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10 ABSTRACT

A game controller of a gaming device comprises a sequence module arranged to implement a plurality of draws in a 5 game. A matching module is provided for matching a set of drawn symbols against a set of selected symbols for each of the plurality of draws such that each drawn symbol is ineligible to be drawn in subsequent draws. An outcome determiner module determines an award dependent on the number of matched symbols.

## Related Application

This application is a divisional application of Australian application no. 2016200005 which, in turn, is a divisional of 2012216244 , which, in turn, is a divisional of 2009202037. The disclosure of each of these applications is incorporated herein by reference.

Field of the Invention

The present invention relates to a gaming system, game controller and a method of gaming.

Background of the Invention

It is known to provide a gaming system which comprises a game controller arranged to randomly display several
symbols from a predetermined set of symbols and to determine a game outcome such as a game win based on the displayed symbols. Such gaming systems may commonly be implemented as a stepper machine provided with reels with each reel carrying several symbols of the set, or a video machine wherein selected symbols are displayed on virtual reels on a video display. Win outcomes can occur based on symbols appearing in one or more horizontal lines, diagonal lines, or any other predetermined way.

While such gaming systems provide users with enjoyment, the need exists for alternative gaming systems in order to maintain or increase player enjoyment.

Summary of the Invention

In accordance with a first aspect, the present invention provides a computer implemented method of gaming for use with a gaming system having a game controller the method. comprising:
for each draw of a plurality of draws, matching by a matching module a same number of drawn symbols against a number of symbols selected by a player, the selection being received as a signal from a player interface, each non-matching drawn symbol being ineligible to be drawn in subsequent draws of the plurality of draws; and
determining an award dependent on the number of matched symbols.

In an embodiment, symbols matched in each draw remain matched in each of the subsequent draws.

In an embodiment, the symbols selected for each draw includes symbols matched in previous draws of the plurality of draws.

In an embodiment, the award is determined after each draw.

In an alternative embodiment, the award is determined upon completion of the plurality of draws.

In an embodiment, at least one of the number of draws and number of selected symbols is dependent on an amount wagered by a player.

In an embodiment, the selected symbols are the same for each of the draws.

In an embodiment, the game is Keno and a player selects the symbols to be matched in each draw. The symbols may, for example, be marked on a game card displayed on the player's gaming terminal. Matched symbols may be bolded or displayed in a different format to non-matched symbols during the draw.

In an embodiment, the game is Bingo and the symbols to be matched are selected independently of the player. Again, the symbols may be displayed on a game card visible to the player.

In an embodiment, the selected symbols are selected from the same symbol set as the drawn symbols.

In accordance with a second aspect the present invention provides computer system implemented game controller comprising:
a sequence module arranged to implement a plurality of draws;
a matching module arranged to, for each of the plurality of draws, match a same number of drawn symbols against a number of symbols selected by a player, the selection being received via a player interface, each drawn symbol being ineligible to be drawn in subsequent draws; and
an outcome determiner module arranged to determine an award dependent on the number of matched symbols.

In an embodiment, the symbols matched in each draw remain matched in each of the subsequent draws.

In an embodiment, the selected symbols for each game include symbols matched in previous draws.

In an embodiment, the outcome determiner module determines the award after each draw. Alternatively, the outcome determiner module may determine the award upon completion of the plurality of draws.

In an embodiment, at least one of the number of draws and number of selected symbols is dependent on an amount wagered by a player.

In an embodiment, the selected symbols are the same for each of the plurality of draws.

In an embodiment, the game is Keno and a player selects symbols to be matched in each draw using an input module of the game controller.

In an embodiment, the game is Bingo and a symbol selector module determines the symbols to be matched.

In an embodiment, the selected symbols are selected from the same symbol set as the drawn symbols.

In a third aspect the present invention provides a gaming system including:
a game controller according to the second aspect; and at least one display arranged to display a representation of each draw phase.

In accordance with a fourth aspect, the present invention provides computer program code which when executed by a processor implements the above methods.

In accordance with a fifth aspect, the present invention provides a computer readable medium providing a computer program in accordance with the fourth aspect.

In accordance with a sixth embodiment the present invention comprises transmitting or receiving a data signal including the program code of the fourth aspect.

Brief Description of the Drawings

Features and advantages of the present invention will become apparent from the following description of embodiments thereof, by way of example only, with reference to the accompanying drawings, in which:

Figure 1 is a schematic block diagram of core components of a gaming system, according to an embodiment of the present invention;

Figure 2 is a perspective view of a gaming machine arranged to implement the gaming system of Figure 1, according to an embodiment;

Figure 3 is a schematic block diagram of operative components of the gaming machine shown in Figure 2;

Figure 4 is a schematic block diagram representing the structure of a memory of the gaming machine shown in Figure 2;

Figure 5 is a schematic diagram of a networked gaming system;

Figure 6 is a further schematic block diagram of the gaming system;

Figure 7 is a screen shot of a game card displayable by the gaming system;

Figure 8 is a flowchart of an embodiment;

Figures 9a through 9c are screen shots illustrating an example operation of game play; and

Figure 10 is a flow diagram of the example operation.

Detailed Description

In an embodiment a game controller of a gaming device comprises a sequence module arranged to implement a plurality of draws in a game. A matching module is provided for matching a set of drawn symbols against a set of selected symbols for each of the plurality of draws such that each drawn symbol is ineligible to be drawn in
subsequent draws. An outcome determiner module determines an award dependent on the number of matched symbols.

General construction of gaming system

The gaming system can take a number of different forms. In a first form, a stand alone gaming machine is provided wherein all or most components required for implementing the game are present in a player operable gaming machine.

In a second form, a distributed architecture is provided wherein some of the components required for implementing the game are present in a player operable gaming machine and some of the components required for implementing the game are located remotely relative to the gaming machine. For example, a "thick client" architecture may be used wherein part of the game is executed on a player operable gaming machine and part of the game is executed remotely, such as by a gaming server; or a "thin client" architecture may be used wherein most of the game is executed remotely such as by a gaming server and a player operable gaming machine is used only to display audible and/or visible gaming information to the player and receive gaming inputs from the player.

However, it will be understood that other arrangements are envisaged. For example, an architecture may be provided wherein a gaming machine is networked to a gaming server and the respective functions of the gaming machine and the gaming server are selectively modifiable. For example, the gaming system may operate in stand alone gaming machine mode, "thick client" mode or "thin client" mode
depending on the game being played, operating conditions, and so on. Other variations will be apparent to persons skilled in the art.

Irrespective of the form, the gaming system comprises several core components. At the broadest level, the core components are a player interface 50 and a game controller 60 as illustrated in Figure 1. The player interface is arranged to enable manual interaction between a player and the gaming system and for this purpose includes the input/output components required for the player to enter instructions and play the game.

Components of the player interface may vary from embodiment to embodiment but will typically include a credit mechanism 52 to enable a player to input credits and receive payouts, one or more displays 54, a game play mechanism 56 that enables a player to input game play instructions (e.g. to place bets), and one or more speakers 58.

The game controller 60 is in data communication with the player interface and typically includes a processor 62 that processes the game play instructions in accordance with game play rules and outputs game play outcomes to the display. Typically, the game play instructions are stored as program code in a memory 64 but can also be hardwired. Herein the term "processor" is used to refer generically to any device that can process game play instructions in accordance with game play rules and may include: a microprocessor, microcontroller, programmable logic device
or other computational device, a general purpose computer (e.g. a PC) or a server.

A gaming system in the form of a stand alone gaming machine 10 is illustrated in Figure 2. The gaming machine 10 includes a console 12 having a display 14 on which are displayed representations of a game 16 that can be played by a player. A mid-trim 20 of the gaming machine 10 houses a bank of buttons 22 for enabling a player to interact with the gaming machine, in particular during game play. The mid-trim 20 also houses a credit input mechanism 24 which in this example includes a coin input chute 24A and a bill collector 24B. Other credit input mechanisms may also be employed, for example, a card reader for reading a smart card, debit card or credit card. A player marketing module (not shown) having a reading device may also be provided for the purpose of reading a player tracking device, for example as part of a loyalty program. The player tracking device may be in the form of a card, flash drive or any other portable storage medium capable of being read by the reading device.

A top box 26 may carry artwork 28 , including for example pay tables and details of bonus awards and other information or images relating to the game. Further artwork and/or information may be provided on a front panel 29 of the console 12. A coin tray 30 is mounted beneath the front panel 29 for dispensing cash payouts from the gaming machine 10 .

The display 14 shown in Figure 2 is in the form of a video display unit, particularly a cathode ray tube screen
device. Alternatively, the display 14 may be a liquid crystal display, plasma screen, any other suitable video display unit, or the visible portion of an
electromechanical device. The top box 26 may also include a display, for example a video display unit, which may be of the same type as the display 14, or of a different type.

Figure 3 shows a block diagram of operative components of a typical gaming machine which may be the same as or different to the gaming machine of Figure 2.

The gaming machine 100 includes a game controller 101 having a processor 102. Instructions and data to control operation of the processor 102 are stored in a memory 103, which is in data communication with the processor 102. Typically, the gaming machine 100 will include both volatile and non-volatile memory and more than one of each type of memory, with such memories being collectively represented by the memory 103.

The gaming machine has hardware meters 104 for purposes including ensuring regulatory compliance and monitoring player credit, an input/output (I/O) interface 105 for communicating with peripheral devices of the gaming machine 100. The input/output interface 105 and/or the peripheral devices may be intelligent devices with their own memory for storing associated instructions and data for use with the input/output interface or the peripheral devices. A random number generator module 113 generates random numbers for use by the processor 102. Persons
skilled in the art will appreciate that the reference to random numbers includes pseudo-random numbers.

In the example shown in Figure 3, a player interface 120 includes peripheral devices that communicate with the game controller 101 comprise one or more displays 106, a touch screen and/or buttons 107, a card and/or ticket reader 108, a printer 109, a bill acceptor and/or coin input mechanism 110 and a coin output mechanism 111. Additional hardware may be included as part of the gaming machine 100, or hardware may be omitted as required for the specific implementation.

In addition, the gaming machine 100 may include a communications interface, for example a network card 112. The network card may, for example, send status information, accounting information or other information to a central controller, server or database and receive data or commands from the central controller, server or database.

Figure 4 shows a block diagram of the main components of an exemplary memory 103. The memory 103 includes RAM 103A, EPROM 103B and a mass storage device 103C. The RAM 103A typically temporarily holds program files for execution by the processor 102 and related data. The EPROM 103B may be a boot ROM device and/or may contain some system or game related code. The mass storage device 103C is typically used to store game programs, the integrity of which may be verified and/or authenticated by the processor 102 using protected code from the EPROM 103B or elsewhere.

It is also possible for the operative components of the gaming machine 100 to be distributed, for example input/output devices 106,107,108,109,110,111 to be provided remotely from the game controller 101.

Figure 5 shows a gaming system 200 in accordance with an alternative embodiment. The gaming system 200 includes a network 201, which for example may be an Ethernet network. Gaming machines 202, shown arranged in three banks 203 of two gaming machines 202 in Figure 5, are connected to the network 201. The gaming machines 202 provide a player operable interface and may be the same as the gaming machines 10,100 shown in Figures 2 and 3 , or may have simplified functionality depending on the requirements for implementing game play. While banks 203 of two gaming machines are illustrated in Figure 5, banks of one, three or more gaming machines are also envisaged.

One or more displays 204 may also be connected to the network 201. For example, the displays 204 may be associated with one or more banks 203 of gaming machines. The displays 204 may be used to display representations associated with game play on the gaming machines 202, and/or used to display other representations, for example promotional or informational material.

In a thick client embodiment, game server 205 implements part of the game played by a player using a gaming machine 202 and the gaming machine 202 implements part of the game. With this embodiment, as both the game server and the gaming device implement part of the game, they
collectively provide a game controller. A database management server 206 may manage storage of game programs and associated data for downloading or access by the gaming devices 202 in a database 206A. Typically, if the gaming system enables players to participate in a Jackpot game, a Jackpot server 207 will be provided to perform accounting functions for the Jackpot game. A loyalty program server 212 may also be provided.

In a thin client embodiment, game server 205 implements most or all of the game played by a player using a gaming machine 202 and the gaming machine 202 essentially provides only the player interface. With this embodiment, the game server 205 provides the game controller. The gaming machine will receive player instructions, pass these to the game server which will process them and return game play outcomes to the gaming machine for display. In a thin client embodiment, the gaming machines could be computer terminals, e.g. PCs running software that provides a player interface operable using standard computer input and output components.

Servers are also typically provided to assist in the administration of the gaming network 200, including for example a gaming floor management server 208, and a licensing server 209 to monitor the use of licenses relating to particular games. An administrator terminal 210 is provided to allow an administrator to run the network 201 and the devices connected to the network.

The gaming system 200 may communicate with other gaming systems, other local networks, for example a corporate
network, and/or a wide area network such as the Internet, for example through a firewall 211.

Persons skilled in the art will appreciate that in accordance with known techniques, functionality at the server side of the network may be distributed over a plurality of different computers. For example, elements may be run as a single "engine" on one server or a separate server may be provided. For example, the game server 205 could run a random generator engine. Alternatively, a separate random number generator server could be provided. Further, persons skilled in the art will appreciate that a plurality of game servers could be provided to run different games or a single game server may run a plurality of different games as required by the terminals.

Persons skilled in the art will also appreciate that the method of the preferred embodiment could be embodied in program code. The program code could be supplied in a number of ways, for example on a computer readable 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 downloading it from a server).

Further Detail of the Game Controller

The game controller 60 of an embodiment is shown in more detail in Figure 6. For simplicity, only those modules needed to carry out embodiments of the invention are illustrated in Figure 6. Other standard and/or non-
standard modules may also be implemented for carrying out operation of normal and feature game play functionality. Referring to Figure 6, the game controller 60 includes a processor 62 which is arranged to control game play and to determine a game outcome. It will be apparent that the processor 62 implements a number of modules, namely a random number generator module 621, sequence module 622 , symbol selector module 624, matching module 626 , outcome determiner module 628 and display controller module 630 , based on program code stored in memory 64.

Persons skilled in the art will appreciate that not all modules need be implemented by processor 62. Other implementations are envisaged. For example, the functional modules of Figure 6 may be implemented in hardware as separate units, or a combination of hardware and software as separate units. Any practical implementation of these functional units may be employed.

With additional reference to Figure 7, the display module 630 is arranged to display a game card 702 on the display screen 54 of the gaming machine 10. In the embodiment described herein the match game implemented by the game controller is a variation of the well-known game of Keno and as such the game card is in the form of a Keno card 702. Specifically each game includes a plurality of draws, or "phases". Non-matching numbers drawn in each phase are ineligible to be drawn again in any of the subsequent draws thereby improving the player's chances of being awarded a prize (as will be understood by persons skilled in the art, the game of Keno involves matching a set of randomly drawn numbers against a set of player-selected.
numbers marked on the Keno card and awarding a prize dependent on the number of matches). In an embodiment the number of phases is dependent on an amount wagered by the player. For example, triple draw keno may require the player to wager three times the standard single draw wager amount; five draw keno may require the player to wager five times the standard wager amount, etc.

According to the illustrated embodiment, the Keno card 702 comprises a standard $10 \times 8$ matrix having ten columns and eight rows. Numbers from one through eighty are displayed on the Keno card 702 with each number having its own matrix position. It will be understood that the size of the matrix can vary as can the type of displayed/drawn symbols, depending on the actual implementation.

Players can select both the number of draw phases and the individual numbers to play in each draw, using either the touch screen and or buttons 107 provided on the gaming machine 10. The selection can be made by marking the appropriate squares on the keno card 702, as shown in Figure 7. Data representative of the player phase selection and number selection is stored in memory 64 as phase data 623 and number selection data 625, respectively.

The sequence module 622 of the game controller 60 is operable to carry out the selected number of draw phases based on the number specified by the phase data 623. After completion of each phase, the sequence module 622 updates the phase data 623 to indicate how many phases remain in the selected number of draw phases.

During each draw phase, the symbol selector module 624 randomly draws numbers to be matched against the playerselected numbers based on symbol data 627 stored in memory 64, which specifies the available numbers. As will be described in more detail in subsequent paragraphs, once a number has been selected it is ineligible to be selected in any of the subsequent draw phases.

The matching module 626 is operable to match drawn numbers against player selected numbers and instruct the display module 630 to provide an indication on the relevant square of the keno card 702 that the selected number has been matched. In an embodiment, numbers that have been matched remain matched for at least one other draw phase of the remaining number of specified draw phases, thus increasing the potential award payable to the player.

The outcome determiner module 628 determines the game outcomes (i.e. the quantity and optionally position of matched numbers) and associated prize to be awarded to the player dependent on the quantity of matched numbers and amount wagered in the game. In an embodiment the determiner module 628 determines the prize upon completion of all draw phases. Alternatively, the prize may be determined after each of the draw phases. The prize pay scale may be the same for each draw phase (e.g. the prize value for achieving five matched symbols in the first draw is the same as the prize value for achieving five matched symbols in the nth draw phase). Alternatively the pay scale may change for different draw phases. For example, the pay scale for each successive draw phase may be
reduced by an amount proportional to the draw phase number.

Persons skilled in the art will appreciate that the game implemented by the game controller 60 can relate to any form of match game and is not limited to Keno-type games as described above. For example, in an alternative embodiment, the game controller 60 could implement a multi-draw game of Bingo. In such an embodiment the numbers to be matched (i.e. the numbers selected on the game card) may be determined at random by the game controller 60, as opposed to being player-selectable. The award may additionally be determined not only based on the number of matched symbols but also dependent on their position on the game card as prescribed by match rule data 629 stored in memory 64. Again, non-matched numbers/symbols drawn by the game controller in each draw phase are ineligible to be re-drawn in subsequent draw phases.

The method 800 is summarised in Figure 8. Each game comprises a plurality of draws. At step 802 for each draw of the plurality of draws, a set of drawn symbols is matched against a set of selected symbols, each nonmatching drawn symbol being ineligible to be drawn in subsequent draws of the plurality of draws. At step 804 an award/prize is determined dependent on the number of matched symbols.

Example

An example of game play in accordance with an embodiment will hereafter be described with reference to the screen displays illustrated in Figures 9a through 9c and flow chart of Figure 10. In the illustrated example, a player has elected to play five numbers in three simultaneous draws (referred to as a "triple-draw" game sequence) at step 910. The outcome determiner module 628 determines the award payable following each draw of the draw phase (i.e. as if each draw phase were its own complete game). The numbers available for player selection range from 1 to 80. The first forty numbers available for selection are displayed in an upper partition 704 of the game card 702, while the remaining forty numbers are displayed in a lower partition 706.

With specific reference to Figure 9a, the player begins game play by selecting/marking five numbers on the game card 702 (step 920). In the illustrated example, the player has marked the numbers "3", "12", "25", "44" and "60". Once the player has entered their selection, the symbol selector module 624 draws five numbers at random utilising the random number generator 621 (step 930). In this example, the drawn numbers are "14", "22", "25", "30" and "38". The matching module 626 compares the drawn and selected numbers of the first draw phase and determines that only one match exists, namely the number "25". The outcome determiner module 628 determines and awards the prize for one matched symbol by referencing a prize table stored in memory 64 (steps $940 \& 950$ ). The sequence module 622 adjusts the phase data 623 to show that the first phase has been completed. Since not all draws have
been completed (step 950), the sequence module 622 initialises the second draw phase.

The second draw phase is illustrated in Figure 9b. As can be seen, matched number " 25 " remains matched for the second draw phase. Accordingly, the player now has the opportunity to select four numbers (in addition to the number "25" matched in the first phase) to play in the second draw phase. In the illustrated embodiment, the player has elected to select a different set of numbers to those used in the first draw phase, namely "3", "9", "15" and "50". It will be noted that both the number of symbols to be selected and number of drawn symbols are reduced by the number of symbols matched in previous drawn phases. Upon completion of the player selection, the symbol selector module 624 draws four numbers at random based on the symbol data 627 indicating available numbers. Only one of the four drawn numbers matches the player selected numbers, namely the number "50". Again by referencing the prize table, the outcome determiner module 628 determines and awards the prize for two matched symbols (i.e. the "25" from the first phase and the "50" from the second phase). The sequence module 622 adjusts the phase data 623 to show that the second phase has been completed and initialises the third and final draw phase.

The third draw phase is shown in Figure 9c. The numbers "25" and "50" remain matched thus leaving three playerselectable numbers to be entered. As shown, the player has elected to keep the three numbers previously unmatched from the second draw phase. The symbol selector module 624 draws three numbers as shown based on the
symbol data 627. The matching module determines that only one of the three drawn numbers of "3", "33" and "75", the number "3", matches the player selected numbers. Accordingly, the outcome determiner module 628 determines and awards the player with the relevant prize for three matched symbols (step 960). The sequence module 622 adjusts the phase data 623 to show that all phases have been completed and the game ends.

The aforementioned embodiments provide an alternative type of game play to that provided by traditional match games, such as Keno and Bingo-type games. By rendering drawn symbols ineligible for use in subsequent draws, a new and exciting variation of a match game may be implemented which may provide players with an increased chance of being awarded a prize in the selected number of draws thus heightening the sense of excitement experienced by the player.

It will be appreciated by persons skilled in the art that numerous variations and/or modifications may be made to the invention as shown in the specific embodiments without departing from the spirit or scope of the invention as broadly described. The present embodiments are, therefore, to be considered in all respects as illustrative and not restrictive.

It is to be understood that, if any prior art publication is referred to herein, such reference does not constitute an admission that the publication forms a part of the common general knowledge in the art, in Australia or any other country.

1. A computer implemented method of gaming for use with a gaming system having a game controller the method comprising:
for each draw of a plurality of draws, matching by a matching module a same number of drawn symbols against a number of symbols selected by a player, the selection being received as a signal from a player interface, each non-matching drawn symbol being ineligible to be drawn in subsequent draws of the plurality of draws; and
determining an award dependent on the number of matched symbols.
2. A method of gaming as claimed in claim 1, whereby symbols matched in each draw remain matched in each of the subsequent draws.
3. A method of gaming as claimed in claim 1 or claim 2, whereby the selected symbols for each draw includes symbols matched in previous draws of the plurality of draws.
4. A method of gaming as claimed in any one of the preceding claims, wherein the award is determined after each draw.
5. A method of gaming as claimed in any one of claims 1 to 3, wherein the award is determined upon completion of the plurality of draws.
6. A method of gaming as claimed in any one of the preceding claims, wherein at least one of the number of draws and the number of selected symbols is dependent on an amount wagered by a player.
7. A method of gaming as claimed in any one of the preceding claims, wherein the game is Keno and whereby a player selects the symbols to be matched in each draw.
8. A method of gaming as claimed in any one of claims 1 to 6, wherein the game is Bingo and whereby the symbols to be matched are selected independently of the player.
9. A method of gaming as claimed in any one of the preceding claims, wherein the selected symbols and the drawn symbols are selected from a same set of symbols.
10. A computer system implemented game controller comprising:
a sequence module arranged to implement a plurality of draws;
a matching module arranged to, for each of the plurality of draws, match a same number of drawn symbols against a number of symbols selected by a player, the selection being received via a player interface, each drawn symbol being ineligible to be drawn in subsequent draws; and
an outcome determiner module arranged to determine an award dependent on the number of matched symbols.
11. A game controller as claimed in claim 10, whereby symbols matched in each draw remain matched in each of the subsequent draws.
12. A game controller as claimed in claim 10 or claim 11, whereby the selected symbols for each game includes symbols matched in previous draws.
13. A game controller as claimed in any one of claims 10 to 12 , whereby the outcome determiner module determines the award after each draw.
14. A game controller as claimed in any one of claims 10 to 12 , whereby the outcome determiner module determines the award upon completion of the plurality of draws.
15. A game controller as claimed in any one of claims 10 to 14, wherein at least one of the number of draws and the number of selected symbols is dependent on an amount wagered by a player.
16. A game controller as claimed in any one of claims 10 to 15 , wherein the number of selected symbols is the same for each of the plurality of draws.
17. A game controller as claimed in any one of claims 10 to 16, wherein the game is Keno and whereby a player selects the symbols to be matched in each draw using an input module.
18. A game controller as claimed in any one of claims 10 to 16, wherein the game is Bingo and whereby a symbol
selector module determines the selected symbols to be matched.
19. A game controller as claimed in any one of claims 10
to 18 , wherein the selected symbols and the drawn symbols are selected from a same set of symbols.
20. A gaming system including:
a game controller according to any one of claims 10
to 19; and
at least one display arranged to display a representation of each draw phase.
21. Computer program code which when executed by a processor implements the method according to any one of claims 1 to 9.
22. A computer readable medium comprising the program code of claim 21.
23. Transmitting or receiving a data signal comprising the computer program code of claim 21.


Figure 1


Figure 2

3/9


Figure 4


Figure 5
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| 1 | 2 | $\mathbf{3}$ | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 11 | $\mathbf{1 2}$ | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 |
| 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 |


| 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 |
| 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 |
| 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 |

Legend
Selected Symbol
Drawn Symbol
Matched Symbol
Previously drawn symbol

## 3 No. Draws

Figure 7

> For each draw of a plurality of draws, match a set of drawn symbols against a set of selected symbols, each non-matching symbol being ineligible to be drawn in subsequent draws


Figure 8

| $N$ | 8/9 |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\checkmark$ | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| $\bigcirc$ | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| $\bigcirc$ | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 |
|  | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 |
| $\stackrel{\square}{\square}$ | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 |
| $\infty$ | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 |
| $\stackrel{\sim}{\sim}$ | 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 |
| N | 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 |

Figure 9a

| 1 | 2 | $\mathbf{3}$ | 4 | 5 | 6 | 7 | 8 | $\mathbf{9}$ | 10 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 11 | 12 | 13 | $\mathbf{1 4}$ | $\mathbf{1 5}$ | 16 | 17 | 18 | 19 | 20 |
| 21 | $\mathbf{2 2}$ | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 |
| 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 |


| 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 |
| 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 |
| 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 |

Figure 9b

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 |
| 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 |
| 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 |
| 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 |
| 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 |
| 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 |

Figure 9c


Figure 10

