a computing device for use with the present technology. System **800** of FIG. **8** may be implemented in the contexts of the likes of application server **110**, data stores **120** and **160**, web server **130** and machines of CMS **150**. The computing system **800** of FIG. **8** includes one or more processors **810** and memory **820**. Main memory **820** stores, in part, instructions and data for execution by processor **810**. Main memory **820** can store the executable code when in operation. The system **800** of FIG. **8** further includes a mass storage device **830**, portable storage medium drive(s) **840**, output devices **850**, user input devices **860**, a graphics display **870**, and peripheral devices **880**.

The components shown in FIG. **8** are depicted as being connected via a single bus **890**. However, the components may be connected through one or more data transport means. For example, processor unit **810** and main memory **820** may be connected via a local microprocessor bus, and the mass storage device **830**, peripheral device(s) **880**, portable storage device **840**, and display system **870** may be connected via one or more input/output (I/O) buses.

Mass storage device **830**, which may be implemented with a magnetic disk drive or an optical disk drive, is a non-volatile storage device for storing data and instructions for use by processor unit **810**. Mass storage device **830** can store the system software for implementing embodiments of the present invention for purposes of loading that software into main memory **820**.

Portable storage device **840** operates in conjunction with a portable non-volatile storage medium, such as a floppy disk, compact disk or Digital video disc, to input and output data and code to and from the computer system **800** of FIG. **8**. The system software for implementing embodiments of the present invention may be stored on such a portable medium and input to the computer system **800** via the portable storage device **840**.

Input devices **860** provide a portion of a user interface. Input devices **860** may include an alpha-numeric keypad, such as a keyboard, for inputting alpha-numeric and other information, or a pointing device, such as a mouse, a trackball, stylus, or cursor direction keys. Additionally, the system **800** as shown in FIG. **8** includes output devices **850**. Examples of suitable output devices include speakers, printers, network interfaces, and monitors.

Display system **870** may include a liquid crystal display (LCD) or other suitable display device. Display system **870** receives textual and graphical information, and processes the information for output to the display device.

Peripherals **880** may include any type of computer support device to add additional functionality to the computer system. For example, peripheral device(s) **880** may include a modem or a router.

The components contained in the computer system **800** of FIG. **8** are those typically found in computer systems that may be suitable for use with embodiments of the present invention and are intended to represent a broad category of such computer components that are well known in the art. Thus, the computer system **800** of FIG. **8** can be a personal computer, hand held computing device, telephone, mobile computing device, workstation, server, minicomputer, mainframe computer, or any other computing device. The computer can also include different bus configurations, networked platforms, multi-processor platforms, etc. Various operating systems can be used including Unix, Linux, Windows, Macintosh OS, Palm OS, and other suitable operating systems.

FIG. **9** illustrates an exemplary mobile device that may be used to implement the present technology, such as for example a client device **105** implemented as a smart phone, tablet computer or other mobile device. The mobile device **900** of FIG. **9** includes one or more processors **910** and memory **912**. Memory **912** stores, in part, programs, instructions and data for execution and processing by processor **910**. The system **900** of FIG. **9** further includes storage **914**, one or more antennas **916**, a display system **918**, inputs **920**, one or more microphones **922**, and one or more speakers **924**.

The components shown in FIG. **9** are depicted as being connected via a single bus **926**. However, the components **910-1024** may be connected through one or more data transport means. For example, processor unit **910** and main memory **912** may be connected via a local microprocessor bus, and storage **914**, display system **918**, input **920**, and microphone **922** and speaker **924** may be connected via one or more input/output (I/O) buses.

Memory **912** may include local memory such as RAM and ROM, portable memory in the form of an insertable memory card or other attachment (e.g., via universal serial bus), a magnetic disk drive or an optical disk drive, a form of FLASH or PROM memory, or other electronic storage medium. Memory **912** can store the system software for implementing embodiments of the present invention for purposes of loading that software into main memory **910**.

Antenna **916** may include one or more antennas for communicating wirelessly with another device. Antenna **916** may be used, for example, to communicate wirelessly via Wi-Fi, Bluetooth, with a cellular network, or with other wireless protocols and systems. The one or more antennas may be controlled by a processor **910**, which may include a controller, to transmit and receive wireless signals. For example, processor **910** execute programs stored in memory **912** to control antenna **916** transmit a wireless signal to a cellular network and receive a wireless signal from a cellular network.

Display system **918** may include a liquid crystal display (LCD), a touch screen display, or other suitable display device. Display system **970** may be controlled to display textual and graphical information and output to text and graphics through a display device. When implemented with a touch screen display, the display system may receive input and transmit the input to processor **910** and memory **912**.

Input devices **920** provide a portion of a user interface. Input devices **960** may include an alpha-numeric keypad,

such as a keyboard, for inputting alpha-numeric and other information, buttons or switches, a trackball, stylus, or cursor direction keys.

Microphone **922** may include one or more microphone devices which transmit captured acoustic signals to processor **910** and memory **912**. The acoustic signals may be processed to transmit over a network via antenna **916**.

Speaker **924** may provide an audio output for mobile device **900**. For example, a signal received at antenna **916** may be processed by a program stored in memory **912** and executed by processor **910**. The output of the executed program may be provided to speaker **924** which provides audio. Additionally, processor **910** may generate an audio signal, for example an audible alert, and output the audible alert through speaker **924**.

The mobile device system **900** as shown in FIG. **9** may include devices and components in addition to those illustrated in FIG. **9**. For example, mobile device system **900** may include an additional network interface such as a universal serial bus (USB) port.

The components contained in the computer system **900** of FIG. **9** are those typically found in mobile device systems that may be suitable for use with embodiments of the present invention and are intended to represent a broad category of such mobile device components that are well known in the art. Thus, the computer system **1000** of FIG. **10** can be a cellular phone, smart phone, hand held computing device, minicomputer, or any other computing device. The mobile device can also include different bus configurations, networked platforms, multi-processor platforms, etc. Various operating systems can be used including Unix, Linux, Windows, Macintosh OS, Google OS, Palm OS, and other suitable operating systems.

The foregoing detailed description of the technology herein has been presented for purposes of illustration and description. It is not intended to be exhaustive or to limit the technology to the precise form disclosed. Many modifications and variations are possible in light of the above teaching. The described embodiments were chosen in order to best explain the principles of the technology and its practical application to thereby enable others skilled in the art to best utilize the technology in various embodiments and with various modifications as are suited to the particular use contemplated. It is intended that the scope of the technology be defined by the claims appended hereto.

What is claimed is:

1. A method for communicating loyalty credit information, comprising:

accessing account information for a user's first account with an online gaming service, the user's first account associated with first loyalty credits;

accessing account information for a user's second account with a casino management system, the user's second account associated with second loyalty credits; and

communicating loyalty credit information for the user between a server providing the online gaming service and machines providing the casino management system, wherein communicating loyalty credit information includes:

determining whether first loyalty credits from the user's first account are transferrable to the casino management system, and

transmitting a number of first loyalty credits from the user's first account with the online gaming service to the user's second account with the casino management system when it is determined that the first loyalty credits are transferrable to the casino management system, wherein the number of first loyalty credits transmitted is based on available first loyalty credits in the user's first account and user input.

2. The method of claim **1**, wherein accessing account information for a user's second account with a casino management system includes:

determining the user does not have a second account with the casino management system;

creating a second account with the casino management system for the user, wherein the user's second account is associated with a second loyalty credit; and

accessing the user's second account.

3. The method of claim **1**, wherein communicating loyalty credit information includes:

determining whether second loyalty credits from the user's second account are retrievable by the online gaming system, and

retrieving a number of second loyalty credits from the user's second account with the casino management system, the number of second loyalty credits received at the user's first account with the online gaming service, when it is determined that the second loyalty credits are retrievable by the online gaming system, wherein the number of second loyalty credits retrieved is based on available second loyalty credits in the user's second account and user input.

4. The method of claim **3**, wherein the second loyalty credits are retrievable by the online gaming service when the second loyalty credits are usable by the user in the user's first account with the online gaming service.

5. The method of claim **3**, wherein the online gaming service communicates user identification information to the casino management system before the second loyalty credits are retrieved, and wherein the user identification information is required by the casino management system.

6. The method of claim **1**, wherein the first loyalty credits are transferrable to the casino management system when the first loyalty credits are usable by the user in the user's second account with the casino management system.

7. The method of claim **1**, wherein communicating loyalty credit information further includes:

determining the casino management system is not available; and

queuing a message containing the loyalty credit information.

8. The method of claim **1**, wherein the second loyalty credits of the user's second account with the casino management system are displayed for the user in an interface provided by the online gaming system.

9. The method of claim **1**, further comprising communicating updated loyalty credit information for the user between the server providing the online gaming service and the machines providing the casino management system when the user earns additional loyalty credits.

10. The method of claim **1**, wherein the casino management system communicates user login information to the online gaming service before the first loyalty credits are transmitted, and wherein the user login information is required by the online gaming service.

11. A non-transitory computer readable storage medium having embodied thereon a program, the program being executable by a processor to perform a method for communicating loyalty credit information, the method comprising:

accessing account information for a user's first account with an online gaming service, the user's first account associated with first loyalty credits;

accessing account information for a user's second account with a casino management system, the user's second account associated with second loyalty credits; and

communicating loyalty credit information for the user between a server providing the online gaming service and machines providing the casino management system, wherein communicating loyalty credit information includes:

determining whether first loyalty credits from the user's first account are transferrable to the casino management system, and

transmitting a number of first loyalty credits from the user's first account with the online gaming service to the user's second account with the casino management system when it is determined that the first loyalty credits are transferrable to the casino management system, wherein the number of first loyalty credits transmitted is based on available first loyalty credits in the user's first account and user input.

12. The non-transitory computer readable storage medium of claim **11**, wherein accessing account information for a user's second account with a casino management system includes:

determining the user does not have a second account with the casino management system;

creating a second account with the casino management system for the user, wherein the user's second account is associated with a second loyalty credit, and accessing the user's second account.

13. The non-transitory computer readable storage medium of claim **11**, wherein communicating loyalty information includes:

determining whether second loyalty credits from the user's second account are retrievable by the online gaming system, and

retrieving a number of second loyalty credits from the user's second account with the casino management system, the number of second loyalty credits received at the user's first account with the online gaming service, when it is determined that the second loyalty credits are retrievable by the online gaming system, wherein the number of second loyalty credits retrieved is based on available second loyalty credits in the user's second account and user input.

14. The non-transitory computer readable storage medium of claim **13**, wherein the second loyalty credits are retrievable by the online gaming service when the second loyalty credits are usable by the user in the user's first account with the online gaming service.

15. The non-transitory computer readable storage medium of claim **11**, wherein the first loyalty credits are transferrable to the casino management system when the first loyalty credits are usable by the user in the user's second account with the casino management system.

16. The non-transitory computer readable storage medium of claim **11**, wherein communicating information further includes:

determining the casino management system is not available; and

queuing a message containing the loyalty credit information.

17. The non-transitory computer readable storage medium of claim **11**, wherein the second loyalty credits of the user's second account with the casino management system are displayed for the user in an interface provided by the online gaming system.

18. A system for communicating loyalty credit information, comprising:

a server providing a web-based gaming service to a user, the server having access to a user's first account with the web-based gaming service, the user's first account associated with first loyalty credits;

a management system that manages a reward for the user, the management system associated with a gaming facility and having access to a user's second account with the management system, the user's second account associated with second loyalty credits; and

one or more modules stored on a second server and executed by a processor to communicate loyalty credit information for the user between the first server and the management system, wherein communicating loyalty credit information includes:

determining whether first loyalty credits from the user's first account are transferrable to the management system, and

transmitting a number of first loyalty credits from the user's first account with the web-based gaming service to the user's second account with the management system when it is determined that the first loyalty credits are transferrable to the management system, wherein the number of first loyalty credits transmitted is based on available first loyalty credits in the user's first account and user input.

19. The system of claim **18**, wherein executing the one or more modules communicates loyalty credit information asynchronously between the first server and the management system.

20. The system of claim **18**, wherein executing the one or more modules communicates loyalty credit information synchronously between the first server and the management system.

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(12) EX PARTE REEXAMINATION CERTIFICATE (11071st)

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Smurfit et al.

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(54) **NETWORK GAMING SYSTEM AND CASINO MANAGEMENT SYSTEM LINK**

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G06F 17/00 (2006.01)
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(52) **U.S. Cl.**
CPC ***G07F 17/3255*** (2013.01)

(58) **Field of Classification Search**
None
See application file for complete search history.

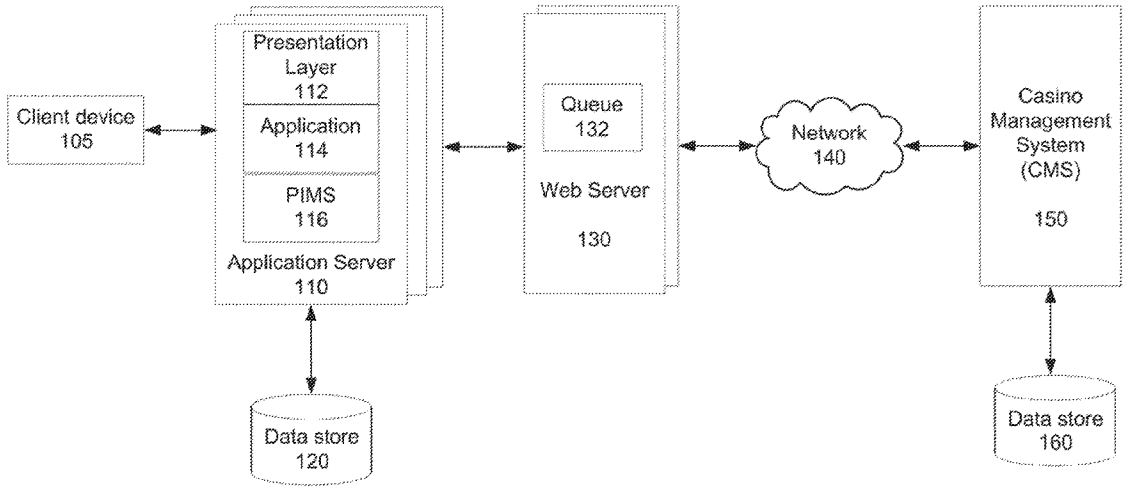
(56) **References Cited**

To view the complete listing of prior art documents cited during the proceeding for Reexamination Control Number 90/013,739, please refer to the USPTO's public Patent Application Information Retrieval (PAIR) system under the Display References tab.

Primary Examiner — Rachna Desai

(57) **ABSTRACT**

A network (e.g., Internet) based gaining system and one or more casino management systems (CMS) are connected to manage patron data, loyalty programs, and other data. The connection may be implemented as an abstracted integration. As such, the connection mechanism may be used to connect the network based gaming system to a variety of proprietary and other CMS types. The connection mechanism may be synchronous, such as for example via a web service using XML over SOAP, or asynchronous, such as for example using a message sender/listener system such as system-2-system (S2S).



EX PARTE REEXAMINATION CERTIFICATE

THE PATENT IS HEREBY AMENDED AS INDICATED BELOW.

Matter enclosed in heavy brackets [ ] appeared in the patent, but has been deleted and is no longer a part of the patent; matter printed in italics indicates additions made to the patent.

AS A RESULT OF REEXAMINATION, IT HAS BEEN DETERMINED THAT:

Claims **2** and **19-20** are cancelled.

Claims **1**, **11**, **13**, **17** and **18** are determined to be patentable as amended.

Claims **3-10**, **12** and **14-16**, dependent on an amended claim, are determined to be patentable.

New claims **21-22** are added and determined to be patentable.

1. A method for communicating loyalty credit information, comprising:

accessing account information for a user's first account with an online gaming service, the user's first account associated with first loyalty credits;

accessing account information for a user's second account with a casino management system, *comprising:*

determining, by an application server, the user does not have a second account with the casino management system;

upon determining, by the application server, that the user does not have a second account with the casino management system, creating, by the application server, a second account with the casino management system for the user, the user's second account associated with second loyalty credits; and

accessing the user's second account; and

communicating loyalty credit information for the user between a server providing the online gaming service and machines providing the casino management system, wherein communicating loyalty credit information includes:

determining whether first loyalty credits from the user's first account are transferrable to the casino management system, and

transmitting a number of first loyalty credits from the user's first account with the online gaming service to the user's second account with the casino management system when it is determined that the first loyalty credits are transferrable to the casino management system, wherein the number of first loyalty credits transmitted is based on available first loyalty credits in the user's first account and user input.

11. A non-transitory computer readable storage medium having embodied thereon a program, the program being executable by a processor to perform a method for communicating loyalty credit information, the method comprising:

accessing account information for a user's first account with an online gaming service, the user's first account associated with first loyalty credits;

accessing account information for a user's second account with a *particular* casino management system, the user's second account associated with second loyalty credits;

determining, by a partner integration management system, a communication preference of the particular casino management system based on an identity of the user; and

communicating loyalty credit information for the user between a server providing the online gaming service and machines providing the *particular* casino management system *according to the communication preference of the particular casino management system*, wherein communicating loyalty credit information includes:

determining whether first loyalty credits from the user's first account are transferrable to the *particular* casino management system, and

transmitting a number of first loyalty credits from the user's first account with the online gaming service to the user's second account with the *particular* casino management system when it is determined that the first loyalty credits are transferrable to the *particular* casino management system, wherein the number of first loyalty credits transmitted is based on available first loyalty credits in the user's first account and user input.

13. The non-transitory computer readable storage medium of claim **11**, wherein communicating loyalty information includes:

determining whether second loyalty credits from the user's second account are retrievable by the online gaming **[**system**]** *service*, and

retrieving a number of second loyalty credits from the user's second account with the casino management system, the number of second loyalty credits received at the user's first account with the online gaming service, when it is determined that the second loyalty credits are retrievable by the online gaming **[**system**]** *service*, wherein the number of second loyalty credits retrieved is based on available second loyalty credits in the user's second account and user input.

17. The non-transitory computer readable storage medium of claim **11**, wherein the second loyalty credits of the user's second account with the casino management system are displayed for the user in an interface provided by the online gaming **[**system**]** *service*.

18. A system for communicating loyalty credit information, comprising:

a *first* server providing a web-based gaming service to a user, the server having access to a user's first account with the web-based gaming service, the user's first account associated with first loyalty credits;

a *particular casino* management system that manages a reward for the user, the *particular casino* management system associated with a gaming facility and having access to a user's second account with the *particular casino* management system, the user's second account associated with second loyalty credits; **[**and**]**

a partner integration management system to determine a communication preference of the particular casino management system based on an identity of the user; and

one or more modules stored on a second server and executed by a processor to communicate loyalty credit information for the user between the first server and the *particular casino* management system *according to the communication preference of the particular casino management system*, wherein communicating loyalty credit information includes:

determining whether first loyalty credits from the user's first account are transferrable to the *particular casino* management system, and

transmitting a number of first loyalty credits from the user's first account with the web-based gaming service to the user's second account with the *particular casino* management system when it is determined that the first loyalty credits are transferrable to the *particular casino* management system, wherein the number of first loyalty credits transmitted is based on available first loyalty credits in the user's first account and user input.

21. The system of claim 18, wherein:

the partner integration management system determines a communication type used by the casino management system, the communication type being asynchronous or synchronous,

the one or more modules are configured to communicate asyncronously or synchronously, and

transmitting the loyalty credits is transmitting asynchronously when it is determined that the communication type is asynchronous, and transmitting the loyalty credits is transmitting synchronously when it is determined that the communication type is synchronous.

22. The system of claim 21, wherein the one or more modules comprise:

a send module configured to send messages to the casino management system when it is determined that the communication type is asynchronous;

a receive module configured to send messages to the casino management system when it is determined that the communication type is asynchronous; and

a synchronous module configured to transmit a message to the casino management system and receive a corresponding response from the casino management system when the communication type is synchronous.

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