ABSTRACT

A gaming system server, the server arranged to receive
terminal data from a player operable terminal and
5   determine whether the terminal data includes at least one
of game play data and lottery data, the server comprising:
a game module which operates in response to a
determination that the terminal data includes game play
data to generate server game data based on the game play
10   data for transmission to the player operable terminal; a
lottery module which operates in response to a
determination that the terminal data includes lottery data
to generate a lottery entry; and a communication module
arranged to communicate the lottery entry to an
15   independent lottery system in a form compatible with the
lottery system, receive a receipt from the lottery system
for the lottery entry, and associate the receipt with the
terminal.

AUSTRALIA

Patents Act 1990

COMPLETE SPECIFICATION

Standard Patent

Applicant:

Aristocrat Technologies Australia Pty Limited

Invention Title:

A GAMING SYSTEM SERVER

The following statement is a full description of this invention, including the best method for performing it known to me/us:

A GAMING SYSTEM SERVER

Field

5   The present invention relates generally to a gaming system server.

Background

10   Currently, client/server gaming systems are proposed which enable clients to access games hosted by proprietary game servers.

Summary of the Invention

15

The invention provides a gaming system server, the server arranged to receive terminal data from a player operable terminal and determine whether the terminal data includes at least one of game play data and lottery data, the
20   server comprising:

a game module which operates in response to a determination that the terminal data includes game play data to generate server game data based on the game play data for transmission to the player operable terminal;

25   a lottery module which operates in response to a determination that the terminal data includes lottery data to generate a lottery entry; and

a communication module for communicating the lottery entry to an independent lottery system in a form
30   compatible with the lottery system, receiving a receipt from the lottery system for the lottery entry, and associating the receipt with the terminal.

In an embodiment, the server associates the receipt with a
35   terminal by associating the receipt with a player of the terminal.

In an embodiment, the gaming system server comprises an determination module for conducting the determination.

In an embodiment, the determination module selectively activates the lottery module or the game module in dependence on whether game play data or lottery data is included in the terminal data.

In an embodiment, the gaming system server is arranged to communicate with a plurality of player operable terminals and process terminal data from each player terminal to determine whether the terminal data includes game play data or lottery data.

In an embodiment, the server comprises a plurality of computers and the communication module is implemented by a computer which is separate to the computer or computers which implement the game play module and the lottery module.

In an embodiment, the gaming system server comprises a processor and a tangible memory accessible by the processor to enable the processor to execute computer program instructions stored therein for the game play module, the lottery module and the communications module.

The invention also provides a method in a gaming system, comprising:

receiving terminal data from a player operable terminal at a gaming server and determining whether the terminal data includes at least one of game play data and lottery data, the server comprising:

operating a game module of the game server in response to a determination that the terminal data includes game play data to generate server game data based on the game play data for transmission to the player operable terminal;

operating a lottery module of the game server in response to a determination that the terminal data includes lottery data to generate a lottery entry;

communicating the lottery entry from the game server to an independent lottery system in a form compatible with the lottery system;

receiving a receipt at the game server from the lottery system for the lottery entry; and

associating the receipt with the terminal.

In an embodiment, the method comprises associating the receipt with a terminal by associating the receipt with a player of the terminal.

In an embodiment, the method comprises selectively activating the lottery module or the game module in dependence on whether game play data or lottery data is included in the terminal data.

The invention also provides program code which when executed implements the method.

The invention also provides a tangible computer readable medium comprising the computer program code.

Brief Description of Accompanying Drawings

The invention is further explained by means of the following non-limiting examples and in conjunction with the accompanying drawings, in which:

Figure 1 shows schematically an embodiment of a client-server based gaming system with a plurality of gaming terminals in accordance with an embodiment of the invention;

Figure 2 is a block diagram of further components of a

gaming system; and

Figure 3 is a functional block diagram of certain
components of a gaming system.

5

Detailed Description of Embodiments of the Invention

Figure 1 shows schematically a gaming system 1 with a
plurality of gaming terminals GT1, GT2…GTn 101, where the
10   number n is arbitrary. Each gaming terminal 101 is
equipped with a player interface having a display screen
and input means comprised of one or more input devices,
such as a touch screen, and client game program code which
implements a number of functions when executed as
15   described in further detail below including communicating
via a network, in the form of Internet 103, with a server
102 to seek to establish a gaming session with a game
module on server 102. The server 102 is also arranged to
communicate with an external lottery system 104 via the
20   Internet 103.

The gaming system 1 according to the present embodiment is
based on a client/server architecture where the game
software is divided into a client game module and a server
25   game module. In order to run a game the client game
module must be associated with, and use functions
available at, a server game module. When a game is played
via a client gaming terminal 101, a game session is
established and game session data is generated in the
30   course of the game. Each game session has a specific
identity and is assigned a game session identify code.
The game session data is stored in the game server
database associated with the game session identity code.

35   Figure 2 shows schematically a client and server based
computerised gaming system in further detail with a client
gaming terminal 101 and a server 102 that are

communicatively coupled. The gaming terminal 101 and the
server 102 are provided with data processors, memory, data
communications interfaces, control programs, user
input/output interfaces etc as is known in the art.

5 Different functions and features that are specific to the
preferred embodiment are preferably realised by software
computer program code executed by data processors in the
server and in the client respectively, or by employing
specifically designed electronic components, or by means

10 of combinations of software and electronic components. In
the example of Figure 2, there is only a single client
gaming terminal 101 but of course a number of client
gaming terminals 101 are normally connected to a server
102 as shown in Figure 1. In this context a server 204

15 generally means hardware and software units in a central
system that provide server functions, database functions
and other centralized functions to connectable client
gaming terminals 101.

20 The server 102 is provided with an application program
interface, in short called server API 206, enabling
communication between a server module of a specific game
application program 208 and general server gaming
functions 210,212,214,216 installed on the server 102.

25 The general server gaming functions are provided to be
available for any specific game application program
independently of the specific game content. These general
server gaming functions are typically functions such as a
database 210, a random number generator 212, an account

30 service function 214, a log service function 216, or other
functions that can be beneficially shared and used by
different specific game application programs.

The client gaming terminal 101 is also provided with an
35 application program interface, "client API" 220, enabling
communication between a client game module 218 of the
specific game application program and general client

gaming functions 222,224,226,228 installed on the client
gaming terminal 101 and used by different client game
modules. The general client gaming functions are designed
for assisting in implementing and executing a specific
5   game on the client gaming terminal 101 and are available
for the client game module 218. These general client
gaming functions are, in different embodiments, a
selection of a graphical user interface (GUI) 222, a
cashbox function 224, a sound function 226, user input
10 interface function, for example buttons 228, data storage
229, a printer 203, a bar code reader 233 and other
functions that are related to the performance of a game.
The client game module 218 is communicatively coupled to
the corresponding server game module 208 for communicating
15 requests 209 and responses 211 in order to utilize the
general gaming functions provided in the server. For each
game a message protocol for communication between the
client module and the server module is generated, the
protocol is for example based on XML and is shared by the
20 client 101 and the server 102.

A specific game application program thus comprises a
server game module 208 and a client game module 218 that
communicate either directly or via an application program
25 interface on the client side and the server side
respectively as shown in Fig 2. The client game module
218 uses a selection of general client gaming functions
that are available in the client gaming terminal 101,
whereas the server module 208 uses a selection of general
30 server gaming functions 210,212,214,216 that are commonly
used by different game applications and that are provided
and available centrally in the server 204 in database 210.
Further details of a server gaming architecture can be
found in WO 2006/052213 and PCT/SE2006/000559, the
35 disclosures of which are incorporated herein by reference.

Establishment of the gaming session involves the gaming

server loading the relevant server module, and providing
(if necessary) the relevant client module to the client
gaming terminal 101.

5   In the embodiment, there are a plurality of modules
provided in the client and the server such that the player
can play game and the same time purchase a lottery ticket.
That is, during a break in play of a game or while the
game doesn't require player interaction such as during a
10 free game feature, the player can purchase a lottery
ticket at the terminal 101.

The arrangement is illustrated in Figure 3 where it will
be apparent that the game server which otherwise operates
as indicated in Figure 2 has both a client lottery module
15 350 and a game module 218. Accordingly, in use, the
gaming client 101 is operated by the player to enter
instructions for play of the game or to enter instructions
for purchase of a lottery ticket. These instructions are
20 formatted and sent to the server as terminal data.

The gaming server is advantageously arranged to determine
with determination module 310 whether terminal data it
receives contains instructions for either play of a game,
25 in which case the server game module 208, or instructions
for entry in a lottery 330, in which case it invokes the
lottery module 330. The lottery module 330 formulates the
numbers received from the player as part of the terminal
data and generates a lottery entry. It then passes this
30 lottery entry to an external communication module 340
which implements a wrapper function, which adds address
information and an identifier compatible with the external
lottery system before communication with the lottery
system 104 over network 103. The external communication
35 module 340 (or the lottery module 330) stores data in the
lottery database 360 linking the communication with the
external lottery system to make the lottery entry to the

lottery terminal for which the lottery entry was
generated. The data linking the entry to the terminal can
be, for example, a session identifier. This enables the
external communication module 360, upon receipt of a
5   receipt generated by the lottery system 104 for the
lottery entry, to pass the receipt to the correct terminal
where it can be printed by the player.

Persons skilled in the art will appreciate that while in
10   the above described embodiment, there is a single
communication between lottery module 330 and the client
350 and the lottery module 330 in the server 330 in order
to generate the data for an entry, there may, in practice
be multiple communications.

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Further, embodiments are envisaged where part of the
communication may be to load the lottery module onto the
client 101. Still further, it may be the case that only
one of the lottery module 330 or the game server module
20   208 is active within the server 102 at any one time and
the determination module 310 determines which of these to
activate.

Persons skilled in the art, will appreciate from the above
25   description of the system that the invention may be
further embodied as a method. It will be appreciated that
at least part of the method will be implemented digitally
by a processor. Persons skilled in the art will also
appreciate that the method could be implemented by
30   providing program code. The program code could be
supplied in a number of ways, for example on a tangible
computer readable storage medium, such as a disc or a
memory (for example, that could replace part of memory
103) or as a data signal (for example, by transmitting it
35   from a server). Persons skilled in the art, will
appreciate that program code provides a series of
instructions executable by the processor.

Herein the term "processor" is used to refer generically to any device that can process computer readable instructions and may include: a microprocessor,
5   microcontroller, programmable logic device or other computational device, a general purpose computer (e.g. a PC) or a server. That is a processor may be provided by any suitable logic circuitry for receiving inputs, processing them in accordance with instructions stored in
10   memory and generating outputs (for example on the display). Such processors are sometimes also referred to as central processing units (CPUs). Most processors are general purpose units, however, it is also know to provide a specific purpose processor using an application specific
15   integrated circuit (ASIC) or a field programmable gate array (FPGA).

In the claims which follow and in the preceding description of the invention, except where the context
20   requires otherwise due to express language or necessary implication, the word "comprise" or variations such as "comprises" or "comprising" is used in an inclusive sense, i.e. to specify the presence of the stated features but not to preclude the presence or addition of further
25   features in various embodiments of the invention.

CLAIMS:

1.   A gaming system server, the server arranged to
receive terminal data from a player operable terminal and
5   determine whether the terminal data includes at least one
of game play data and lottery data, the server comprising:
        a game module which operates in response to a
determination that the terminal data includes game play
data to generate server game data based on the game play
10   data for transmission to the player operable terminal;
        a lottery module which operates in response to a
determination that the terminal data includes lottery data
to generate a lottery entry; and
        a communication module arranged to communicate
15   the lottery entry to an independent lottery system in a
form compatible with the lottery system, receive a receipt
from the lottery system for the lottery entry, and
associate the receipt with the terminal.

20   2.   A gaming system server as claimed in claim 1, wherein
the server associates the receipt with a terminal by
associating the receipt with a player of the terminal.

3.   A gaming system server as claimed in claim 1 or claim
25   2, comprising a determination module for conducting the
determination.

4.   A gaming system server as claimed in claim 3, wherein
the determination module selectively activates the lottery
30   module or the game module in dependence on whether game
play data or lottery data is included in the terminal
data.

5.   A gaming system server as claimed in any one of
35   claims 1 to 4, arranged to communicate with a plurality of
player operable terminals and process terminal data from
each player terminal to determine whether the terminal

data includes game play data or lottery data.

6.   A gaming system server as claimed in any one of
claims 1 to 5, wherein the server comprises a plurality of
5   computers and the communication module is implemented by a
computer which is separate to the computer or computers
which implement the game play module and the lottery
module.

10   7.   A gaming system server as claimed in any one of
claims 1 to 6, comprising a processor and a tangible
memory accessible by the processor to enable the processor
to execute computer program instructions stored therein
for the game play module, the lottery module and the
15   communications module.

8.   A method in a gaming system, comprising:
        receiving terminal data from a player operable
terminal at a gaming server and determining whether the
20   terminal data includes at least one of game play data and
lottery data, the server comprising:
        operating a game module of the game server in
response to a determination that the terminal data
includes game play data to generate server game data based
25   on the game play data for transmission to the player
operable terminal;
        operating a lottery module of the game server in
response to a determination that the terminal data
includes lottery data to generate a lottery entry;
30   communicating the lottery entry from the game server
to an independent lottery system in a form compatible with
the lottery system;
        receiving a receipt at the game server from the
lottery system for the lottery entry; and
35   associating the receipt with the terminal.

9.   A method as claimed in claim 8, comprising

associating the receipt with a terminal by associating the receipt with a player of the terminal.

10. A method as claimed in claim 8 or claim 9, comprising selectively activating the lottery module or the game module in dependence on whether game play data or lottery data is included in the terminal data.

11. Computer program code which when executed implements the method of any one of claims 8 to 10.

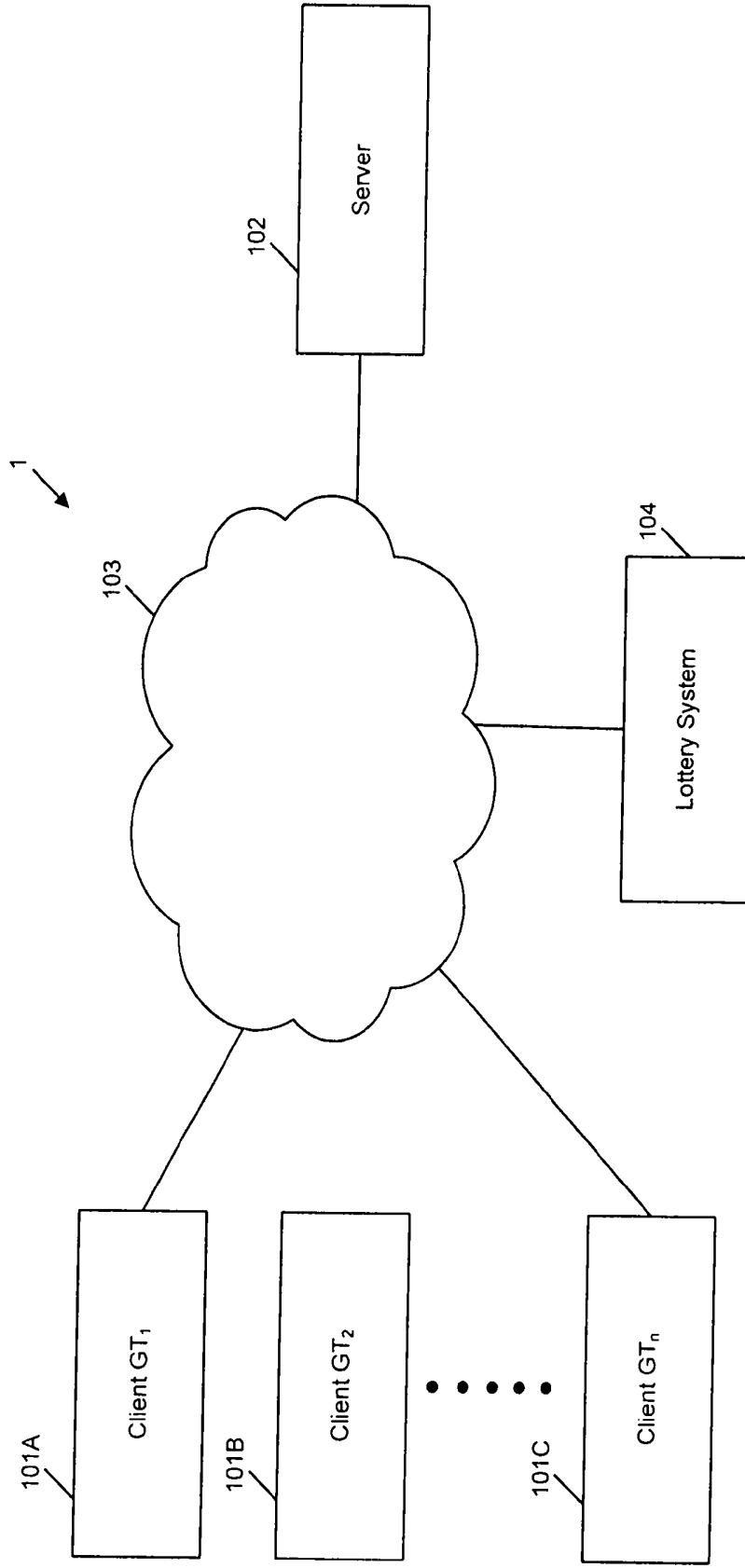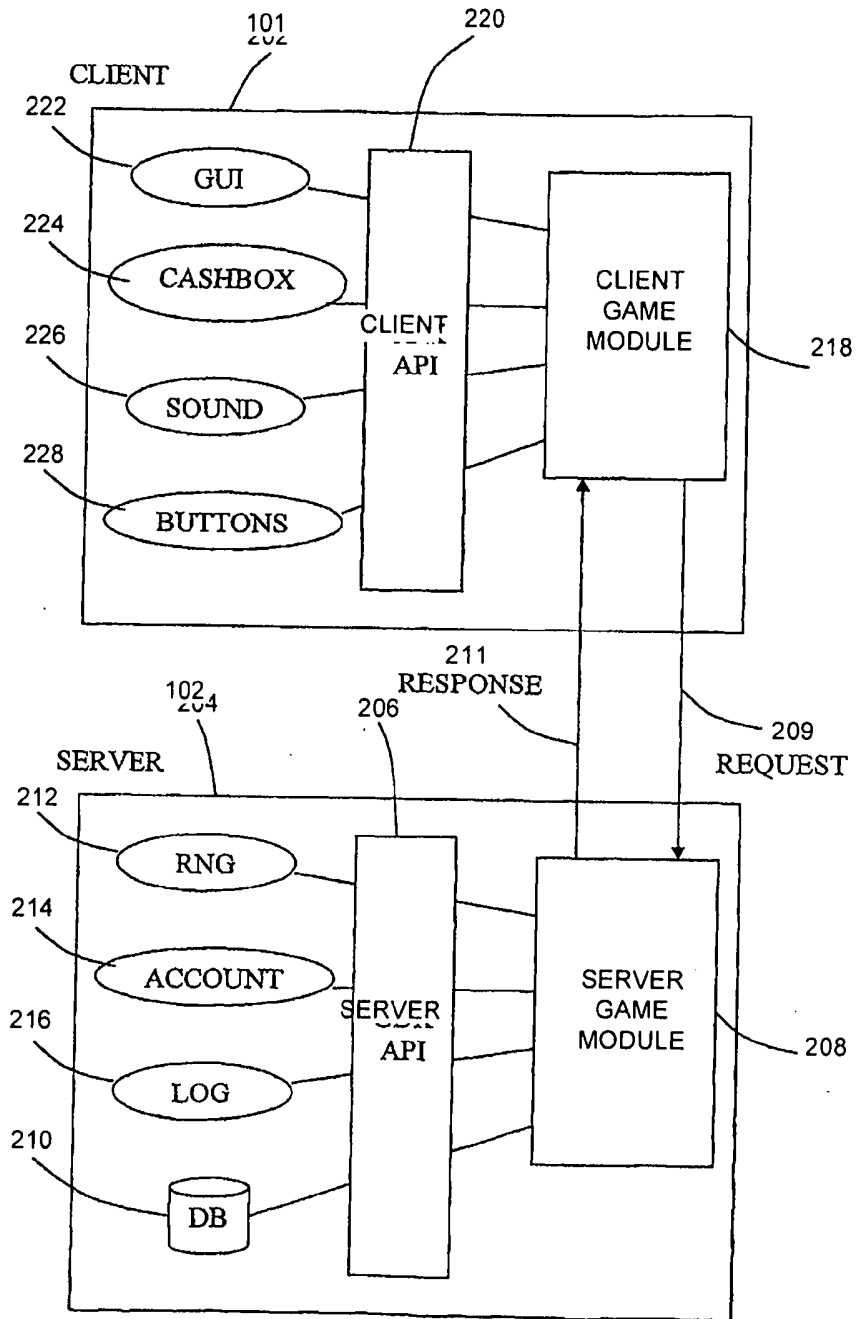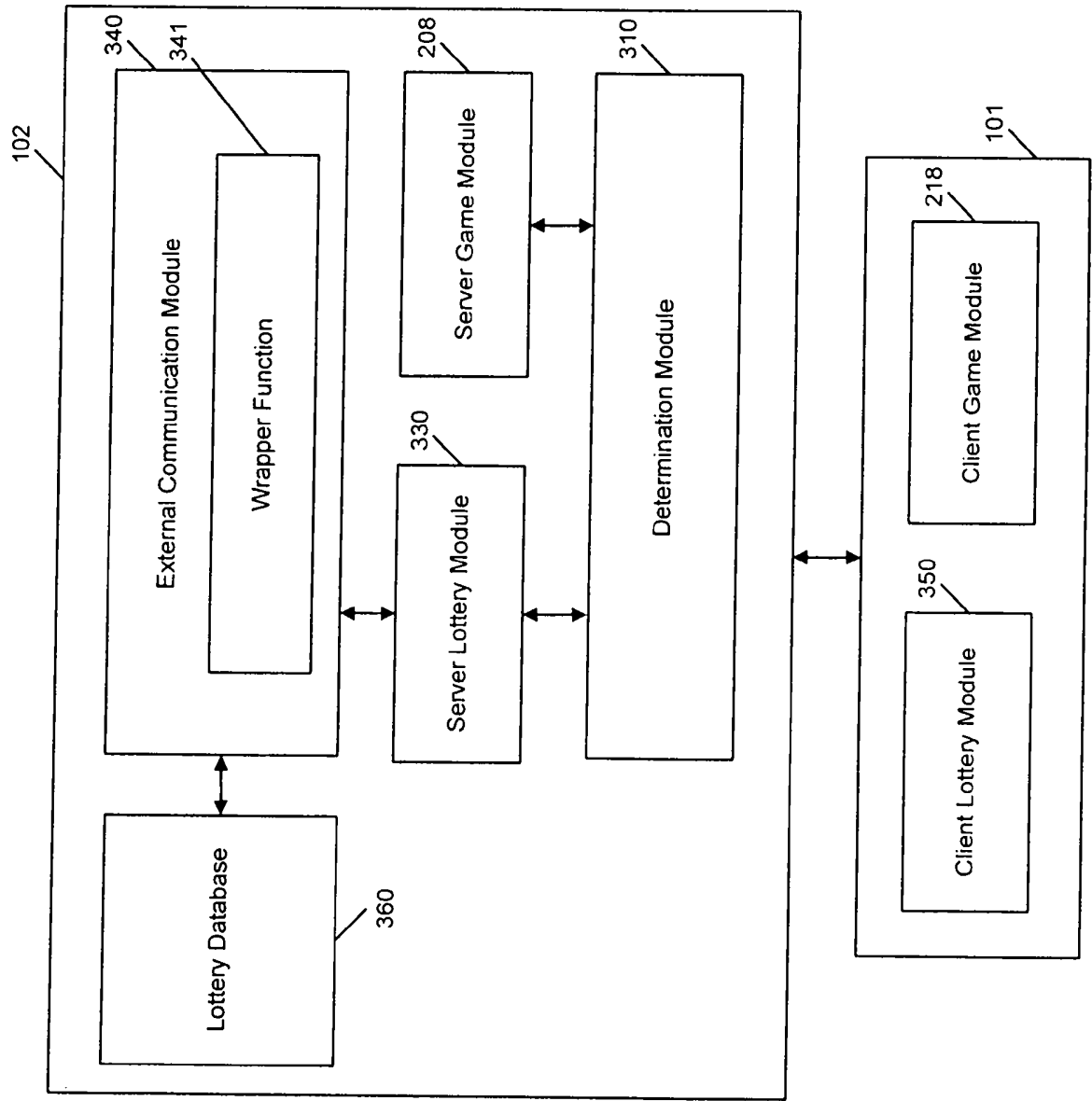12. A tangible computer readable medium comprising the computer program code of claim 11.

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102   Server

103

104   Lottery System

101A   Client GT$_1$

101B   Client GT$_2$

101C   Client GT$_n$

Figure 1

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Figure 2

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Figure 3

102

External Communication Module

340
341

Wrapper Function

208

Server Game Module

330

Server Lottery Module

310

Determination Module

Lottery Database

360

101

218

Client Game Module

350

Client Lottery Module