

(19)



Octrooi Centrum  
Nederland

(11)

**2011307**

(12) **C OCTROOI**

(21) Aanvraagnummer: **2011307**

(51) Int.Cl.:  
**G07F 17/32** (2006.01)

(22) Aanvraag ingediend: **15.08.2013**

(43) Aanvraag gepubliceerd:  
-

(47) Octrooi verleend:  
**26.02.2015**

(45) Octrooischrift uitgegeven:  
**04.03.2015**

(73) Octrooihouder(s):  
**Won in a Million Pty Ltd.  
te Toorak, Australië (AU).**

(72) Uitvinder(s):  
**Victor Susman te Toorak (AU).  
Kennedy Baker te Bend of Islands (AU).  
Benjamin Canaider te Malvern (AU).**

(74) Gemachtigde:  
**Dr. R. Jorritsma c.s. te Den Haag.**

(54) **Method and system for determining a winner of a lottery.**

(57) There is disclosed a computer-implemented method of determining a winner of a lottery, including: (i) generating data representing tickets purchased by users, said data including, for each ticket, a value for each of one or more variables and a status indicator indicating whether the ticket is live or dead; (ii) selecting a group of live tickets on the basis of a value or range of values for at least one of the one or more variables, (iii) setting the status indicator to dead for each ticket within the selected group; and (iv) iterating over steps (ii) and (iii) to progressively reduce the number of live tickets in groups until one or more threshold numbers of live tickets is reached and/or until a single live ticket remains.

NL C 2011307

Dit octrooi is verleend ongeacht het bijgevoegde resultaat van het onderzoek naar de stand van de techniek en schriftelijke opinie. Het octrooischrift komt overeen met de oorspronkelijk ingediende stukken.

## **METHOD AND SYSTEM FOR DETERMINING A WINNER OF A LOTTERY**

### Technical Field

- 5    The present invention relates to a method and system for determining a winner of a lottery.

### Background

- It is known for entities such as gaming authorities to conduct games of chance such as  
10    lotteries. In one known form of lottery, contestants purchase tickets and choose (or have  
randomly selected for them in a "quick pick" system) a subset of numbers from an  
available set of two-digit numbers. One or more winners are then determined by randomly  
drawing a reference subset of numbers, which can be matched against numbers allocated to  
a contestant's ticket. Other types of lottery in which one or more winning numbers (or sets  
15    of numbers) are randomly drawn are also known.

- It is typical for the random draw to be conducted "live", for example in a television studio,  
and the results to be broadcast to viewers. Since contestants may purchase multiple tickets,  
each associated with different sets of numbers, it may not be immediately obvious to a  
20    contestant as the random numbers are drawn whether or not any of their tickets has a  
chance of winning. Further, the live draw holds interest only for those who have actually  
purchased tickets, and not for a wider audience.

- It would be desirable to provide a method of conducting a lottery which provides enhanced  
25    entertainment for contestants and/or the wider public, or at least to provide a useful  
alternative.

### Summary of the Invention

- 30    In accordance with one aspect of the present invention, there is provided a computer-  
implemented method of determining a winner of a lottery, including:

- (i) generating data relating to tickets purchased by users, said data including, for each ticket, a value for each of one or more variables and a status indicator indicating whether the ticket is live or dead;
- (ii) selecting a group of live tickets on the basis of a value or range of values for at least one of the one or more variables;
- (iii) setting the status indicator to dead for each ticket within the selected group; and
- (iv) iterating over steps (ii) and (iii) to progressively reduce the number of live tickets in groups until one or more threshold numbers of live tickets is reached and/or until a single live ticket remains.

10

In another aspect of the present invention, there is provided a system for determining a winner of a lottery, including at least one computer processor configured to perform the method of the first aspect of the invention.

- 15 In a third aspect, the invention provides a system for determining a winner of a lottery, including:

means for generating data representing tickets purchased by users, said data including, for each ticket, a value for each of one or more variables and a status indicator indicating whether the ticket is live or dead; and

- 20 means for iteratively:

selecting a group of live tickets on the basis of a value or range of values for at least one of the one or more variables; and

setting the status indicator to dead for each ticket within the selected group,

- 25 to thereby progressively reduce the number of live tickets in groups until one or more threshold numbers of live tickets is reached and/or until a single live ticket remains.

- In a fourth aspect of the invention, there is provided a computer program product for determining a winner of a lottery, including program instructions which, when executed, cause one or more computer processors to perform the method of the first aspect of the invention.

30

In a fifth aspect, the invention provides a computer readable data storage device including the computer program product of the fourth aspect of the invention.

### Brief Description of the Drawings

Certain embodiments of the present invention are hereafter described, by way of non-  
5 limiting example only, with reference to the accompanying drawings in which:

Figure 1 is a block diagram of a system for determining a winner of a lottery;

Figure 2 is a block diagram of an exemplary computer system for use with the system of  
Figure 1; and

10 Figures 3 to 8 are flow charts showing steps of an exemplary process implemented by the  
system of Figure 1.

### Detailed Description

15 Embodiments of the invention provide an online lottery which may incorporate social  
media, share-trading, convergent technologies and brand and celebrity creation and  
endorsement. The online lottery may be conducted in conjunction with a game show which  
is broadcast on television and/or via the internet.

20 In one embodiment, the lottery runs for a predetermined period, for example six weeks, to  
determine a single winner of a grand prize from an initial pool of entries. The initial pool  
may be made arbitrarily large. In the following examples, the initial pool comprises  
1,000,000 entries (live tickets).

25 In the first three phases of the competition the number of live tickets is reduced from  
1,000,000 to 800 (for example) in three phases of elimination rounds. Further elimination  
rounds are then conducted and the winner of the grand prize is determined at the end of a  
predetermined cycle (for example, a six-week cycle).

30 The winning ticket is not determined by randomly drawing a specific number (for  
example, from the set of numbers corresponding to the initial pool of live tickets). Nor, as  
in many types of lotto games, are a series of numbers drawn and then matched to an

individual ticket. The present inventors believe that neither of these two approaches is able to provide information to an audience in a sufficiently rapid and efficient manner.

5 The invention, in at least some of its embodiments, is specifically designed to allow rapid transmission of updated ticket status data from the operator of the lottery (or an associated entity) to an audience connected by remote devices such as TVs, computers connected to the operator's system over a network connection, set top boxes, or mobile telephony devices.

## 10 **System overview**

Referring initially to Figure 1, there is shown a system 100 for determining a winner of a lottery. The system includes a computer system (server) 110 in communication with a client system 115 via a data communication network 112, such as the Internet. Further,  
15 similar client systems 120 may also be simultaneously in communication with server 110. Server 110 is responsible for the overall control and coordination of the process described herein and may be in communication with various other components (hardware and/or software) which handle parts of the process.

20 The system 100 includes a TV streaming server 130 which receives video and audio data from a broadcast source 135 for broadcast over the Internet 112. The broadcast source 135 may be an analog or digital source such as a radio frequency transmitter or transmitters transmitting signals originating from a TV studio. Alternatively, server 110 may itself be the source of video and audio data for the streaming server 130, having first received and  
25 processed signals received from the TV studio, for example. In some embodiments, data transmitted by streaming server 130 may also incorporate data from databases 162, 164 which are in communication with server 110. The TV streaming server 130 may be a standard computer system running one or more software modules which convert the video and audio data to a stream, or may be a standard computer system in communication with a  
30 dedicated streaming device such as an IMX i2410 Live TV MatrixCast Streaming Server of MatrixCast Technologies, Inc. (California).

The server 110 is in communication with a database server 160 which in turn is in communication with databases 162, 164 which store data used by the system, including data relating to user accounts, tickets and trading of shares in tickets as will later be described. It will also be appreciated that server 110 may be directly in communication with databases 162, 164.

Further included in system 100 is a share trading server 170, in communication with server 110.

- 10 In the described embodiment, the server 110 is a standard computer system such as a commercially available personal computer or server computer system based on a 32-bit or 64-bit Intel architecture, and the processes and/or methods executed or performed by the system 100 are implemented in the form of programming instructions of one or more software components or modules 150 stored on non-volatile (*e.g.*, hard disk) computer-readable storage 202 associated with the computer system 110, as shown in Figure 2. At least parts of the software modules 150 could alternatively be implemented as one or more dedicated hardware components, such as application-specific integrated circuits (ASICs) and/or field programmable gate arrays (FPGAs).
- 15
- 20 The software modules 150 include at least the following: a contestant registration module, a user authentication module, a ticket sales module, a ticket elimination module, and a share trading module.

The computer system 110 includes at least one or more of the following standard, commercially available, computer components, all interconnected by a bus 214: random access memory (RAM) 204, at least one computer processor 206, and external computer interfaces. The external computer interfaces include a network interface connector (NIC) 210 which connects the computer system 110 to a data communications network such as the Internet 112.

30

The computer system 110 includes a plurality of standard software modules, including: an operating system (OS) 124 (*e.g.*, Linux or Microsoft Windows); web server software 128 (*e.g.*, Apache, available at <http://www.apache.org>); scripting language modules 131 (*e.g.*,

personal home page or PHP, available at <http://www.php.net>, or Microsoft ASP); and structured query language (SQL) modules 132 (*e.g.*, MySQL, available from <http://www.mysql.com>), which allow data to be stored in and retrieved/accessed from an SQL databases 162, 164.

5

Together, the web server 128, scripting language 131, and SQL modules 132 provide the computer system 110 with the general ability to allow users of the Internet 112 with standard computing devices equipped with standard web browser software to access the computer system 110 and in particular to provide data to and receive data from the  
10 databases 162, 164. It will be understood by those skilled in the art that the specific functionality provided by the system 110 to such users is provided by scripts accessible by the web server 128, including the one or more software modules 150 implementing the processes 400, 500, 600, 700, and also any other scripts and supporting data 134, including markup language (*e.g.*, HTML, XML) scripts, PHP (or ASP), and/or CGI scripts, image  
15 files, style sheets, and the like.

Client system 115 includes standard software modules including an operating system (OS) 122 and a web browser 117. The client system 115 may also include a client application module 118 for communicating with server 110.

20

### **Process overview**

An overview of a computerised process 300 for determining a winner of a lottery is shown in Figure 3.

25

The process allows for registrations for users of the system (contestants) at step 400. Tickets are offered for sale to registered contestants at step 500 (whilst also allowing ongoing registrations of new contestants). At a predetermined point, for example when all available tickets are sold or at a fixed time prior to commencement of the first random  
30 draw (whichever occurs first), ticket sales end.

Then, a series of elimination rounds is conducted at step 600 to progressively eliminate groups of tickets from the initial pool of purchased tickets until a threshold number of non-

eliminated (live) tickets is reached, as will be described in more detail below. On reaching this threshold number, a "live exchange" process is commenced (step 700) whereby holders of the remaining live tickets may accept bids from registered contestants for shares in their tickets. Shares may be traded between contestants.

5

The "live exchange" process may run for a predetermined time and may be interspersed with further elimination rounds (step 1000).

At a further threshold number of remaining live tickets, or at a predetermined time, the  
10 "live exchange" process 700 terminates and a final elimination phase 1100 is conducted in order to determine a winner of a grand prize. For example, the final elimination 1100 may involve a random selection of a single winning ticket from the remaining live tickets, or may involve one-at-a-time or few-at-a-time elimination of the remaining live tickets until a single winning ticket remains. The final elimination 1100 may be filmed 'live' and  
15 broadcast via streaming server 130 and/or by web server 128.

### **Process details**

In step 400 of the process 300, as shown in Figure 4, a contestant registration module (of  
20 modules 150) provides for registration of a contestant by serving, to a web browser 117 of the contestant's system 115, a web page including a series of data entry fields.

At step 410, the contestant registration module receives the contestant details entered in the data entry fields and then performs an age verification step 420 to confirm that the  
25 contestant meets a legal age requirement for participating in lotteries and the like (for example, 18 years and over). This may be as simple, as example, as serving a web page including a prompt to the contestant to check a box or click a button to confirm they are of the legal age.

30 The contestant registration module stores the contestant details in a user database 162 (step 430). The stored contestant details may include a user name, encrypted password information, personal details of the user such as contact information, and a verification question/answer for resetting the user's password. Age verification information (for

example, date of birth and a flag indicating that the user has confirmed the age requirement) may also be stored.

Typically, the registration process 400 will include a step (not shown) of recording

5 banking details for the contestant, to enable payout of prizes and/or payment of funds for shares in a live ticket during the live exchange process 700 as will later be described. The banking details may be used by payment processing server 125 in order to perform transactions as required.

10 Once the user has been registered, the process 400 may prompt the user to install custom software modules (player software) 118 on the user's system 115 (step 440). Alternatively, the player software may be browser-based, for example being implemented in javascript or the like which is executable or interpretable by web browser 117.

15 The contestant registration process 400 may be executed at any time during the overall process 300, for example either before or after sales of tickets have commenced and up until the first of the elimination rounds (step 600) has commenced.

Referring now to Figure 5, the steps of the ticket sale process 500 are shown. The ticket

20 sales module executing process 500 first checks whether the contestant is registered, and if not, branches to contestant registration process 400. For a previously-registered contestant, a ticket purchase page is generated and sent to the contestant's web browser 117 (step 520). The contestant selects the number of tickets desired, and payment details (such as credit card details). It will also be appreciated that the payment details may be stored as part of  
25 the contestant details in user database 162 to obviate the need for the contestant to enter them at each ticket purchase.

The number of tickets and payment details are received by the ticket sales module at step 530, and the payment is then processed (step 540), for example by transmitting data

30 representing the payment details to a payment processing module in communication with a third party payment processing system 125 over Internet connection 112 in a manner known in the art.

- On successful processing of the payment, the ticket sales module then assigns a unique ticket number (step 550) to each purchased ticket. The process 500 may offer an option for the contestant to choose a name for each ticket, for ease of remembering details of each ticket as will later be explained. The ticket name should also be unique, and this may be
- 5 checked by process 500 by querying database 162 on receiving the contestant's name selection(s) (not shown). The process 500 may also assign unique ticket names on behalf of the contestant, for example combinations of the contestant's user name with random numbers and optionally the date of sale or the date of the relevant draw.
- 10 At step 560, the ticket sales module assigns values for a number of variables to each purchased ticket. The variables may be categorical variables, or a mixture of categorical and numerical (discrete or continuous) variables. In one example, a first variable is "colour" while four further variables are numerical group identifiers of varying size. The variables define a hierarchy of group identifiers which can be used to progressively
- 15 eliminate live tickets as will be described below. One or more of the variables may be "hidden" variables – that is, their values are known to the server system 110 and stored in database 162, but are not visible to contestants.

- In one example, the total number of tickets available is 1,000,000 and the variables/group
- 20 identifiers are as shown in Table 1 below. Each variable in this example is a 1-, 2- or 3-digit number representing a group.

**Table 1 - example variable types**

| Variable                                 | Type    | Digits | Range       | Comments                                                                                                                  |
|------------------------------------------|---------|--------|-------------|---------------------------------------------------------------------------------------------------------------------------|
| Colour                                   | Integer | 1      | 1-8         | Each number is associated with a colour.<br>Can be chosen by contestant (possibly with restriction) or randomly generated |
| Grouping<br>Level 1( to<br>get to 1,000) | Integer | 3      | 001-<br>125 | number between 1 and 125. Typically chosen by system but may be user-selectable.                                          |

|                                  |         |   |       |                                                                   |
|----------------------------------|---------|---|-------|-------------------------------------------------------------------|
| Grouping Level 2 (to get to 800) | Integer | 1 | 1-5   | number between 1 and 5, chosen by system - may be hidden variable |
| Grouping Level 3 (to get to 50)  | Integer | 2 | 01-16 | number between 01 and 16 -- may be hidden variable                |
| Grouping Level 4 (to get to 10)  | Integer | 1 | 1-5   | number between 1 and 5 - may be hidden variable                   |
| check digits                     | Integer | 2 | 0-99  | validation digits                                                 |

A structured ticket number may be generated from the values of the above variables, for example by converting the values to characters and concatenating the characters into a single string. So, for example, for a ticket having Colour=3, Grouping Level 1=77, Grouping Level 2=2, Grouping Level 3=9 and Grouping Level 4=5, the structured ticket number would be "30772095". Delimiting characters, such as a hyphen, may be introduced into the structured ticket number for ease of reading, for example "3-077-2-09-5".

The check digits serve as an authentication measure for the ticket number and may be generated by performing a series of mathematical operations, known only to the system, on each of the digits of the structured ticket number. For example, the sum of the digits could be multiplied by 7, the result divided by 31, and the result of the division truncated at two decimal places with the two digits of the fractional part then being used as the check digits. The transformation between structured ticket number and check digits could be periodically changed, so that, for example, the particular series of operations would be associated with a particular draw of the lottery, a particular purchase time, or so on. The check digits may thereby be used to detect whether an entered ticket number is valid or not.

20

Step 560 may allow the contestant to choose the "colour" of each ticket, from 8 available colours, for example. Alternatively, the contestant may request the colour to be randomly assigned. In either case, the ticket sales module maps the assigned colour name to a colour

number (between 1 and 8) and maintains a table of the number of tickets assigned to each colour.

The first level of classification, colour, therefore divides the initial pool of tickets into 8  
5 lots of up to 125,000 tickets (assuming all 1,000,000 tickets are sold).

At a second level of classification, called Grouping Level 1 in Table 1, each ticket may be assigned a number between 1 and 125, i.e. tickets are now grouped into lots of up to 1,000 within each colour. The value of the Grouping Level 1 variable may be chosen by the  
10 contestant at purchase, or may be randomly assigned by the ticket sales module. Similar considerations apply to Grouping Levels 2, 3 and 4, although if these are hidden variables then of course there should not be an option for the contestant to choose their values.

It is preferable to maintain a uniform distribution of tickets amongst the colours, and  
15 among the other levels of classification. In the event of a non-uniform distribution, a rebalancing step may be applied to redistribute tickets between the different colours, Level 1 groups, etc. Rebalancing may be applied at the close of ticket sales. It may also be applied while ticket sales are ongoing, for example by regularly monitoring the distribution of tickets between groups, detecting whether the distribution is skewed towards one or  
20 more of the groups, and reallocating tickets from those groups to groups which are under-represented.

The process 500 may continue to offer tickets for sale until all available tickets are sold, or until a predetermined termination time, for example 24 hours before commencement of the  
25 first elimination round.

In a process which is not shown in the figures, the ticket sales module may cause web server 128 to generate and serve, on request by a user, a summary web page containing details of each ticket purchased by that user, including its name, structured ticket number,  
30 colour, date of purchase and the like. The summary web page may include a URL for further individual web pages for each ticket, which are generated or generatable on user request.

Figure 6 illustrates an example process 600, performed by a ticket elimination module (of modules 150) for progressive elimination of tickets from the initial pool until a desired threshold is reached. In this example, the desired threshold is a threshold number of tickets to be entered into a "Live exchange" part 700 of the process 300 as will be described later.

- 5 For example, the threshold number may be 800 live tickets (of the initial pool of 1,000,000 tickets).

At step 610, the ticket elimination module selects one or more groups of tickets to be eliminated. For example, in a first elimination round, the colour "purple" is randomly  
10 selected by the process 600. The list of all "purple" tickets is retrieved from database 162 (step 620). A status indicator for each purple ticket is then set to "dead" and the database 162 updated accordingly (step 630).

Typically, the ticket elimination module transmits, to one or more user devices (for  
15 example client machine 115), data representing the group of live tickets selected at step 610. On each said user device, the data representing the selected group of live tickets is processed, and data representing a structured ticket number of a ticket held by the user of the user device is retrieved. The user device then determines from the structured ticket number whether the ticket belongs to the selected group, and updates a display of the user  
20 device if the ticket belongs to the selected group.

For example, notification of the eliminated group may be posted by web server 128 (step 640), and may also be incorporated in the data stream being transmitted by streaming  
25 server 130. If a contestant is signed in, a refresh of a web page showing the status of each of their tickets may cause an updated page to be delivered, displaying to the contestant that any "purple" tickets they hold are now dead. For example, the status of each live ticket may be represented by a continually moving sine wave representing a beating heart (including sound). The eliminated ticket will be represented by a medical flatline (ie. no  
30 pulse) accompanied by a continuous beep.

The process 600 may then continue, with each further elimination round eliminating a further colour until only a single colour remains. The elimination rounds may be carried

out at regular intervals, for example once per evening, such that the elimination can be simultaneously broadcast at the same time each evening, for example through TV streaming server 130 and/or by standard television broadcasting technology.

- 5    At the end of the first phase of elimination rounds, (up to) 125,000 tickets, belonging to the only non-eliminated colour, remain.

In the second phase of elimination rounds, random selections of groups from the 125 groups of Grouping Level 1 are made by the ticket elimination module (step 610), tickets  
10    belonging to those groups retrieved (step 620) and the status of those tickets updated to "dead" (step 630), in similar fashion to the selection of colours for elimination as described above. The process continues until, at the end of the second phase, 1,000 tickets remain.

In the third phase, a random selection of one of the 5 groups from Grouping Level 2 is  
15    made by the ticket elimination module. This eliminates the selected group (via steps 610, 620 and 630 as described above), leaving 800 live tickets. A check is then conducted (step 650) to determine whether this is the "live exchange" threshold, and if so the live exchange process 700 then begins.

## 20    **Live exchange**

At commencement of the live exchange process 700, each of the 800 live tickets is assigned an equal number of shares by a share trading module (of modules 150), for example 100 shares per ticket. Share trading data for each live ticket is generated by the  
25    share trading module (which may be executed, at least in part, by share trading server 170) and entered into a share trading database 164.

The shares can be traded amongst contestants, including contestants whose tickets have been eliminated or contestants who have not purchased tickets, but have registered with the  
30    system 110.

The total potential value of the 100 shares may be up to half of the grand prize, for example. Ticket holders may opt to sell no shares / some shares / or all 100 shares. Astute operators will make money from share trading whether they win the first prize or not.

- 5 Only shares purchased in the winning ticket, or in a ticket which is associated with a consolation prize, share in any winnings. The proceeds from the initial sale of the 100 shares go to the holder of the ticket corresponding to those shares. In some examples, the share can continue to be traded to any identified buyer on the exchange, potentially earning traders a profit along the way.

10

In the live exchange process 700, the share trading module processes bids for shares at step 800, and allows for trading of the shares at step 900. The share trading module checks whether an elimination threshold has been reached, for example, a time threshold which is a predetermined time after commencement of the live exchange process 700. If the  
15 elimination threshold has not been reached, the share trading module permits further processing of bids at step 800. If the elimination threshold has been reached, further elimination rounds are carried out, by the elimination module, at step 1000.

- 20 The bid processing step 800 performed by the share trading module is illustrated in more detail in Figure 8. On request by a user, the share trading module causes web server 128 to generate a web page (using ticket data for live tickets from database 162) with a listing of the live tickets (step 810) which is displayed in the user's web browser (step 820). The listing may be in the form of a list of URLs pointing to individual "live ticket" web pages.

- 25 The live tickets page may include, for each live ticket, a current offer price (the price that the owner of the live ticket would like to obtain per share) and a current bid price (the price that potential buyers are willing to pay per share). The offer prices and bid prices may be expressed as a percentage of the ticket holder's potential winnings.

- 30 As shown in Figure 8, the web server 128 may receive a ticket selection from a registered contestant (step 840), for example when the contestant clicks on one of the "live ticket" URLs at step 830. This causes the corresponding "live ticket" information page to be generated, sent to (step 850) and displayed in (step 860) the contestant's web browser 117.

The ticket information page, as well as including content provided by the contestant owning the selected live ticket, may include portions which are generated based on retrieval of ticket data from share trading database 164. For example, the ticket

- 5    information page may include the following: the current offer price set by the contestant owning the ticket, and the value and number of shares for each bid issued by a contestant. The ticket information page may also include links to further web pages, for example a link to a profile page of each contestant who has made a bid.

- 10   The ticket information page may also include data entry fields for the contestant to enter a number of shares and a bid price for each share. If the contestant places a bid at step 870, the bid data is received by web server 128 (step 880) and the bid data for the live ticket in share trading database 164 are then updated accordingly (step 885). If no bid is made at step 870, the contestant may be returned to the "live tickets" summary page, for example.

15

The process 800 also includes a step 890 of processing acceptance or refusal of entered bids by the holder of the live ticket. Once processing is complete, the bid data are again updated at step 895.

- 20   Returning to Figure 3, if the elimination threshold has been reached as described above, the process 300 proceeds to further elimination rounds 1000. The ticket elimination module selects one or more random numbers between 1 and 16, to eliminate one or more groups of tickets based on the value of the Grouping Level 3 variable (Table 1).

- 25   Each elimination may optionally be followed by the payout of a consolation prize to one or more of the eliminated tickets.

After each elimination, the process 300 may return to the live exchange process 700 to permit trading of shares in the remaining live tickets. It will be appreciated that if shares

- 30   have been purchased in tickets which are eliminated, those shares lose the entirety of their value, unless there was an award of a consolation prize on the eliminated ticket in which case the shares would have a recalculated value based on the ratio of the consolation prize to the grand prize, for example (since the original share offering would have been based on

the value of the grand prize). So, for example, if a ticket holder sold 40% of their potential winnings in 100 shares and won a consolation prize, the ticket holder would receive 60% of the consolation prize and each share would be allocated 0.4% of the consolation prize.

- 5    The elimination rounds 1000 may continue until only one Grouping Level 3 group of tickets remains, i.e. 50 live tickets remain (see Table 1). At this point, four further eliminations may be carried out by the ticket elimination module, each successive elimination followed by a return to the live exchange process 700, until only 10 live tickets remain.

10

Referring again to Figure 3, the process 300 concludes by determining a winner of the lottery, at step 1100. For example, the final elimination 1100 may involve a random selection of a single winning ticket from the 10 remaining live tickets, or may involve one-at-a-time or few-at-a-time elimination of the remaining live tickets until a single winning  
15    ticket remains. Optionally, eliminated tickets may receive a payout of a consolation prize. The single winning ticket receives a payout of the grand prize.

Each "live ticket" web page may be at least partially generated by the contestant associated with the corresponding live ticket, for example using standard software modules or plugins  
20    (not shown) accessible via web server 128. The page may include content uploaded by the contestant, for example a video presentation or a combination of text, photos, graphics and audio. The "live ticket" page allows the contestant to pitch to potential buyers why they should buy a share in the ticket. An example pitch, from a contestant at the start of the live exchange process, may be:

25

***“G’day, my name is Bill Smith and I’ve always been lucky. My ticket is already a 800 to 1 chance to win the ten million bucks. There’s no guarantee but I just know my ticket has a better chance to win first prize than all the other 799 ticket holders”.***

- 30    Contestants holding live tickets may sell shares in their ticket(s) at any time after the beginning of the live exchange process 700, at any time up until the final elimination 1100. Further, the offer price may be adjusted at any time by the contestant, and bidding contestants may adjust the number and/or value of their bids.

In addition, shares held by contestants may be traded to other contestants. For example, the web page for a particular live ticket may include information relating to bids which have been accepted by the ticket-holder, including the contestant details for each accepted bid.

- 5 Web server 128 may generate code which causes the live ticket details page to allow accepted bids to themselves be bid on by a contestant viewing the live ticket details page. The holder of an accepted bid, when next accessing their account on system 110, would then see displayed the offer(s) from other contestant(s) for their shares, and web server 128 may generate code allowing the holder to accept or refuse any such offers. It will be
- 10 realised that the ticket-holder may themselves make offers on accepted bids, such that they "buy back" their shares. For example, a ticket-holder may survive several eliminations such that they remain in the final 10 contestants, and wish to increase their potential earnings by a share buy-back.
- 15 In some embodiments, the share trading module may allow for bids by syndicates of two or more users.

- There need be no restriction on the number of times a share can be traded (provided the ticket is still live) up until the competition close, nor on live ticket holders purchasing
- 20 shares in other tickets. The live exchange process 700 may operate continuously, with the exception of optional lockout periods, for example during live TV broadcast time of a show associated with the lottery as mentioned above.

- Typically, the live exchange server 170 will cause to be stored in shares trading database
- 25 164 a log of each transaction relating to shares in each ticket to enable a full audit trail to be maintained in the event of any disputes.

- In at least some embodiments, the share trading module may require that a contestant enter their password in order to complete any action, such as a bid or an acceptance of a bid. The
- 30 share trading module may also communicate with the payment processing server 125 to instruct it to store payments for shares (on acceptance of a bid) in a trust account, and may then instruct payment processing server 125 to transfer the payments from the trust account to an account of the ticket holder, after a "cooling-off" period of, for example, 3 to 5 days.

In some embodiments, the process 300 may allow holders of live tickets to enter into one or more contracts with registered contestants, called 'If I Win' contracts herein. Each said contract is conditional upon the ticket holder winning the grand prize or a consolation  
5 prize. If they lose, the contract is annulled. If they win the grand prize or a consolation prize the contract is binding. No ticket holder will be allowed to enter into contracts worth more than a total of 50% of their potential winnings.

Many modifications will be apparent to those skilled in the art without departing from the  
10 scope of the present invention.

The boundaries between the modules and components in the software modules 150 are exemplary, and alternative embodiments may merge modules or impose an alternative decomposition of functionality of modules. For example, the modules discussed herein  
15 may be decomposed into submodules to be executed as multiple computer processes, and, optionally, on multiple computers. Moreover, alternative embodiments may combine multiple instances of a particular module or submodule. Furthermore, the operations may be combined or the functionality of the operations may be distributed in additional operations in accordance with the invention. Alternatively, such actions may be embodied  
20 in the structure of circuitry that implements such functionality, such as the micro-code of a complex instruction set computer (CISC), firmware programmed into programmable or erasable/programmable devices, the configuration of a field-programmable gate array (FPGA), the design of a gate array or full-custom application-specific integrated circuit (ASIC), or the like.

25 Each of the blocks of the flow diagrams of the processes of the computer system 110 may be executed by a module or a portion of a module. The processes may be embodied in a machine-readable and/or computer-readable medium for configuring a computer system to execute the method. The software modules may be stored within and/or transmitted to a  
30 computer system memory to configure the computer system to perform the functions of the module.

The computer system 110 normally processes information according to a program (a list of internally stored instructions such as a particular application program and/or an operating system) and produces resultant output information via input/output (I/O) devices. A computer process typically includes an executing (running) program or portion of a  
5 program, current program values and state information, and the resources used by the operating system to manage the execution of the process. A parent process may spawn other, child processes to help perform the overall functionality of the parent process. Because the parent process specifically spawns the child processes to perform a portion of the overall functionality of the parent process, the functions performed by child processes  
10 (and grandchild processes, etc.) may sometimes be described as being performed by the parent process.

The boundaries between databases 162, 164 are exemplary and it will be appreciated that alternative embodiments may merge the data in these databases or impose an alternative  
15 decomposition of the data records, for example over various physical databases and/or data structures.

Throughout this specification, unless the context requires otherwise, the word "comprise", and variations such as "comprises" and "comprising", will be understood to imply the  
20 inclusion of a stated integer or step or group of integers or steps but not the exclusion of any other integer or step or group of integers or steps.

The reference in this specification to any prior publication (or information derived from it), or to any matter which is known, is not, and should not be taken as an acknowledgment or  
25 admission or any form of suggestion that that prior publication (or information derived from it) or known matter forms part of the common general knowledge in the field of endeavour to which this specification relates.

The following clauses define embodiments.

- 30 1. A computer-implemented method of determining a winner of a lottery, including:  
(i) generating data representing tickets purchased by users, said data including, for each ticket, a value for each of one or more variables and a status indicator indicating whether the ticket is live or dead;

- (ii) selecting a group of live tickets on the basis of a value or range of values for at least one of the one or more variables;
  - (iii) setting the status indicator to dead for each ticket within the selected group; and
  - (iv) iterating over steps (ii) and (iii) to progressively reduce the number of live tickets in  
5 groups until one or more threshold numbers of live tickets is reached and/or until a single live ticket remains.
2. A computer-implemented method according to clause 1, wherein the variables include categorical variables.
- 10
3. A computer-implemented method according to clause 1 or clause 2, including generating, for each ticket, a structured ticket number from the values of said variables.
4. A computer-implemented method according to any one of the preceding clauses,  
15 including transmitting, to one or more user devices, data representing the group of live tickets selected in step (ii).
5. A computer-implemented method according to clause 4, including processing, on each said user device, the data representing the selected group of live tickets.
- 20
6. A computer-implemented method according to clause 5, including retrieving data representing a structured ticket number of a ticket held by the user of the user device, determining from the structured ticket number whether the ticket belongs to the selected group, and updating a display of the user device if the ticket belongs to the  
25 selected group.
7. A computer-implemented method according to any one of the preceding clauses, including, on reaching a first threshold of the one or more thresholds, generating share data corresponding to shares in each live ticket.
- 30
8. A computer-implemented method according to clause 7, wherein the share data includes bid data corresponding to zero or more bids from users.

9. A computer-implemented method according to clause 8, including receiving bid data from one or more users for shares.
10. A computer-implemented method according to clause 9, wherein the one or more users  
5 includes a syndicate of users.
11. A computer-implemented method according to any one of the preceding clauses, wherein steps (ii) and (iii) are carried out at predetermined intervals after a start time.
- 10 12. A computer-implemented method according to any one of the preceding clauses, including paying out a prize to a user after reaching at least one prize threshold of the one or more thresholds.
13. A computer-implemented method according to clause 12, wherein the at least one prize  
15 threshold includes at least one consolation prize threshold, one or more consolation prizes being paid out to users associated with one or more dead tickets on reaching said consolation prize threshold.
14. A computer-implemented method according to clause 13, wherein the consolation prize  
20 thresholds correspond to the number of live tickets after one or more of the progressive reductions of the number of live tickets.
15. A computer-implemented method according to any one of the preceding clauses, including, for at least some users associated with one or more live tickets, generating a  
25 user page including ticket data for each said user.
16. A computer-implemented method according to clause 15, wherein the at least some users are users associated with live tickets when a second threshold number of live tickets is reached.
- 30 17. A computer-implemented method according to clause 16 when appended to clause 2 or any clause dependent therefrom, wherein the second threshold is the same as the first threshold.

18. A computer-implemented method according to clause 16 or clause 17, including populating the user page with content received from the user.
- 5 19. A computer-implemented method according to any one of the preceding clauses, including generating contract data representing a legal agreement between two users.
20. A computer-implemented method according to clause 19, wherein the contract data includes a contract validity flag.
- 10 21. A computer-implemented method according to clause 20, including setting the contract validity flag to false if one of the users is not the winner of the lottery.
22. A system for determining a winner of a lottery, including at least one computer  
15 processor configured to perform the method of any one of clauses 1 to 21.
23. A system for determining a winner of a lottery, including:  
means for generating data representing tickets purchased by users, said data including,  
for each ticket, a value for each of one or more variables and a status indicator indicating  
20 whether the ticket is live or dead; and  
means for iteratively:  
selecting a group of live tickets on the basis of a value or range of values for at least  
one of the one or more variables; and  
setting the status indicator to dead for each ticket within the selected group,  
25 to thereby progressively reduce the number of live tickets in groups until one or more  
threshold numbers of live tickets is reached and/or until a single live ticket remains.
24. A system according to clause 23, including means for generating share data  
corresponding to shares in each live ticket on reaching a first threshold of the one or  
30 more thresholds.
25. A system according to clause 24, wherein the share data includes bid data  
corresponding to zero or more bids from users.

26. A system according to clause 25, including means for receiving bid data from one or more users for shares.
- 5 27. A system according to clause 26, wherein the one or more users includes a syndicate of users.
28. A computer program product for determining a winner of a lottery, including program instructions which, when executed, cause one or more computer processors to perform  
10 the method of any one of clauses 1 to 21.
29. A computer readable data storage device, including the computer program product of clause 28.

## CONCLUSIES:

1. Een met een computer geïmplementeerde werkwijze voor het bepalen van een winnaar van een loterij, de werkwijze omvattend:
  - 5 (i) genereren van data die tickets gekocht door gebruikers representeert, genoemde data omvattend, voor elk ticket, een waarde voor elk van een of meer variabelen en een status indicator die aangeeft of het ticket levend of dood is;
  - (ii) selecteren van een groep van levende tickets op basis van een waarde of bereik van waarden voor ten minste een van de een of meer variabelen;
  - 10 (iii) instellen van de status indicator op dood voor elk ticket in de geselecteerde groep; en
  - (iv) herhalen van stappen (ii) en (iii) om het aantal levende tickets progressief te reduceren in groepen totdat een of meer drempelwaarde-aantallen van levende tickets is bereikt en/of totdat een enkel levend ticket overblijft.
- 15 2. Een met een computer geïmplementeerde werkwijze volgens conclusie 1, waarin de variabelen categorische variabelen omvatten.
3. Een met een computer geïmplementeerde werkwijze volgens conclusie 1 of  
20 conclusie 2, omvattend het genereren, voor elk ticket, van een gestructureerd ticketnummer van de waardes van genoemde variabelen.
4. Een met een computer geïmplementeerde werkwijze volgens een van de voorgaande conclusies, omvattend het versturen, aan een of meer gebruikersapparaten, van  
25 data die de groep levende tickets geselecteerd in stap (ii) representeert.
5. Een met een computer geïmplementeerde werkwijze volgens conclusie 4, omvattend het verwerken, op elk genoemd gebruikersapparaat, de data die de geselecteerde groep van levende tickets representeert.
- 30 6. Een met een computer geïmplementeerde werkwijze volgens conclusie 5, omvattend het ontvangen van data die een gestructureerd ticketnummer gehouden door de gebruiker van het gebruikersapparaat representeert, het bepalen op basis van het

gestructureerde ticketnummer of het ticket behoort tot de geselecteerde groep, en het bijwerken van een scherm van het gebruikersapparaat als het ticket behoort tot de geselecteerde groep.

- 5    7.      Een met een computer geïmplementeerde werkwijze volgens een van de voorgaande conclusies, omvattend, bij het bereiken van een eerste drempelwaarde, het genereren van aandeeldata overeenkomstig aandelen in elk levend ticket.
8.      Een met een computer geïmplementeerde werkwijze volgens conclusie 7, waarin de  
10    aandeeldata biedingsdata omvat overeenkomend met nul of meer biedingen van gebruikers.
9.      Een met een computer geïmplementeerde werkwijze volgens conclusie 8, omvattend het ontvangen van biedingsdata van een of meer gebruikers voor aandelen.  
15
10.     Een met een computer geïmplementeerde werkwijze volgens conclusie 9, waarin de een of meer gebruikers een syndicaat van gebruikers omvat.
11.     Een met een computer geïmplementeerde werkwijze volgens een van de  
20    voorgaande conclusies, waarin stappen (ii) en (iii) uitgevoerd worden op vooraf vastgestelde intervallen na een aanvangstijd.
12.     Een met een computer geïmplementeerde werkwijze volgens een van de  
25    voorgaande conclusies, omvattend het betalen van een prijs aan een gebruiker na het bereiken van tenminste een prijsdrempelwaarde van de een of meer drempelwaarden.
13.     Een met een computer geïmplementeerde werkwijze volgens conclusie 12, waarin de tenminste een prijsdrempelwaarde tenminste een consolidatieprijsdrempelwaarde omvat, waarbij een of meer consolidatieprijzen worden uitbetaald aan gebruikers die  
30    verband houden met een of meer dode tickets bij het bereiken van genoemde consolidatieprijsdrempelwaarde.

14. Een met een computer geïmplementeerde werkwijze volgens conclusie 13, waarin de consolidatieprijzdrempelwaarden overeenkomen met het aantal levende tickets na een of meer van de progressieve reducties van het aantal levende tickets.
- 5 15. Een met een computer geïmplementeerde werkwijze volgens een van de voorgaande conclusies, omvattend, voor tenminste sommige gebruikers die verband houden met een of meer levende tickets, het genereren van een gebruikerspagina die ticketdata voor elke genoemde gebruiker bevat.
- 10 16. Een met een computer geïmplementeerde werkwijze volgens conclusie 15, waarin de tenminste sommige gebruikers gebruikers zijn die verband houden met levende tickets wanneer een tweede drempelwaarde-aantal van levende tickets wordt bereikt.
- 15 17. Een met een computer geïmplementeerde werkwijze volgens conclusie 16 wanneer toegevoegd aan conclusie 2 of enige daarvan afhankelijke conclusie, waarin de tweede drempelwaarde dezelfde is als de eerste drempelwaarde.
- 20 18. Een met een computer geïmplementeerde werkwijze volgens conclusie 16 of conclusie 17, omvattend het toevoegen aan de gebruikerspagina van inhoud die ontvangen wordt van de gebruiker.
- 25 19. Een met een computer geïmplementeerde werkwijze volgens een van de voorgaande conclusies, omvattend het genereren van contractdata die een juridische overeenkomst tussen twee gebruikers representeert.
20. Een met een computer geïmplementeerde werkwijze volgens conclusie 19, waarin de contractdata een contractgeldigheidsvlag omvat.
- 30 21. Een met een computer geïmplementeerde werkwijze volgens conclusie 20, omvattend het instellen van de contractgeldigheidsvlag als onwaar als een van de gebruikers niet de winnaar van de loterij is.

22. Een systeem voor het bepalen van een winnaar van een loterij, omvattend tenminste een computer processor die is geconfigureerd om de werkwijze volgens een van de conclusies 1 tot en met 21 uit te voeren.
- 5 23. Een systeem voor het bepalen van een winnaar van een loterij, waarbij het systeem omvat:
- middelen voor het genereren van data die tickets die zijn gekocht door gebruikers representeert, waarbij genoemde data voor elk ticket een waarde omvat voor elk van een of meer variabelen en een statusindicator die aangeeft of het ticket levend of dood is; en
- 10 middelen voor herhaaldelijk:
- selecteren van een groep levende tickets op basis van een waarde of bereik van waarden voor tenminste een van de een of meer variabelen; en
- instellen van de statusindicator op dood voor elk ticket binnen de geselecteerde groep,
- 15 om daardoor progressief het aantal levende tickets in groepen te reduceren totdat een of meer drempelwaarde-aantallen levende tickets is bereikt en/or totdat een enkel levend ticket overblijft.
24. Een systeem volgens conclusies 23, dat middelen omvat voor het genereren van aandeeldata overeenkomend met aandelen in elk levend ticket bij het bereiken van een
- 20 eerste drempelwaarde van de een of meer drempelwaarden.
25. Een systeem volgens conclusie 24, waarbij de aandelendata biedingsdata omvat overeenkomend met nul of meer biedingen van gebruikers.
- 25
26. Een systeem volgens conclusie 25, dat middelen omvat voor het ontvangen van biedingsdata van een of meer gebruikers voor aandelen.
27. Een systeem volgens conclusie 26, waarin de een of meer gebruikers een syndicaat
- 30 van gebruikers omvat.

28. Een computerprogrammaproduct voor het bepalen van een winnaar van een loterij, dat programma-instructies omvat die, wanneer uitgevoerd, veroorzaken dat een of meer computerprocessoren de werkwijze volgens een van de conclusies 1 tot en met 21 uitvoert.
- 5 29. Een door een computer leesbaar dataopslagapparaat, omvattend het computerprogrammaproduct volgens conclusie 28.

Fig. 1

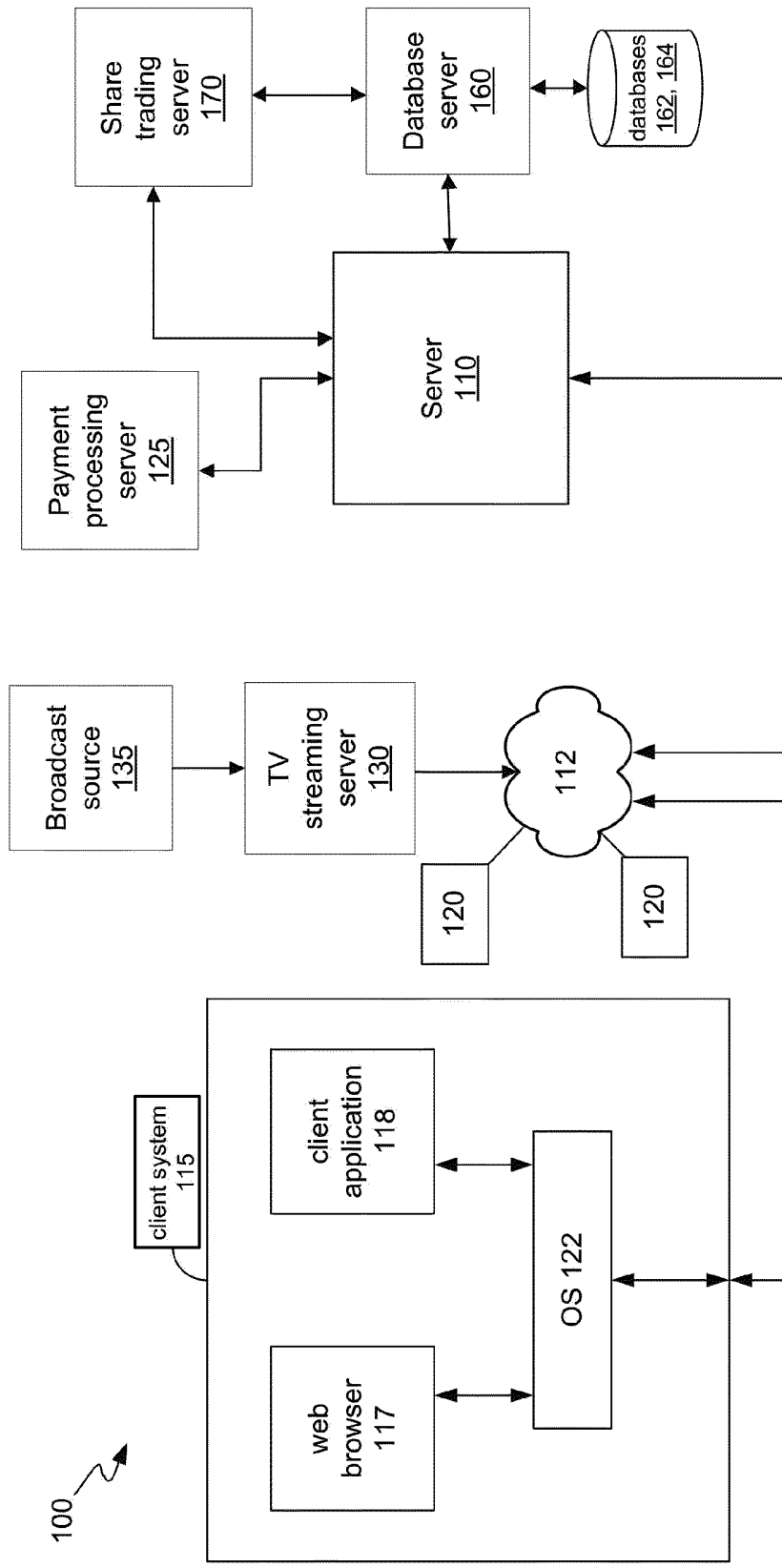
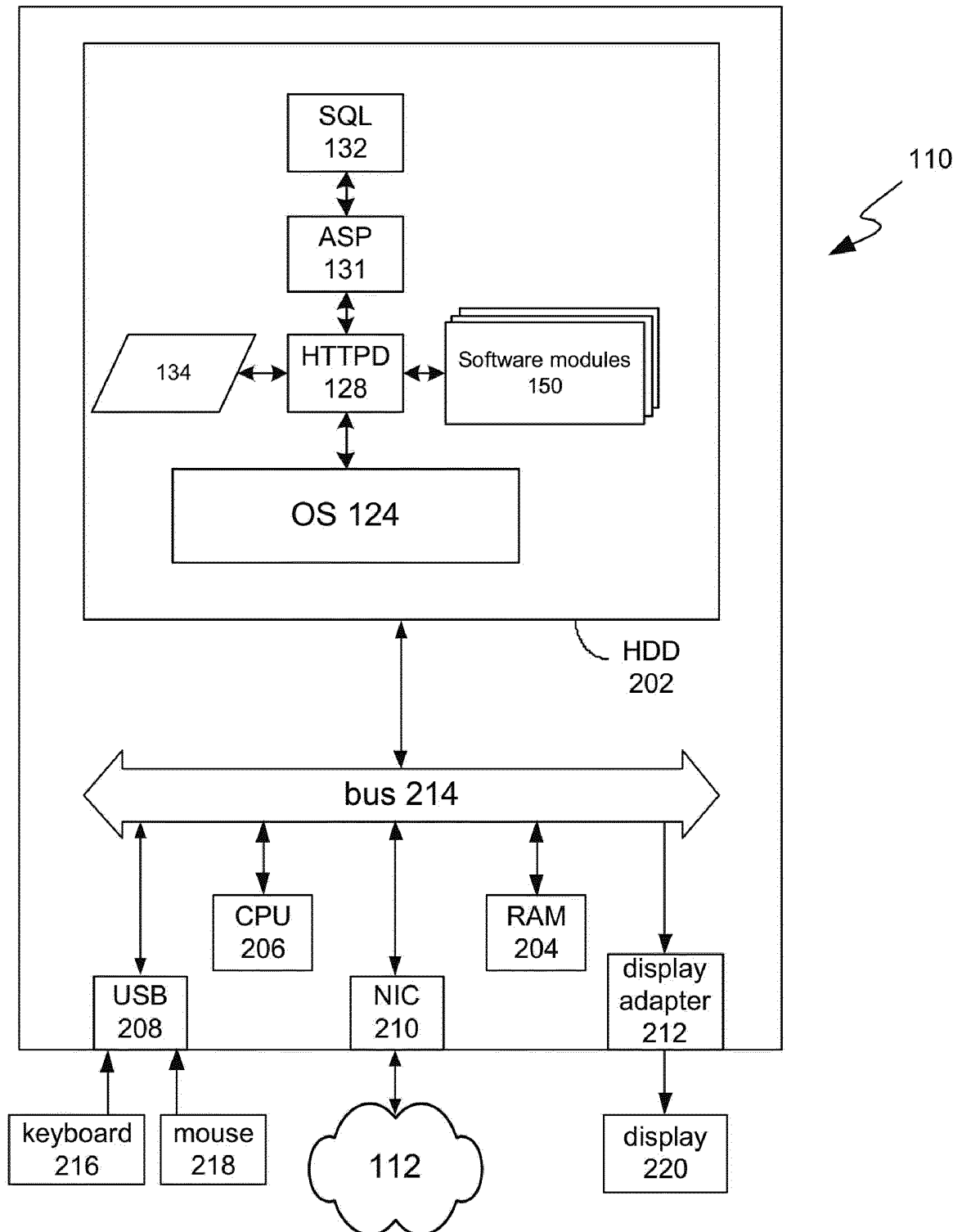
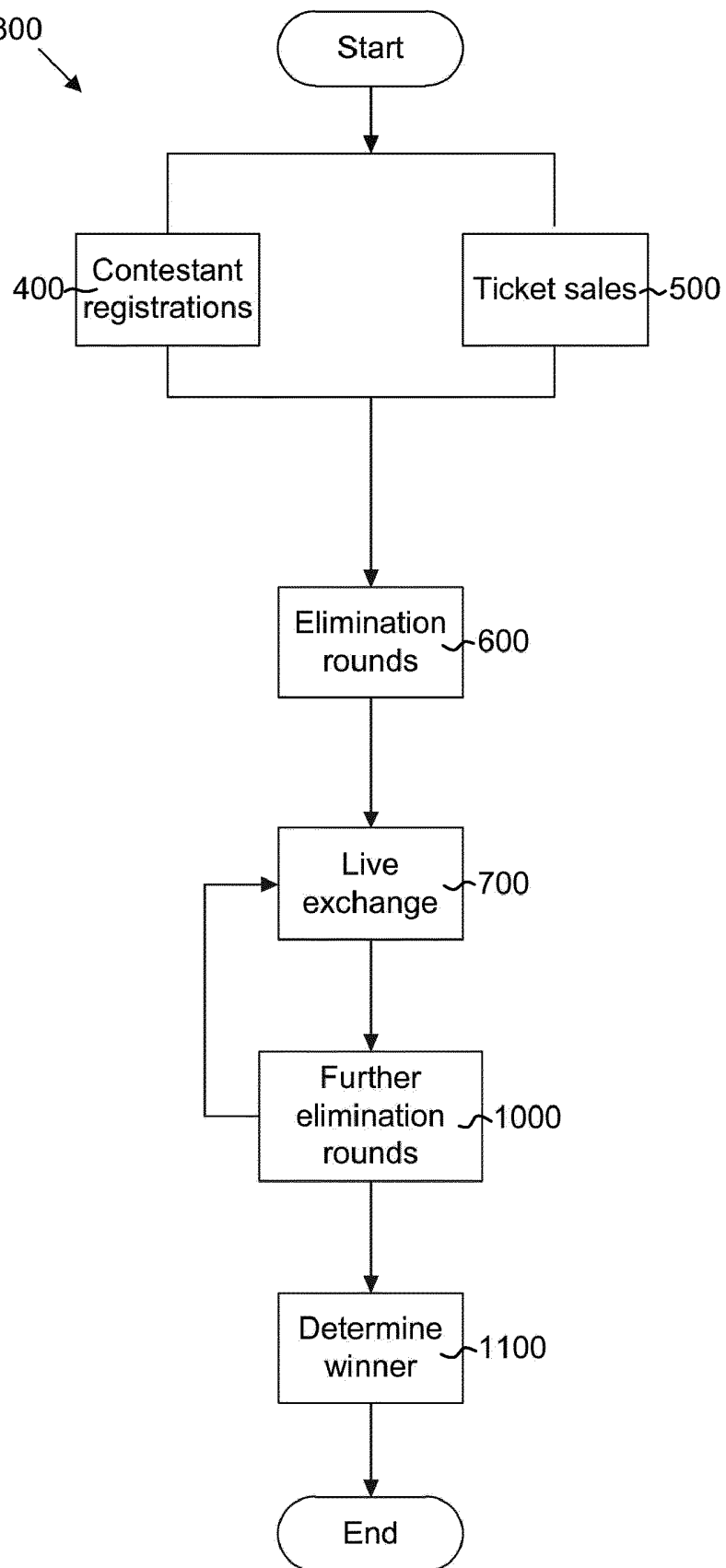


Fig. 2



*Fig. 3*

300



*Fig. 4*

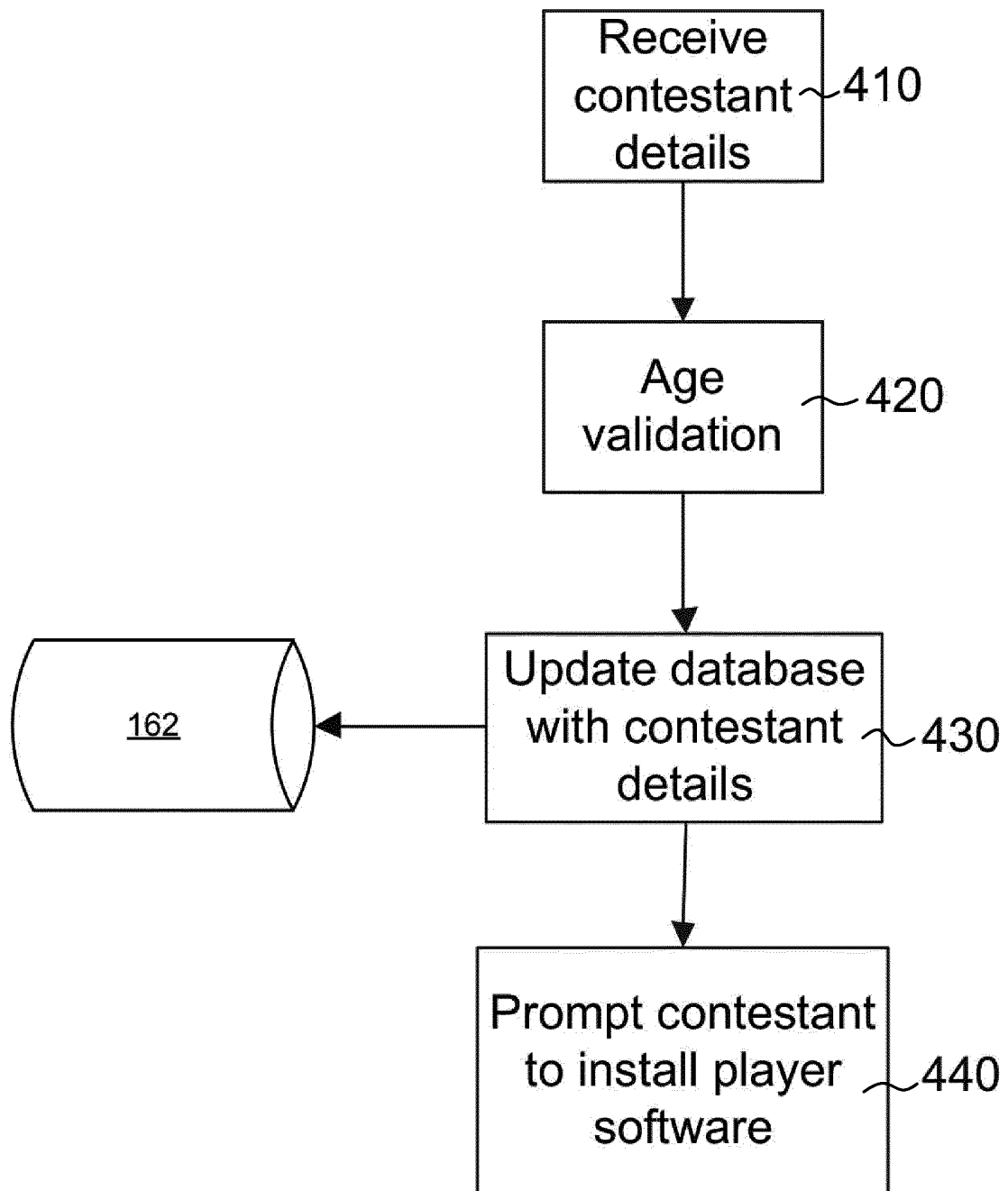


Fig. 5

500

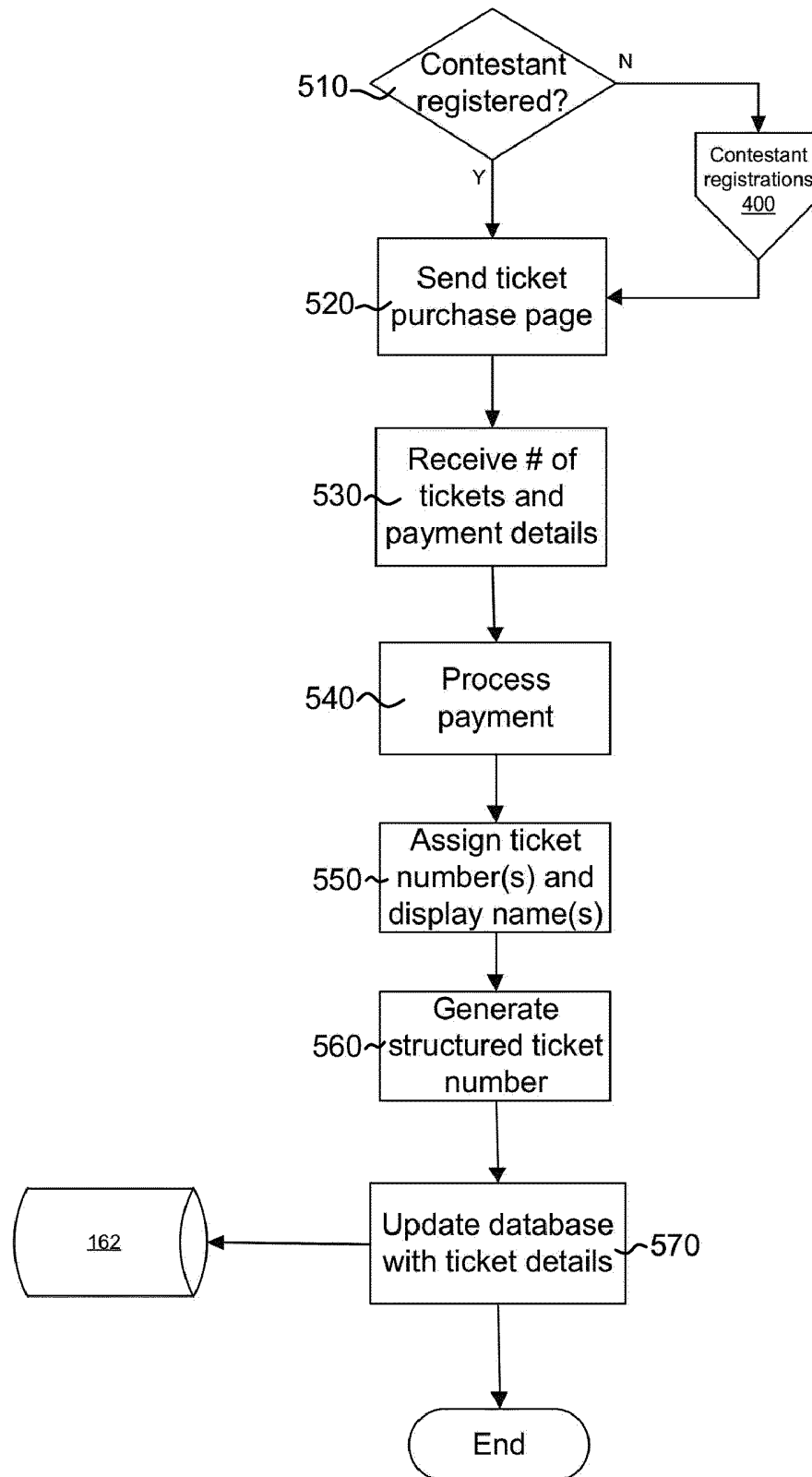
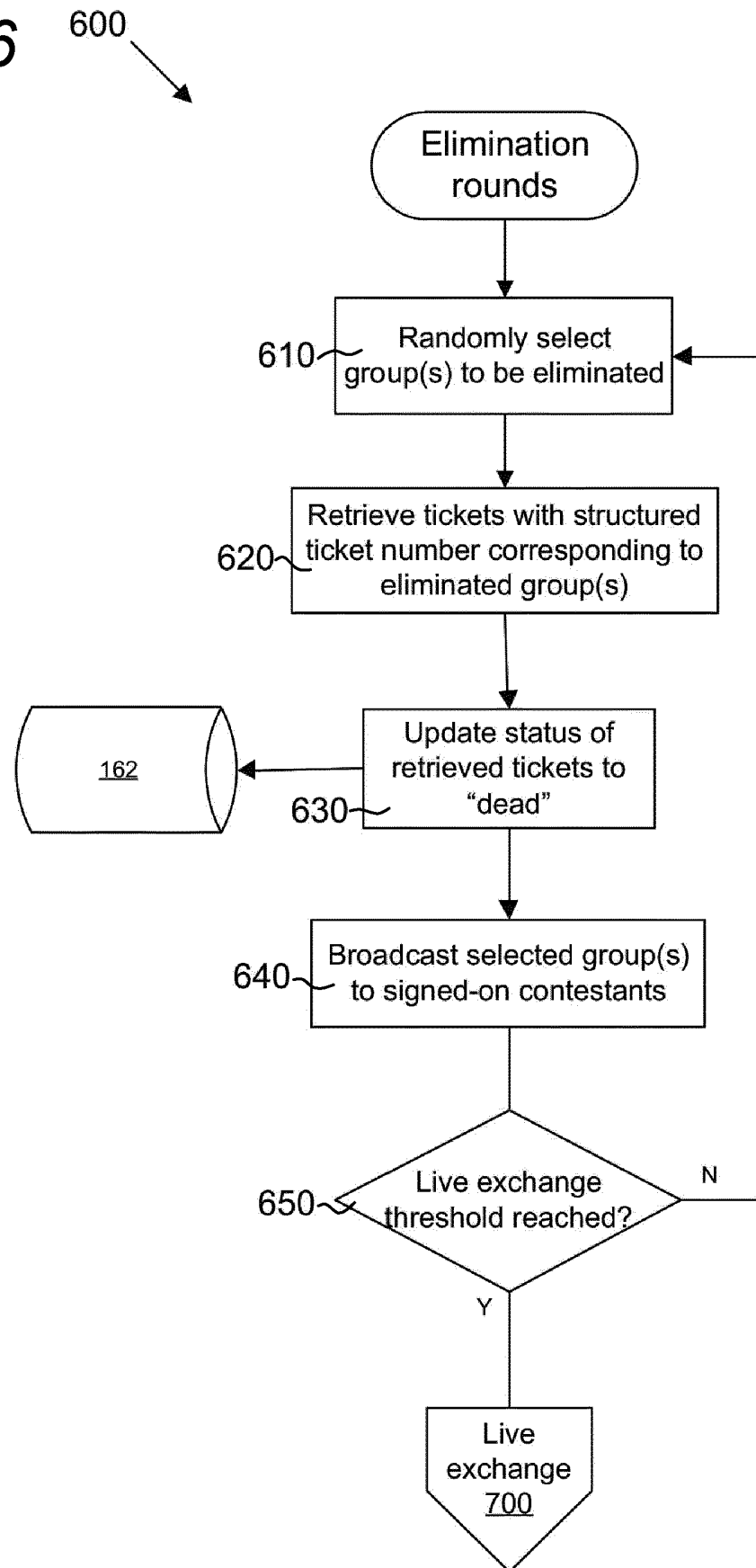
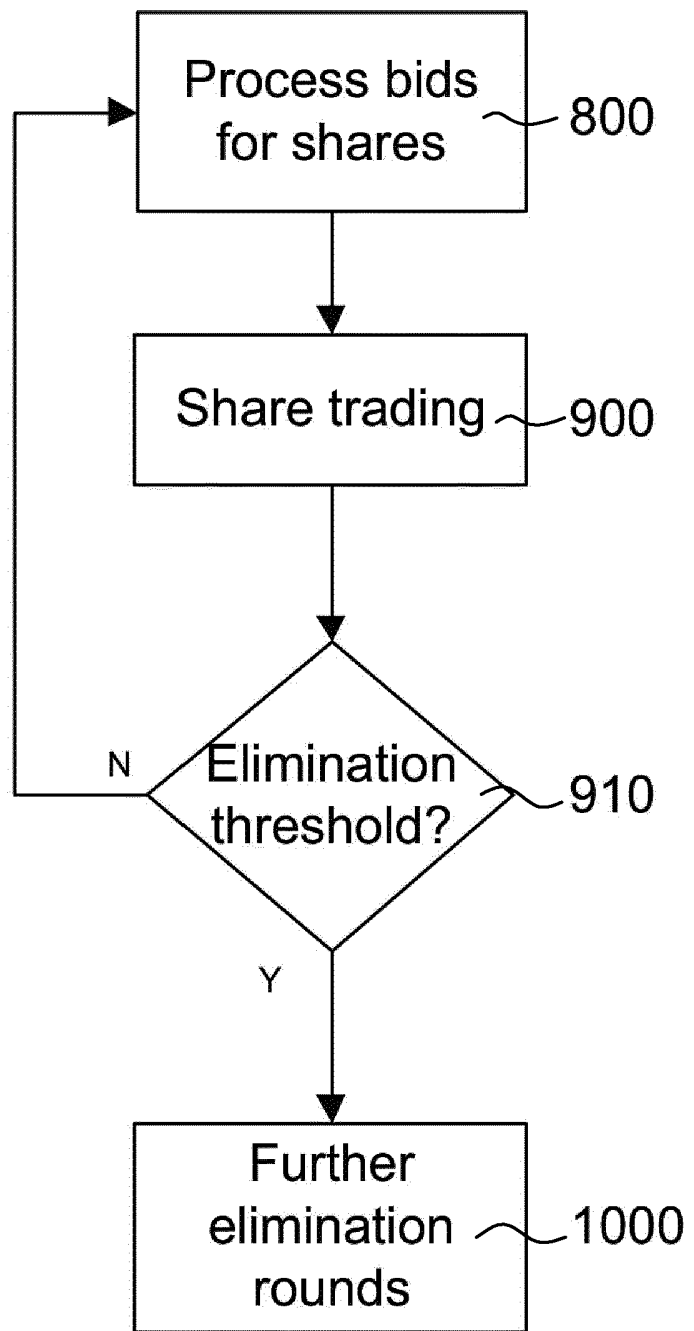


Fig. 6

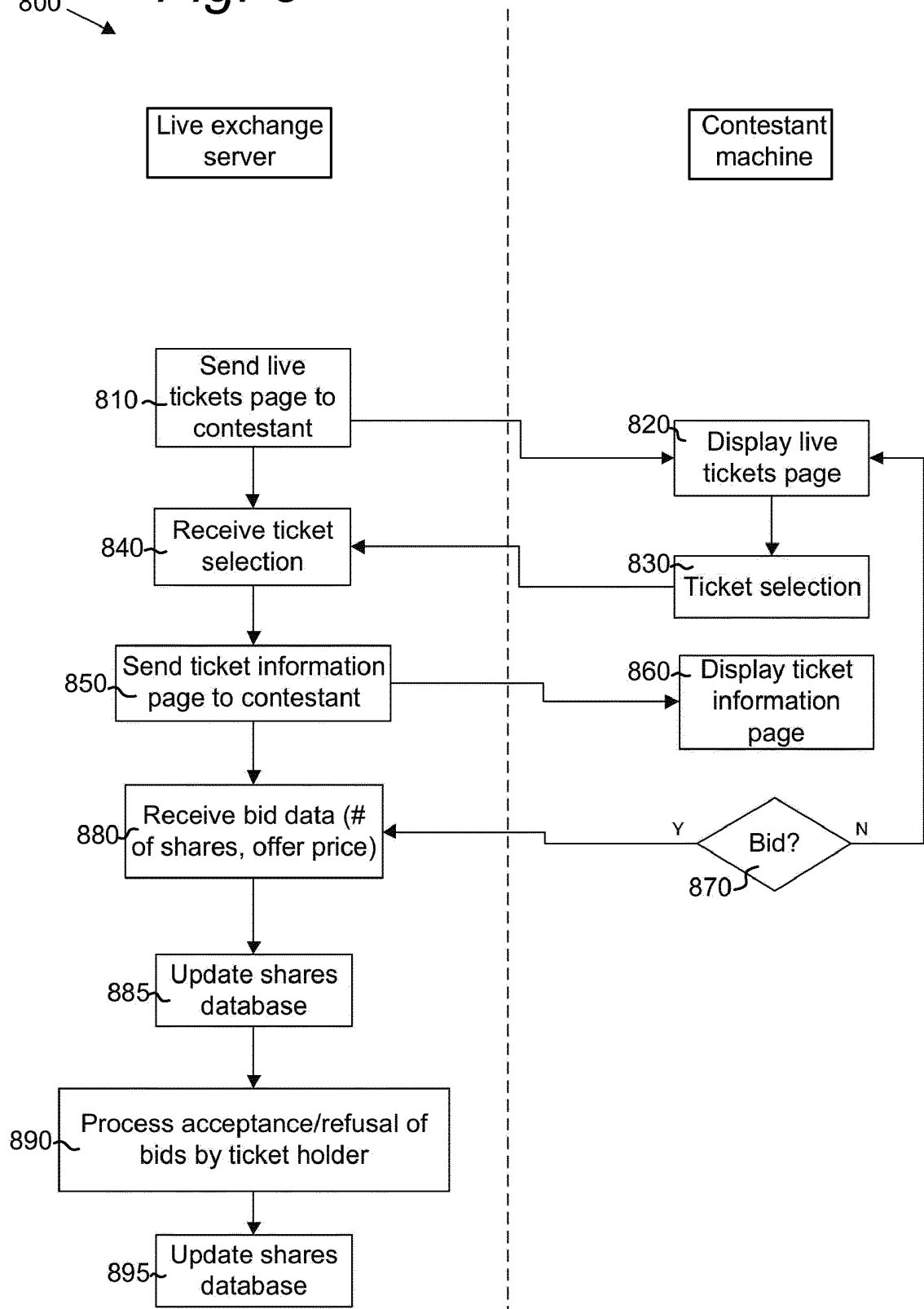


*Fig. 7*

700



800 *Fig. 8*





ONDERZOEKSRAPPORT

BETREFFENDE HET RESULTAAT VAN HET ONDERZOEK NAAR DE STAND VAN DE TECHNIEK

| RELEVANTE LITERATUUR                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                         |                                                                   |                                                |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------|------------------------------------------------|
| Categorie <sup>1</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Literatuur met, voor zover nodig, aanduiding van speciaal van belang zijnde tekstgedeelten of figuren.                                                                                  | Van belang voor conclusie(s) nr:                                  | Classificatie (IPC)                            |
| X                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | US 2007/026926 A1 (ROMANIK PHILIP B [US])<br>1 februari 2007 (2007-02-01)<br>* samenvatting *<br>* figuur 5 *<br>* alinea [0011] - alinea [0014] *<br>* alinea [0022] - alinea [0027] * | 1-29                                                              | INV.<br>G07F17/32                              |
| X                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | WO 2011/116213 A1 (GEORGIA LOTTERY CORP [US]; UPSHAW JEFFERSON [US]; GREGORY JANE MARY [U]) 22 september 2011 (2011-09-22)<br>* het gehele document *                                   | 1-29                                                              |                                                |
| X                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | WO 2013/002670 A1 (BELIKOV PETR ANATOLEVICH [RU]; STREHA DENIS ALEKSANDROVICH)<br>3 januari 2013 (2013-01-03)<br>* het gehele document *                                                | 1-29                                                              |                                                |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                         |                                                                   | Onderzochte gebieden van de techniek           |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                         |                                                                   | G07F                                           |
| Indien gewijzigde conclusies zijn ingediend, heeft dit rapport betrekking op de conclusies ingediend op:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                         |                                                                   |                                                |
| Plaats van onderzoek:<br><b>'s-Gravenhage</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                         | Datum waarop het onderzoek werd voltooid:<br><b>25 april 2014</b> | Bevoegd ambtenaar:<br><b>Diepstraten, Marc</b> |
| <b><sup>1</sup> CATEGORIE VAN DE VERMELDE LITERATUUR</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                         |                                                                   |                                                |
| <p>X: de conclusie wordt als niet nieuw of niet inventief beschouwd ten opzichte van deze literatuur</p> <p>Y: de conclusie wordt als niet inventief beschouwd ten opzichte van de combinatie van deze literatuur met andere geciteerde literatuur van dezelfde categorie, waarbij de combinatie voor de vakman voor de hand liggend wordt geacht</p> <p>A: niet tot de categorie X of Y behorende literatuur die de stand van de techniek beschrijft</p> <p>O: niet-schriftelijke stand van de techniek</p> <p>P: tussen de voorrangsdatum en de indieningsdatum gepubliceerde literatuur</p> <p>T: na de indieningsdatum of de voorrangsdatum gepubliceerde literatuur die niet bezwarend is voor de octrooiaanvraag, maar wordt vermeld ter verheldering van de theorie of het principe dat ten grondslag ligt aan de uitvinding</p> <p>E: eerdere octrooi(aanvraag), gepubliceerd op of na de indieningsdatum, waarin dezelfde uitvinding wordt beschreven</p> <p>D: in de octrooiaanvraag vermeld</p> <p>L: om andere redenen vermelde literatuur</p> <p>&amp;: lid van dezelfde octrooifamilie of overeenkomstige octrooipublicatie</p> |                                                                                                                                                                                         |                                                                   |                                                |

**AANHANGSEL BEHORENDE BIJ HET RAPPORT BETREFFENDE  
HET ONDERZOEK NAAR DE STAND VAN DE TECHNIEK,  
UITGEVOERD IN DE OCTROOIAANVRAGE NR.**

NO 138791  
NL 2011307

Het aanhangsel bevat een opgave van elders gepubliceerde octrooiaanvragen of octrooien (zogenaamde leden van dezelfde octrooifamilie), die overeenkomen met octrooischriften genoemd in het rapport.

De opgave is samengesteld aan de hand van gegevens uit het computerbestand van het Europees Octrooibureau per

De juistheid en volledigheid van deze opgave wordt noch door het Europees Octrooibureau, noch door het Bureau voor de Industriële eigendom gegarandeerd; de gegevens worden verstrekt voor informatiedoeleinden.

25-04-2014

| In het rapport<br>genoemd octrooigeschrift | Datum van<br>publicatie | Overeenkomend(e)<br>geschrift(en)    | Datum van<br>publicatie  |
|--------------------------------------------|-------------------------|--------------------------------------|--------------------------|
| US 2007026926 A1                           | 01-02-2007              | GEEN                                 |                          |
| WO 2011116213 A1                           | 22-09-2011              | US 2012061951 A1<br>WO 2011116213 A1 | 15-03-2012<br>22-09-2011 |
| WO 2013002670 A1                           | 03-01-2013              | RU 2011126887 A<br>WO 2013002670 A1  | 10-01-2013<br>03-01-2013 |

## SCHRIFTELIJKE OPINIE

|                                        |                               |                |                             |
|----------------------------------------|-------------------------------|----------------|-----------------------------|
| DOSSIER NUMMER<br>NO138791             | INDIENINGSDATUM<br>15.08.2013 | VOORRANGSDATUM | AANVRAAGNUMMER<br>NL2011307 |
| CLASSIFICATIE<br>INV. G07F17/32        |                               |                |                             |
| AANVRAGER<br>Won in a Million Pty Ltd. |                               |                |                             |

Deze schriftelijke opinie bevat een toelichting op de volgende onderdelen:

- ☒ Onderdeel I Basis van de schriftelijke opinie
- ☐ Onderdeel II Voorrang
- ☐ Onderdeel III Vaststelling nieuwheid, inventiviteit en industriële toepasbaarheid niet mogelijk
- ☐ Onderdeel IV De aanvraag heeft betrekking op meer dan één uitvinding
- ☒ Onderdeel V Gemotiveerde verklaring ten aanzien van nieuwheid, inventiviteit en industriële toepasbaarheid
- ☐ Onderdeel VI Andere geciteerde documenten
- ☐ Onderdeel VII Overige gebreken
- ☐ Onderdeel VIII Overige opmerkingen

|  |                                            |
|--|--------------------------------------------|
|  | DE BEVOEGDE AMBTENAAR<br>Diepstraten, Marc |
|--|--------------------------------------------|

## SCHRIFTELIJKE OPINIE

Aanvraag nr.:  
NL2011307

---

### Onderdeel I Basis van de Schriftelijke Opinie

---

1. Deze schriftelijke opinie is opgesteld op basis van de meest recente conclusies ingediend voor aanvang van het onderzoek.
2. Met betrekking tot **nucleotide en/of aminozuur sequenties** die genoemd worden in de aanvraag en relevant zijn voor de uitvinding zoals beschreven in de conclusies, is dit onderzoek gedaan op basis van:
  - a. type materiaal:
    - ☐ sequentie opsomming
    - ☐ tabel met betrekking tot de sequentie lijst
  - b. vorm van het materiaal:
    - ☐ op papier
    - ☐ in elektronische vorm
  - c. moment van indiening/aanlevering:
    - ☐ opgenomen in de aanvraag zoals ingediend
    - ☐ samen met de aanvraag elektronisch ingediend
    - ☐ later aangeleverd voor het onderzoek
3. ☐ In geval er meer dan één versie of kopie van een sequentie opsomming of tabel met betrekking op een sequentie is ingediend of aangeleverd, zijn de benodigde verklaringen ingediend dat de informatie in de latere of additionele kopieën identiek is aan de aanvraag zoals ingediend of niet meer informatie bevatten dan de aanvraag zoals oorspronkelijk werd ingediend.
4. Overige opmerkingen:

## SCHRIFTELIJKE OPINIE

Aanvraag nr.:  
NL2011307

---

### Onderdeel V Gemotiveerde verklaring ten aanzien van nieuwheid, inventiviteit en industriële toepasbaarheid

---

#### 1. Verklaring

|                            |                                        |
|----------------------------|----------------------------------------|
| Nieuwheid                  | Ja: Conclusies 1-29<br>Nee: Conclusies |
| Inventiviteit              | Ja: Conclusies<br>Nee: Conclusies 1-29 |
| Industriële toepasbaarheid | Ja: Conclusies 1-29<br>Nee: Conclusies |

#### 2. Citaties en toelichting:

**Zie aparte bladzijde**

**Re Item V**

**Reasoned statement with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

1 Reference is made to the following document:

D1 US 2007/026926 A1 (ROMANIK PHILIP B [US]) 1 februari 2007  
(2007-02-01)

2 The present application does not meet the criteria of patentability, because the subject-matter of claims 1 - 29 does not involve an inventive step.

**Independent claims**

2.1 Independent claim 1 deals with a computer-implemented method for drawing a winning lottery ticket in an iterative fashion.

However, a computer system capable of executing such a lottery draw is considered notoriously known, as also exemplified by the disclosures of documents D1 - D3 which also deal with computer systems for executing a lottery draw.

The claimed subject-matter of claim 1, and of the entire application for that matter, merely distinguishes itself from such a notoriously known computer system by the rules that define how the winning lottery ticket is drawn (i.e. selecting a group of tickets as non-winning tickets in an iterative process). However, running a lottery draw incorporating these rules can in itself not be considered as contributing to the solution of any technical problem by providing a technical effect, and can therefore not justify an inventive step.

Nevertheless, providing an implementation of a lottery drawing scheme on a computer system *is* regarded as a technical problem. However, since all technical features necessary for providing this implementation are considered notoriously known (see also documents D1 - D3), the claimed technical solution does not go beyond the concept of a mere automation of constraints imposed by the rules of the lottery draw. Such automation is obvious to the person skilled in the art, being a computer programmer.

As a result, the subject-matter of claim 1 cannot be considered as involving an inventive step.

2.2 The same reasoning applies, mutatis mutandis, to the subject-matter of the corresponding independent claims 22, 23, 28 and 29, which therefore are also considered not inventive.

Dependent claims

- 2.3 Dependent claims 2 - 21 and 24 - 27 do not contain any features which, in combination with the features of any claim to which they refer, meet the requirements of patentability in respect of inventive step. They either introduce further aspects relating to the rules that govern the lottery draw, or they introduce further notoriously known technical aspects, such as user devices.