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(54) **A METHOD FOR A GAMING SYSTEM**

(57) The present disclosure relates to a computer implemented method performed by a gaming system. In particular, the present disclosure relates to a scheme for further improving a randomness in a game provided by means of the gaming system. The present disclosure also relates to a corresponding gaming system and a computer program product.

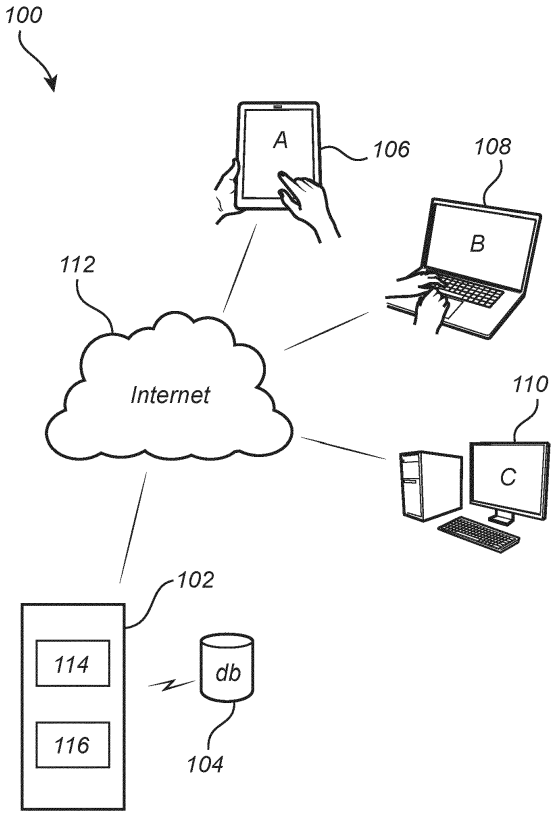

Fig. 1

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Description

TECHNICAL FIELD

[0001] The present disclosure relates to a computer implemented method performed by a gaming system. In particular, the present disclosure relates to a scheme for further improving a randomness in a game provided by means of the gaming system. The present disclosure also relates to a corresponding gaming system and to a computer program product.

BACKGROUND

[0002] Games of chance are known and widely played for recreational purposes. The gaming industry has come to recognize that to sustain long term success it must be constantly innovative in introducing new games and new gaming concepts to the gaming public. One example of this innovating drive can be appreciated in the embrace of the Internet and online gaming by the gaming industry.

[0003] A common trend within the online gaming industry is to provide potentially new and current players with new means for attracting and ensuring that players remain at the online site, controlled by a gaming operator, providing the games. An example of such a means is the introduction of further unexpected scenarios in the game, potentially allowing a player to be further driven to play the game since the player has a desire to participate with the game in case of such an unexpected scenario appearing.

[0004] The introduction of possible unexpected scenarios in the game could also further increase the payout to the player, since the unexpected scenario possibly could add a further leverage to a bet placed by the player. Although this of course is of high interest to the player, such further possible payouts must be closely controlled by a gaming operator, ensuring that the payouts stay within desired boundaries. Thus, there is a general need to balance the attraction power of the game by means of possible further and higher payouts, while at the same time ensuring that an operator is in total control of the game.

[0005] An example of an implementation of an exemplary gaming system adapted for further improving an attraction power to an online game is presented in US20220068083A1. In US20220068083A1, the focus is towards an implementation where a server continuously updates a portion of an online gaming environment comprising a table holding a predetermined plurality of cells populated with e.g. slot game elements, where the gaming environment is provided at a display screen of an electronic user device operated by a user/player. The server is further adapted to function in a reactive manner and only direct the electronic user device to display the updated table if new elements have been introduced in the table.

[0006] Even though US20220068083A1 presents a highly interesting approach to enhanced online gaming, there is always a desire to provide further enhancements to further increase the attractiveness of online gaming, while ensuring that the online gaming may be performed in a safe and secure manner for the user/player as well as for an operator of the online game.

SUMMARY

[0007] According to an aspect of the present disclosure, the above is at least partly met by a computer implemented method performed by a gaming system, the gaming system comprising a server arranged in communication with an electronic user device using a network connection, the electronic user device comprising a display screen, wherein the method comprises the steps of receiving, at the server, a request from the electronic user device to play a game provided by the server, the request comprising a wagering bet, forming, using the server, a table in the form of a grid having a selected dimension and comprising a selected number of cells, generating, using the server, a set of elements corresponding to the selected number of cells, wherein the set of elements are selected from a group of predefined element types, populating, using the server, the cells of the table with the set of elements, directing, using the server, the electronic user device to display the table at the display screen, detecting, using the server and by applying a predefined matching scheme, the presence of a cluster of adj acent cells comprising a plurality of related element types, increasing, using the server, a multiplication factor for the game based on the detected cluster of adjacently arranged cells, and identifying, using the server, a predefined relation between the set of elements comprised with the table, determining, using the server, a gaming outcome based on the wagering bet, the multiplication factor and the predefined relation between the set of elements comprised with the table.

[0008] Generally, when the operational scheme according to the present disclosure is applied to a game concept provided by the server, it may be possible to increase the randomization of the game, thus ensuring an improved integrity of the game as compared to prior-art implementations relying on random generated determinations, since known general computer-based issues relating to the generation of randomized material to the game are minimized. Additionally and advantageously, the suggested scheme may also, potentially, allow for increasing winning possibilities for a player participating in the game. This could potentially be beneficial to both the player participating in the game and the gaming operator providing the game.

[0009] These advantageous effects are achieved by the introduction of a multiplication factor that dynamically will affect the overall outcome of the game. The multiplication factor is in turn at least dependent on a detected clustering of adj acently arranged cells within the table of the game. Additionally, the introduction of the multipli-

cation factor will drastically reduce the level of predictability of the game, effectively and drastically increasing the randomness of the game.

[0010] The definition of "adjacently arranged cells" may be dependent on the specific implementation of the present scheme. For example, adjacently may be defined as arranged on the same row of the table or in the same column of the table. It may however also be possible to allow other cluster formations to be seen as adjacently, such for example comprising a combination of cells arranged both on different columns and on different rows, but at least sharing a side of a cell to another cell holding a matching element.

[0011] In one embodiment the plurality of adjacently arranged is at a minimum four adjacently arranged cells, including e.g. 1×4 cells or 2×2 cells. However, any plurality of (at least two) cells is possible and within the scope of the present disclosure. Other definitions of clusters comprising matching elements are of course possible and within the scope of the present disclosure. Such a further example of a cluster may be where matching elements form specific "shapes", but not necessarily share a cell side with each other. Thus, two adjacent cells may possibly, in some embodiments, be seen as two cells at least having "touching" cell corners.

[0012] For ensuring that the matching is performed with a minimum amount of perceived delay in the progression of the game it is desirable to apply a computational efficient predefined matching scheme. Possible schemes that can be used in relation to the present disclosure include different forms of feature detection algorithms that today find usage within e.g. the computer vision field, such as for detecting and describing local features in images. In some embodiments of the present disclosure the predefined matching scheme may be selected to apply e.g. feature descriptors or feature vectors, where the plurality of predefined cluster formations are expressions of such feature descriptors or feature vectors. Other predefined matching schemes are also possible and within the scope of the present disclosure.

[0013] In some embodiments, the plurality of predefined cluster formations generates different gaming outcomes and affects the multiplication factor differently, where potentially in comparison more "complex" clusters comprising specifically "unusual" elements may generate a different gaming outcome as compared to a less complex cluster comprising "common" elements.

[0014] In accordance to the present disclosure, the overall gaming outcome is as discussed above determined based on the wagering bet, the multiplication factor and the predefined relation between the set of elements comprised with the table. The predefined relation between the set of elements comprised with the table is a further way of additionally increasing the randomness of the game. Specifically, it may in accordance to the present disclosure be possible to allow for specific predefined "patterns" to be identified within the table. As exemplified above, such patterns may for example be identified using the mentioned computational efficient predefined matching scheme. As an example, the gaming operator may in advance dictate that some "element scenarios" (e.g. the presence of a predefined number of elements of a specific type within the table, a specific element type arranged in a specific quadrant of the table, or any possible predefined configuration of elements within the table) to affect the overall gaming outcome.

[0015] That said, "identifying" a predefined relation between the set of elements comprised with the table should be interpreted broadly. Accordingly, a predefined relation must not necessarily be the same type of elements but could for example be related element types. The types or elements may for example include numbers and/or symbols of any kind and matching a desired implementation of the game to be played by the player. Furthermore, different relations between elements may have different value and may as such have different impact on the overall determination of the gaming outcome.

[0016] The combination of the multiplication factor and the predefined relation between the set of elements comprised with the table will as such ensure that the gaming outcome in essence is completely unpredictable, while being computational efficient for the server performing the novel gaming scheme.

[0017] Within the context of the present disclosure, it should be understood that the implementation of the multiplication factor not only serves to enhance game unpredictability but also optimizes server resource utilization. Specifically, the server's capability to adjust the multiplication factor based on detected clusters of adjacently arranged cells reduces the need for constant recalculation of game states, thereby minimizing the computational load. Such an efficient use of resources ensures faster game response times and lowers operational costs, while maintaining the integrity and speed of the gaming experience even under high user load conditions.

[0018] Furthermore, the optimized approach to game state management contributes to a safer gaming environment. By limiting the frequency of data exchanges between the server and user devices to only essential updates, the system reduces the risk of data corruption and unauthorized access. Such a reduction in data traffic not only enhances security but also improves the reliability of the gaming experience across varying network conditions, ensuring that players receive a consistent gaming environment regardless of their internet connectivity.

[0019] The enhanced server capabilities also lead to a more engaging and dynamic gaming experience for users. The adaptive nature of the multiplication factor, influenced by game play patterns and the clustering of game elements, allows for a highly personalized gaming experience. Such a personalization may for example achieved without compromising on the game's performance. Moreover, the architecture of the present gaming system is preferably designed with scalability in mind, allowing for easy integration with future gaming technol-

ogies and formats. Such a scalability ensures that as gaming trends evolve and new types of games are introduced, the system may continue to provide a high-quality, responsive gaming experience without the need for substantial reconfiguration.

[0020] In an embodiment of the present disclosure, the method preferably also comprises the steps of substituting, using the server, the detected cluster of adjacent cells with an expanded element populating the cluster of adj acent cells, and directing, using the server, the electronic user device to display, at the display screen, an updated table comprising the expanded element. Accordingly, in line with the present embodiment the table is only updated in case the substitution between the cluster of cells and the expanded element has been performed. An advantage following this embodiment is the decluttering of the display screen at the same time as the player is provided with a distinct notification of the cluster detection that in turn is affecting the multiplication factor. As such, the player will in a quicker way be aware of the change in the multiplication factor.

[0021] In addition to the advantages already mentioned, this substitution mechanism enhances system stability and user interface responsiveness. By implementing the cluster substitution, the server processes fewer graphical elements, reducing the graphical rendering workload. Such an implementation may in some embodiments result in a lower demand also on the user device's processor and graphics unit, facilitating smoother gameplay and reducing battery consumption on mobile devices, which is particularly beneficial during extended gaming sessions, where device performance and power efficiency are critical.

[0022] Furthermore, the scheme according to the present disclosure may also, in some embodiments provide for an improved data management on the server side. By only transmitting essential updates, such as the expansion of a cluster, rather than continual refreshes of the entire table, the system may conserve network bandwidth and reduces the latency experienced by the player, thereby improving the player's experience by providing timely game updates but also optimizes network resource utilization.

[0023] Furthermore, it may in some embodiments be desirable to additionally increase, using the server, a progress indicator based on the predefined relation between the set of elements comprised with the table. The progress indicator is generally operated to provide the player with an indication of the current status of the table and if any possible related set of elements have been identified within the table. The progress indicator will generally maintain its status as long as positive gaming outcomes are generated by the server.

[0024] The progress indicator will in turn be arranged to affect a progress level when the progress indicator reaches a predetermined level. As an example, once the progress indicator has been incremented to a specified threshold, exceeding the threshold will in turn affect the progress level. Generally the progress indicator will be reset if the progress indicator exceeds the specified threshold.

[0025] In some embodiments increasing the multiplication factor may be further based on the progress level. For example, a current level set at the progress level may be used for increasing the multiplication factor. As such, in case a cluster of adjacently arranged cells is detected, then the multiplication factor may be increase with the current level of the progress level. A minimum level for the progress level is generally one.

[0026] Furthermore, in some embodiments the server may detect more than a single cluster of adjacently arranged cells, such as e.g. two, three of four cluster of cells. The multiplication factor will then be increase by the number of detected clusters of adjacently arranged cells. Similarly, in case the current level set at the progress level is more than one, then the multiplication factor will be increase with the number of detected clusters of adjacently arranged cells times the current level of the progress level. For example, in case two cluster of cells are detected and the current level of the progress level is three, then the multiplication factor will be increase with two times three (i.e. six).

[0027] The scheme according to the present disclosure is generally applicable to any form of table based online games. However, the inventor has identified that it is specifically useful in relation to so called cascade games or slot games, since the overall reduction in the level of predictability of the game will make the game more appealing to the player. At the same time, the integrity and safety of such games will be greatly improved when the present scheme is introduced.

[0028] In line with the discussion above, at least one of the multiplication factor, the progress indicator and the progress level is set to an initiation value if the gaming outcome is determined to be below a predefined threshold. That is, once the gaming outcome is negative (e.g. a loss) or below a predefined threshold (e.g. the win is "too small"), then at least some or all of the multiplication factor, the progress indicator and the progress level are reset. Generally, the initiation value is defined as one.

[0029] In some embodiments the server will transmit graphical data that is displayed at the graphical user interface (GUI) of the user device for achieving the spinning reel. However, to reduce the amount of data that is transmitted between the server and the user device it may as an alternative be possible to form control data (e.g. meta data) at the server that subsequently is transmitted to and used by the control unit for creating the graphical data to be displayed within the GUI at the user device. In some embodiments a bandwidth constrain in the network communication between the server and the user device controls if the server should transmit the graphical data of the control data. This embodiment also ensures that the game is progressing as effectively as possible and with a reduced computational load placed on the server, the network and the user device.

[0030] The server may in a corresponding manner be adapted to form a graphical representation of at least one of the table, the gaming outcome and the updated table, to be distributed to the electronic user device, where the graphical representation is then presented within the GUI. Similarly, the server may instead select to form control data to be used by the user device, where the user device instead will generate the graphical data to be displayed within the GUI at the user device.

[0031] Such a GUI may also be arranged to allow the player to directly interact with the server, for example allowing the player to control his/her participation in the game as well as to control a size of the bet placed when participating in the game.

[0032] Additionally, it may also be possible to allow the graphical representation to be set differently for different game operators, players or groups of players. The graphical representation may also be dependent on e.g. the geographical location of the players, such as dependent on city, country or continent where the player is located/registered.

[0033] Within the context of the present disclosure, it should be understood that it in some embodiments so that it may be possible to allow the server to control if a specific electronic user device is to be allowed to apply the scheme according to the present disclosure. Such control may for example be dependent on a geographical location of the electronic user device. Possibly, the geographical location may be selected from a group comprising a city, a country and a continent.

[0034] According to another aspect of the present disclosure there is provided a gaming system comprising a server arranged in communication with an electronic user device using a network connection, the electronic user device comprising a display screen, wherein the server is adapted to receive a request from the electronic user device to play a game provided by the server, the request comprising a wagering bet, form a table in the form of a grid having a selected dimension and comprising a selected number of cells, generate a set of elements corresponding to the selected number of cells, wherein the set of elements are selected from a group of predefined element types, populate the cells of the table with the set of elements, directing, using the server, the electronic user device to display the table at the display screen, detect, by applying a predefined matching scheme, the presence of a cluster of adjacent cells comprising a plurality of related element types, increase a multiplication factor for the game based on the detected cluster of adjacently arranged cells, identify a predefined relation between the set of elements comprised with the table, and determine a gaming outcome based on the wagering bet, the multiplication factor and the predefined relation between the set of elements comprised with the table. This aspect of the present disclosure provides similar advantages and embodiments as discussed above in relation to the previous aspects of the present disclosure.

[0035] Preferably, the gaming system is a cloud-based computing system, and the server is a cloud server. Thus, the computing power provided by means of the invention may be distributed between a plurality of servers, and the location of the servers must not be explicitly defined. Advantageous following the use of a cloud-based solution is also the inherent redundancy achieved.

[0036] In some embodiments the electronic user devices may be selected to include e.g. a computer (laptop/stationary), a mobile phone, a tablet, a (gaming) consoles or any other gaming device and gambling terminals. The GUI may in some embodiments be allowed to depend on the type of electronic user device.

[0037] According to a still further aspect of the present disclosure there is provided a computer program product comprising a computer readable medium having stored thereon computer program means for operating a gaming system, the gaming system comprising a server arranged in communication with an electronic user device using a network connection, the electronic user device comprising a display screen, wherein the computer program product comprises code for receiving, at the server, a request from the electronic user device to play a game provided by the server, the request comprising a wagering bet, code for forming, using the server, a table in the form of a grid having a selected dimension and comprising a selected number of cells, code for generating, using the server, a set of elements corresponding to the selected number of cells, wherein the set of elements are selected from a group of predefined element types, code for populating, using the server, the cells of the table with the set of elements, code for directing, using the server, the electronic user device to display the table at the display screen, code for detecting, using the server and by applying a predefined matching scheme, the presence of a cluster of adjacent cells comprising a plurality of related element types, code for increasing, using the server, a multiplication factor for the game based on the detected cluster of adjacently arranged cells, code for identifying, using the server, a predefined relation between the set of elements comprised with the table, and code for determining, using the server, a gaming outcome based on the wagering bet, the multiplication factor and the predefined relation between the set of elements comprised with the table. Also this aspect of the present disclosure provides similar advantages and embodiments as discussed above in relation to the previous aspects of the present disclosure.

[0038] The computer program product is typically executed using a computing device comprised with the server, preferably including a microprocessor or any other type of computing device. Similarly, a software executed by the server for operating the gaming system may be stored on a computer readable medium, being any type of memory device, including one of a removable nonvolatile random access memory, a hard disk drive, a floppy disk, a CD-ROM, a DVD-ROM, a USB memory, an SD memory card, or a similar computer readable medium known in the art. Accordingly, operation of the gam-

ing system may be at least partly automated, implemented as e.g. software, hardware and a combination thereof.

[0039] Further features of, and advantages with, the present disclosure will become apparent when studying the appended claims and the following description. The skilled addressee realize that different features of the present disclosure may be combined to create embodiments other than those described in the following, without departing from the scope of the present disclosure.

BRIEF DESCRIPTION OF THE DRAWINGS

[0040] The various aspects of the present disclosure, including its particular features and advantages, will be readily understood from the following detailed description and the accompanying drawings, in which:

Fig. 1 illustrates an exemplary gaming system according to a currently preferred embodiment of the present disclosure;

Fig. 2 provides an exemplary illustration of a typical graphical user interface (GUI) for use in playing a game;

Figs. 3A - 3B present exemplary illustrations of operations of different tables according to different embodiments of the present disclosure,

Figs. 4A - 4B present further exemplary illustrations of operations of different tables according to different embodiments of the present disclosure, and

Fig. 5 is a flow chart illustrating the exemplary steps for operating the gaming system as shown in Fig. 1.

DETAILED DESCRIPTION

[0041] The present disclosure will now be described more fully hereinafter with reference to the accompanying drawings, in which currently preferred embodiments of the present disclosure are shown. This present disclosure may, however, be embodied in many different forms and should not be construed as limited to the embodiments set forth herein; rather, these embodiments are provided for thoroughness and completeness to fully convey the scope of the present disclosure to the skilled addressee. Like reference characters refer to like elements throughout.

[0042] Referring now to the drawings and Fig. 1 in particular, there is depicted a gaming system 100 in which an online game, such as a slot game, may be played according to a currently preferred embodiment of the present disclosure. The system architecture illustrated in Fig. 1 depicts a system environment in which systems, methods, apparatus, computer-readable mediums and data structures consistent with the principles of some embodiments of the present disclosure may be included. It may be appreciated that the components of system 100 may be implemented through any suitable combinations of hardware, software, and/or firmware.

[0043] As shown in Fig. 1, system 100 includes at least one server 102 and/or at least one gaming database 104. Server 102 and gaming database 104 may be communicably linked to a plurality of electronic user devices in the form of electronic user devices, such as client devices 106, 108, 110, etc. through network 112. The network 112 may be wired or wireless, including for example wired connections like a building LAN, a WAN, an Ethernet network, an IP network, etc., and wireless connections like WLAN, CDMA, GSM, GPRS, 3G mobile communications, 4G mobile communications, 5G mobile communications Bluetooth, infrared, or similar. As such, the network 112 may be locally and/or globally provided.

[0044] The gaming database 104 may be any type of physical unit on which games reside, such as a machine in a gaming venue, a lottery machine, an electronic game system, etc. Network 112 may be implemented as the Internet, or any local or wide area network, either public or private. Network 112 may also be a hardware system physically connecting some or all of the server 102 and client devices 106, 108, 110. Client devices 106, 108, 110, typically each operated by a player, may be implemented as any computing devices such as a personal computing device, a server, a server network, handheld computing device, slot machine, other gaming machine in a gaming venue such as a betting terminal, a gaming console, lottery machine, an interface in a virtual environment, etc.

[0045] It may be appreciated by one of ordinary skill in the art that while only one server, one gaming database, one network and two client devices are depicted, more or fewer servers, more or fewer gaming databases, more networks and more or fewer client devices and/or other devices may reside within system 100.

[0046] In line with the present disclosure the server 102 comprises a plurality of computational modules specifically adapted to perform dedicated tasks when operating at the server 102. One of these modules include a monitoring module 114, another one is a spin rendering module 116. The functionality of the monitoring module 114 and the spin rendering module 116 will be further elaborated below.

[0047] The elements inside system 100 may include one or more (micro) processors, purpose-built hardware such as, for example, FPGA, ASIC, etc., software systems and applications, software packages, mechanical and electrical parts, etc. Software packages that may be part of server 102, gaming database 104, client devices 106, 108, 110 and network 112 may be recorded on a computer readable medium such as a memory device, RAM, CD/DVD/USB drives, handheld memory device, etc., and/or may be part of a physical device such as one or more (microprocessors or electro-mechanical systems. Any of server 102, gaming database 104, client devices 106, 108, 110, network 112 and further electronic user device 114 may be fixed systems, mobile systems, portable systems, or cloud systems (as discussed above). Fig. 1 shows only three electronic user devices 106, 108, 110, however it should be understood that a

general implementation of the present disclosure comprises a large plurality of electronic user devices, possibly greatly above three, such as 100, 1000, 10000, etc.

[0048] Although the various components of Fig. 1 are illustrated as discrete elements, it should be recognized that certain operations of some of the various components may be performed by the same physical device, e.g., by one or more microprocessors or other type of devices.

[0049] Turning now to Fig. 2 illustrating a graphical user interface (GUI) 202 to be displayed at a client device, such as any of the client devices 106, 108, 110, in the illustrated embodiment provided as an application ("app") or within e.g. a web browser of the portable client device 106 being a tablet. The game to be played at the client device 106 is here shown as an online game, visualized within the GUI 201 as comprising a table 201, where the table 202 comprises seven lines 204 and seven columns 206, arranged in a grid structure. The columns may in some embodiments be defined as individual reels. Each of the cells is provided with a plurality of different symbols.

[0050] The predefined dimension of the table as shown in Fig. 2 is as mentioned seven times seven, thus comprising 49 cells in total. Any number of lines and columns are of course possible and within the scope of the present disclosure.

[0051] The GUI also comprises a "button" 208 to start the game, here provided with the description "SPIN" for initiating a turn of the game. In addition, the GUI 201 comprises an indicator of the current bet 210 (i.e. payment for each turn of the game) and an indicator of the total player balance 212. It should in any case be understood that other types of games may be played within the scope of the present disclosure, for example being skill based as compared to a game of chance.

[0052] Furthermore, the GUI 201 is additionally provided with a visualization of a multiplication factor 214, a visualization of a progress indicator 216 and a visualization of a present progress level 218.

[0053] Turning now to Figs. 3A - 3B and 4A - 4B in conjunction with Fig. 5, illustrating different tables according to different embodiments of the present disclosure.

[0054] The operational process of the gaming system starts by the server 102 receiving, S1, a request from the electronic user device to play a game provided by the server. According to the present disclosure, the request is arranged to comprise a wagering bet, however the bet must not necessary be provided as integrated with the request, i.e. it may be provided slightly separated in time from the request itself. The server then forms, S2, a table in the form of a grid having a selected dimension and comprising a selected number of cells. Any number of rows and columns are, as mentioned above, possible and within the scope of the present disclosure.

[0055] Subsequently, the server 102 generates, S3, a set of elements corresponding to the selected number of cells, wherein the set of elements are selected from a group of predefined element types. The set of elements includes different element types, e.g. including numbers and pictograms/figures. It should be noted that any form of element types is possible and within the scope of the present disclosure, at least in case the game is a game of chance.

[0056] The server 102 will then populates, S4, the cells of the table 202 with the set of elements that were previously generated by the server 202, and then direct, S5, e.g. the client devices 106 to display the table 202 within its GUI 201.

[0057] As can be seen in Fig. 3A, the table 202 is shown to comprise two clusters of adjacently arranged cells, where each of the cluster comprises the same type of elements. In accordance to the present disclosure, this server performed detection, S6, is performed in an automated manner by applying a predefined matching scheme (possibly using a scheme as used in relation to image processing for object detection).

[0058] In Fig. 3A, two separate clusters were detected, and in accordance to the present disclosure the server 102 will then increase, S7, the multiplication factor 214 with a corresponding number of "steps", thus increasing with two steps to X3, as is shown in Fig. 3B.

[0059] Fig. 3B further illustrates an optional step of substituting the cluster of detected cells with an expanded version of the elements in the clusters. It may be possible, and within the scope of the present disclosure, to introduce other specific expanded elements as substitutions for the clusters. The identification of the clusters will also affect the visualization of the progress indicator 216, provided as a general indication of a positive gaming outcome.

[0060] The server 102 is additionally arranged to identify, S8, further sets of elements that in advance have been determined to be allowed to have an impact on the gaming outcome. Accordingly, the server 102 has been arranged to find elements within the table that have been defined to have a predefined relation therebetween. As an example, the presence of four specific element types within the table may be relevant for the specific game.

[0061] The server 102 will then take into account the wagering bet, the multiplication factor and the predefined relation between the set of elements comprised with the table when determining, S9, the gaming outcome.

[0062] Figs. 4A and 4B presents a further progression of the game as presented in Figs. 3A and 3B. Specifically, in Fig. 4A the server 102 has repopulated the cells of the table 202 with a new set of elements. All cells must not necessarily be populated with new elements, such a repopulation may be dependent on e.g. if the game is a slot game or a cascade game, and/or on the general set-up of the specific game.

[0063] In Fig. 4A it can be seen that the table comprises three separate clusters of cells comprising identical elements. At the same time, the progress level 218 has been previously increase due to a number of positive gaming outcome resulting from the operation in relation to Figs. 3A and 3B, such that the progress level 218 now has

increase to +2. By this is meant that when a threshold of a number of positive gaming outcomes is reaches, the progressive level moves to the next level, in this example from plus 1 to plus 2.

[0064] Accordingly, the multiplication actor 214 will not only be influenced by the three identified clusters, but also by the status of the progress level 218 (i.e. +2), which was increase due to the positive gaming outcome as presented in Fig. 3B. Thus, the multiplication factor will here be increase with +2 times the three clusters, i.e. +6. The previous status of the multiplication factor 218 (as illustrated in Fig. 3B) was set to +3, thus the new status for the multiplication factor 218 (as illustrated in Fig. 4B) will be set to the previous +3 with the addition of +6 as now provided, resulting in a multiplication factor 218 of +9.

[0065] The gaming outcome will accordingly be affected by the increasing multiplication factor, possibly resulting in a large gaming outcome to be provided to the player.

[0066] Generally, and in line with the discussion above, the visualization of the multiplication factor 214, the visualization of the progress indicator 216 and the visualization of the present progress level 218 will be reduced back to an "initiation value" (e.g. generally set to 1) in various instances including when the gaming outcome is below a predefined threshold, when a specific threshold of spins has occurred, when a specific time frame has been reaches or a combination thereof. For example, in case e.g. no clusters and/or no related elements are automatically detected/identified by the server 102 within the table 202, then the gaming outcome will be low or zero, and thus defined as a state for resetting the multiplication factor 214, the progress indicator 216 and/or the present progress level 218.

[0067] In summary, the present disclosure relates to a computer implemented method performed by a gaming system, the gaming system comprising a server arranged in communication with an electronic user device using a network connection, the electronic user device comprising a display screen, wherein the method comprises the steps of receiving, at the server, a request from the electronic user device to play a game provided by the server, the request comprising a wagering bet, forming, using the server, a table in the form of a grid having a selected dimension and comprising a selected number of cells, generating, using the server, a set of elements corresponding to the selected number of cells, wherein the set of elements are selected from a group of predefined element types, populating, using the server, the cells of the table with the set of elements, directing, using the server, the electronic user device to display the table at the display screen, detecting, using the server and by applying a predefined matching scheme, the presence of a cluster of adjacent cells comprising a plurality of related element types, increasing, using the server, a multiplication factor for the game based on the detected cluster of adjacently arranged cells, and identifying, using the server, a predefined relation between the set of elements comprised with the table, determining, using the server, a gaming outcome based on the wagering bet, the multiplication factor and the predefined relation between the set of elements comprised with the table.

[0068] Generally, when the operational scheme according to the present disclosure is applied to a game concept provided by the server, it may be possible to increase the randomization of the game, thus potentially allowing for increasing winning possibilities for a player participating in the game. An advantage following such a possibility is an improved attraction power to the game, thus potentially allowing for the player to remain playing the game for an increased duration as compared to previously known similar operational schemes. This could potentially be beneficial to both the player participating in the game and the gaming operator providing the game.

[0069] In addition, the control functionality of the present disclosure may be implemented using existing computer processors, or by a special purpose computer processor for an appropriate system, incorporated for this or another purpose, or by a hardwired system. Embodiments within the scope of the present disclosure include program products comprising machine-readable media for carrying or having machine-executable instructions or data structures stored thereon. Such machine-readable media can be any available media that can be accessed by a general purpose or special purpose computer or other machine with a processor. By way of example, such machine-readable media can comprise RAM, ROM, EPROM, EEPROM, CD-ROM or other optical disk storage, magnetic disk storage or other magnetic storage devices, or any other medium which can be used to carry or store desired program code in the form of machine-executable instructions or data structures and which can be accessed by a general purpose or special purpose computer or other machine with a processor. When information is transferred or provided over a network or another communications connection (either hardwired, wireless, or a combination of hardwired or wireless) to a machine, the machine properly views the connection as a machine-readable medium. Thus, any such connection is properly termed a machine-readable medium. Combinations of the above are also included within the scope of machine-readable media. Machine-executable instructions include, for example, instructions and data which cause a general-purpose computer, special purpose computer, or special purpose processing machines to perform a certain function or group of functions.

[0070] Although the figures may show a sequence the order of the steps may differ from what is depicted. Also two or more steps may be performed concurrently or with partial concurrence. Such variation will depend on the software and hardware systems chosen and on designer choice. All such variations are within the scope of the disclosure. Likewise, software implementations could be accomplished with standard programming techniques with rule-based logic and other logic to accomplish the various connection steps, processing steps, comparison

steps and decision steps. Additionally, even though the present disclosure has been described with reference to specific exemplifying embodiments thereof, many different alterations, modifications and the like will become apparent for those skilled in the art. Further, a single unit may perform the functions of several means recited in the claims. In the claims, any reference signs placed between parentheses shall not be construed as limiting to the claim. Furthermore, in the claims, the word "comprising" does not exclude other elements or steps, and the indefinite article "a" or "an" does not exclude a plurality.

[0071] Variations to the disclosed embodiments can be understood and effected by the skilled addressee in practicing the claimed present disclosure, from a study of the drawings, the disclosure, and the appended claims. The person skilled in the art realizes that the present disclosure is not limited to the preferred embodiments.

Claims

1. A computer implemented method performed by a gaming system, the gaming system comprising a server arranged in communication with an electronic user device using a network connection, the electronic user device comprising a display screen, wherein the method comprises the steps of:

    - receiving, at the server, a request from the electronic user device to play a game provided by the server, the request comprising a wagering bet,
    - forming, using the server, a table in the form of a grid having a selected dimension and comprising a selected number of cells,
    - generating, using the server, a set of elements corresponding to the selected number of cells, wherein the set of elements are selected from a group of predefined element types,
    - populating, using the server, the cells of the table with the set of elements,
    - directing, using the server, the electronic user device to display the table at the display screen,
    - detecting, using the server and by applying a predefined matching scheme, the presence of a cluster of adjacent cells comprising a plurality of related element types,
    - increasing, using the server, a multiplication factor for the game based on the detected cluster of cells,
    - identifying, using the server, a predefined relation between the set of elements comprised with the table, and
    - determining, using the server, a gaming outcome based on the wagering bet, the multiplication factor and the predefined relation between the set of elements comprised with the table.

2. The method according to claim 1, further comprising the steps of:

    - substituting, using the server, the detected cluster of adjacent cells with an expanded element populating the cluster of adjacent cells, and
    - directing, using the server, the electronic user device to display, at the display screen, an updated table comprising the expanded element.

3. The method according to any one of claims 1 and 2, further comprising the step of:

    - increasing, using the server, a progress indicator based on the predefined relation between the set of elements comprised with the table.

4. The method according to claim 3, wherein the progress indicator affects a progress level when the progress indicator reaches a predetermined level.

5. The method according to claim 4, wherein increasing the multiplication factor is further based on the progress level.

6. The method according to any one of the preceding claims, wherein the game is at least one of a cascade game or a slot game.

7. The method according to any one of the preceding claims, wherein at least one of the multiplication factor, the progress indicator and the progress level is set to an initiation value if a predefined threshold is reached.

8. The method according to any one of the preceding claims, further comprising the steps of:

    - rendering, using the server, a graphical illustration of the gaming outcome, and
    - directing, using the server, the electronic user device to display, at the display screen, the graphical illustration of the gaming outcome.

9. The method according to any one of the preceding claims, wherein the step of identifying the predefined relation between the set of elements comprised within the table comprises matching the set of elements comprised within the table with predefined formations of elements stored at the server.

10. A gaming system comprising a server arranged in communication with an electronic user device using a network connection, the electronic user device comprising a display screen, wherein the server is adapted to:

- receive a request from the electronic user device to play a game provided by the server, the request comprising a wagering bet,
- form a table in the form of a grid having a selected dimension and comprising a selected number of cells,
- generate a set of elements corresponding to the selected number of cells, wherein the set of elements are selected from a group of predefined element types,
- populate the cells of the table with the set of elements,
- directing, using the server, the electronic user device to display the table at the display screen,
- detect, by applying a predefined matching scheme, the presence of a cluster of adjacent cells comprising a plurality of related element types,
- increase a multiplication factor for the game based on the detected cluster of adjacently arranged cells, and
- identify a predefined relation between the set of elements comprised with the table,
- determine a gaming outcome based on the wagering bet, the multiplication factor and the predefined relation between the set of elements comprised with the table.

11. The gaming system according to claim 10, wherein the server is further adapted to:

- substitute the detected cluster of adjacent cells with an expanded element populating the cluster of adjacent cells, and
- directing, using the server, the electronic user device to display, at the display screen, an updated table comprising the expanded element.

12. The gaming system according to any one of claims 10 and 11, wherein the server is further adapted to:

- increase a progress indicator based on the predefined relation between the set of elements comprised with the table.

13. The gaming system according to claim 12, wherein the progress indicator affects a progress level when the progress indicator reaches a predetermined level.

14. The gaming system according to any one of claims 10 - 13, wherein the server is further adapted to:

- rendering, using the server, a graphical illustration of the gaming outcome, and
- directing, using the server, the electronic user device to display, at the display screen, the graphical illustration of the gaming outcome.

15. A computer program product comprising a computer readable medium having stored thereon computer program means for operating a gaming system, the gaming system comprising a server arranged in communication with an electronic user device using a network connection, the electronic user device comprising a display screen, wherein the computer program product comprises:

- code for receiving, at the server, a request from the electronic user device to play a game provided by the server, the request comprising a wagering bet,
- code for forming, using the server, a table in the form of a grid having a selected dimension and comprising a selected number of cells,
- code for generating, using the server, a set of elements corresponding to the selected number of cells, wherein the set of elements are selected from a group of predefined element types,
- code for populating, using the server, the cells of the table with the set of elements,
- code for directing, using the server, the electronic user device to display the table at the display screen,
- code for detecting, using the server and by applying a predefined matching scheme, the presence of a cluster of adjacent cells comprising a plurality of related element types,
- code for increasing, using the server, a multiplication factor for the game based on the detected cluster of adjacently arranged cells,
- code for identifying, using the server, a predefined relation between the set of elements comprised with the table, and
- code for determining, using the server, a gaming outcome based on the wagering bet, the multiplication factor and the predefined relation between the set of elements comprised with the table.

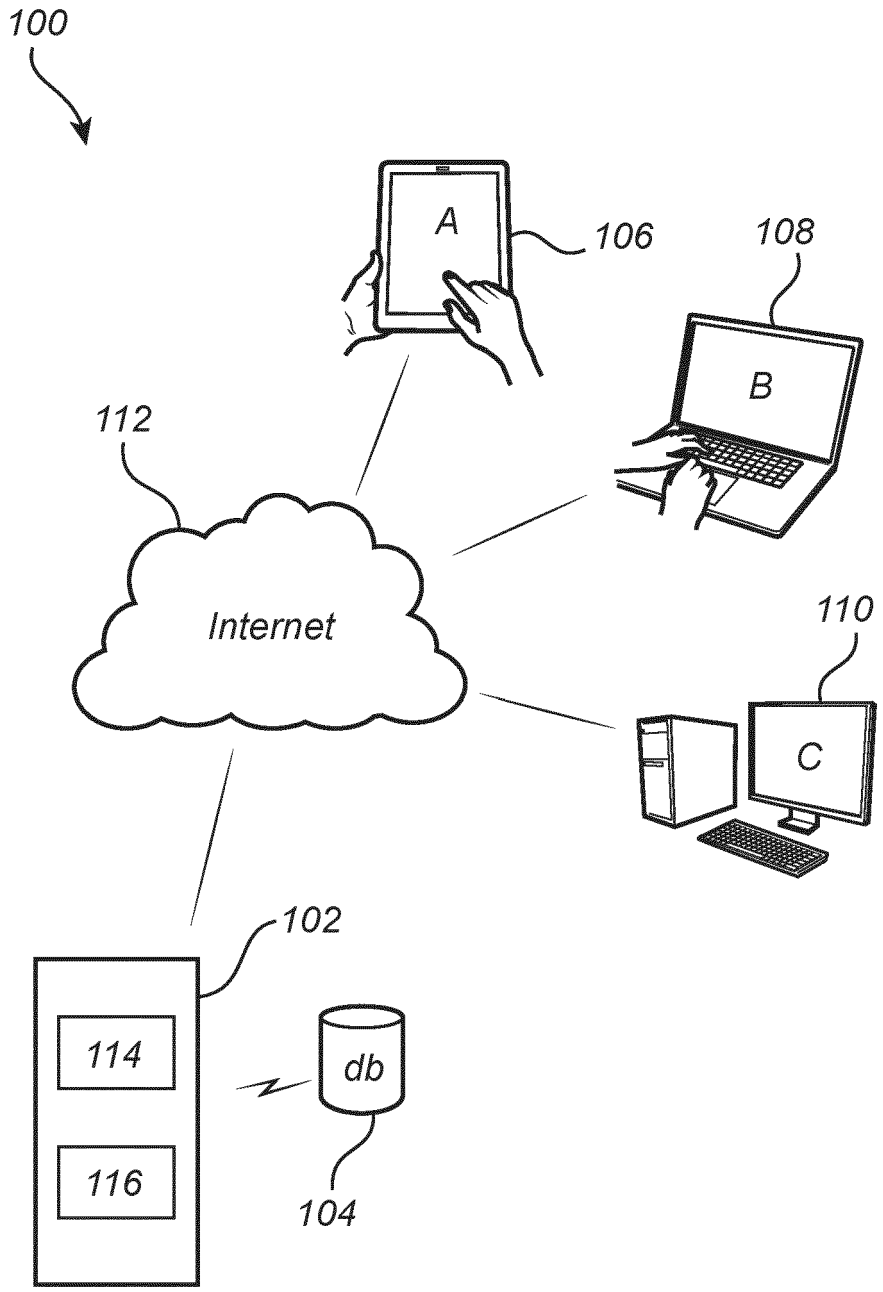

Fig. 1

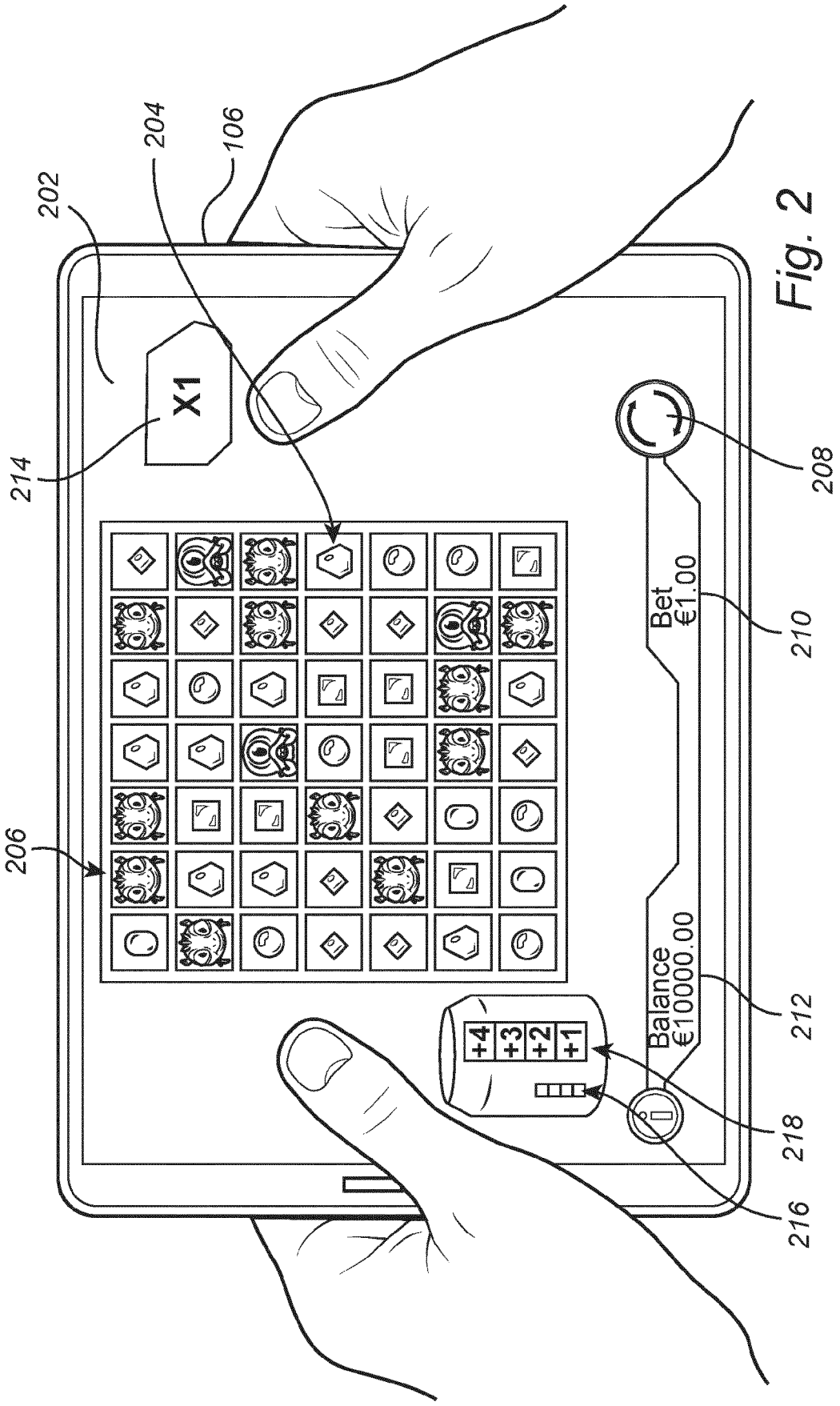
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Fig. 2

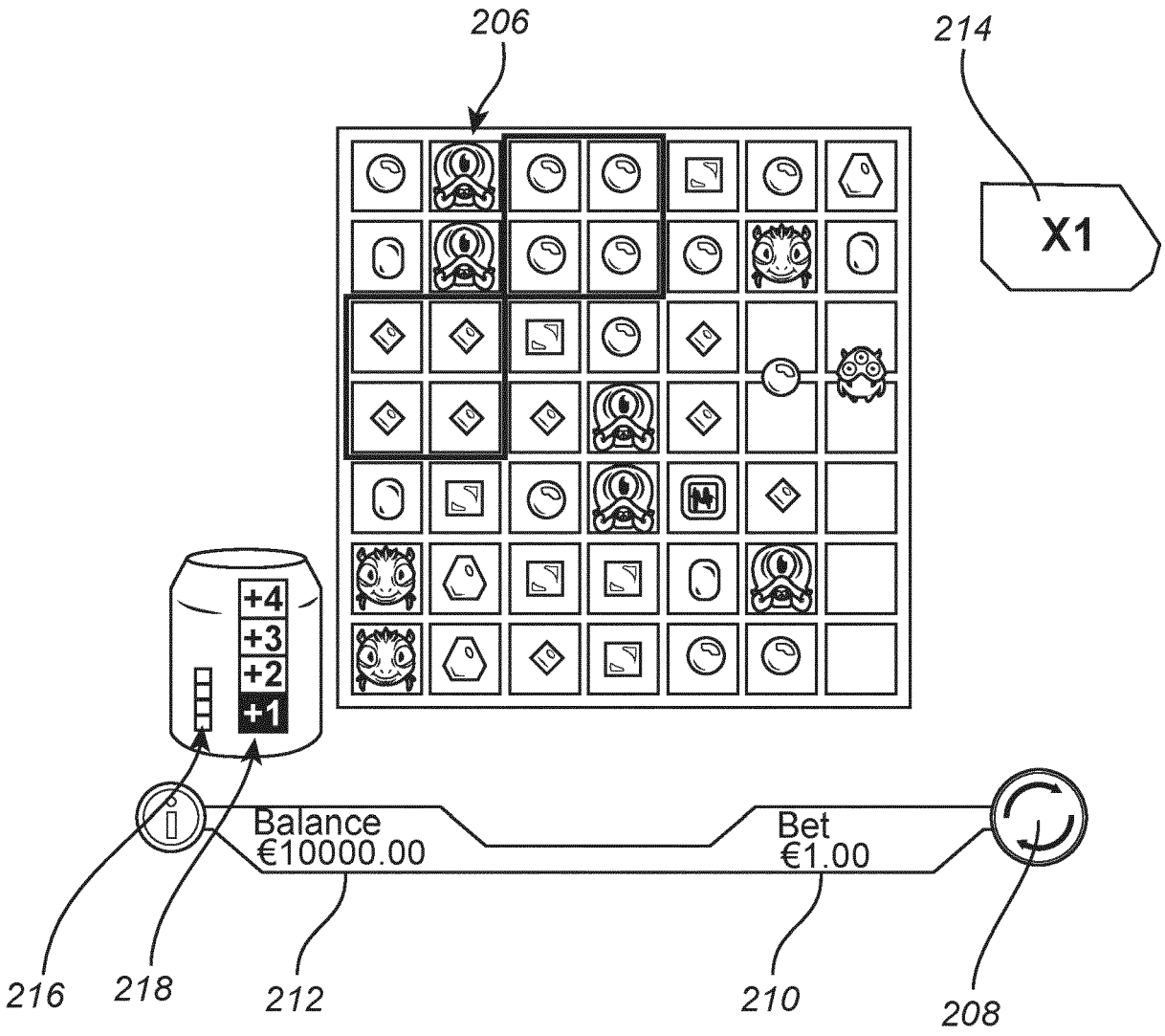

Fig. 3A

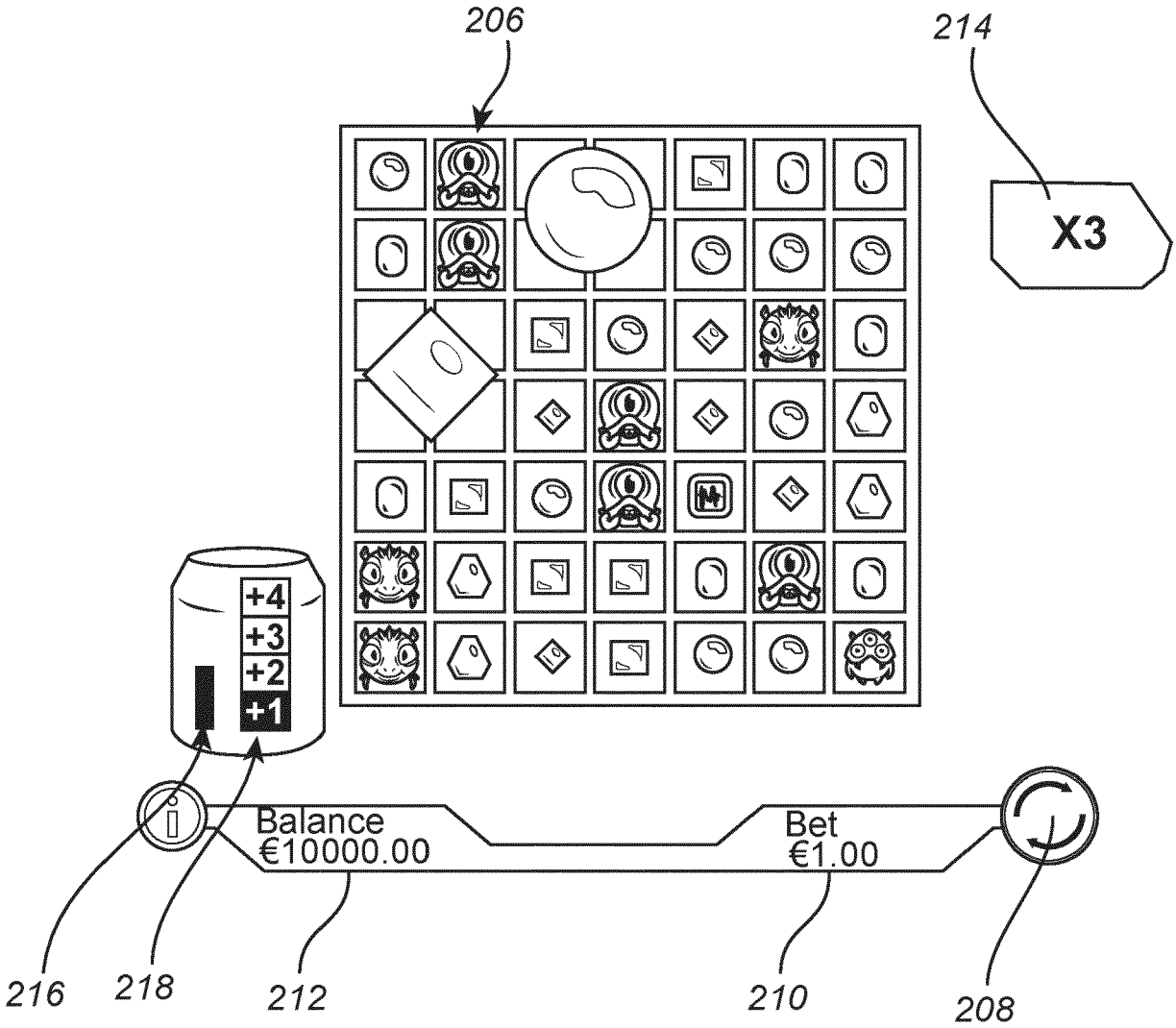

Fig. 3B

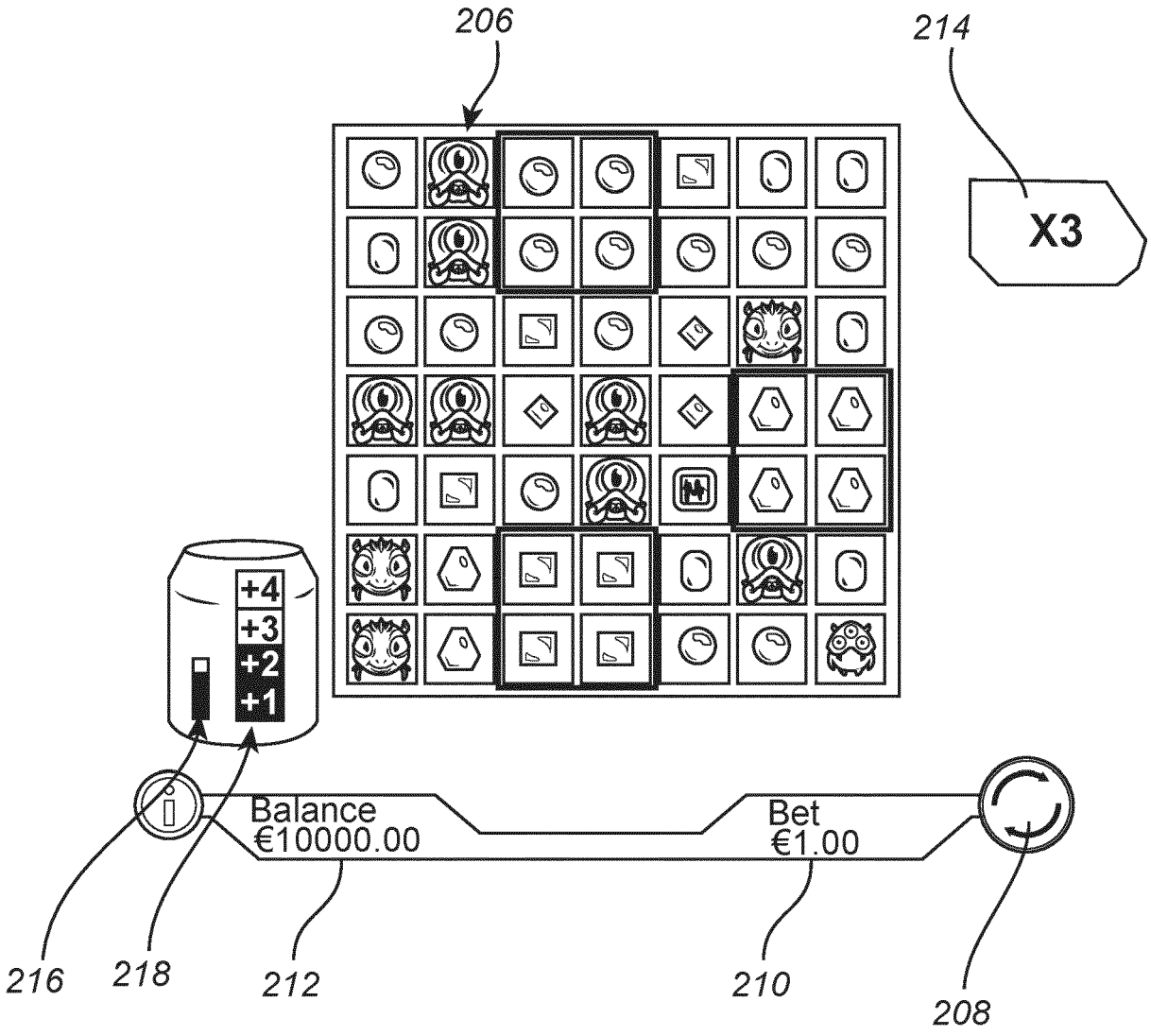

Fig. 4A

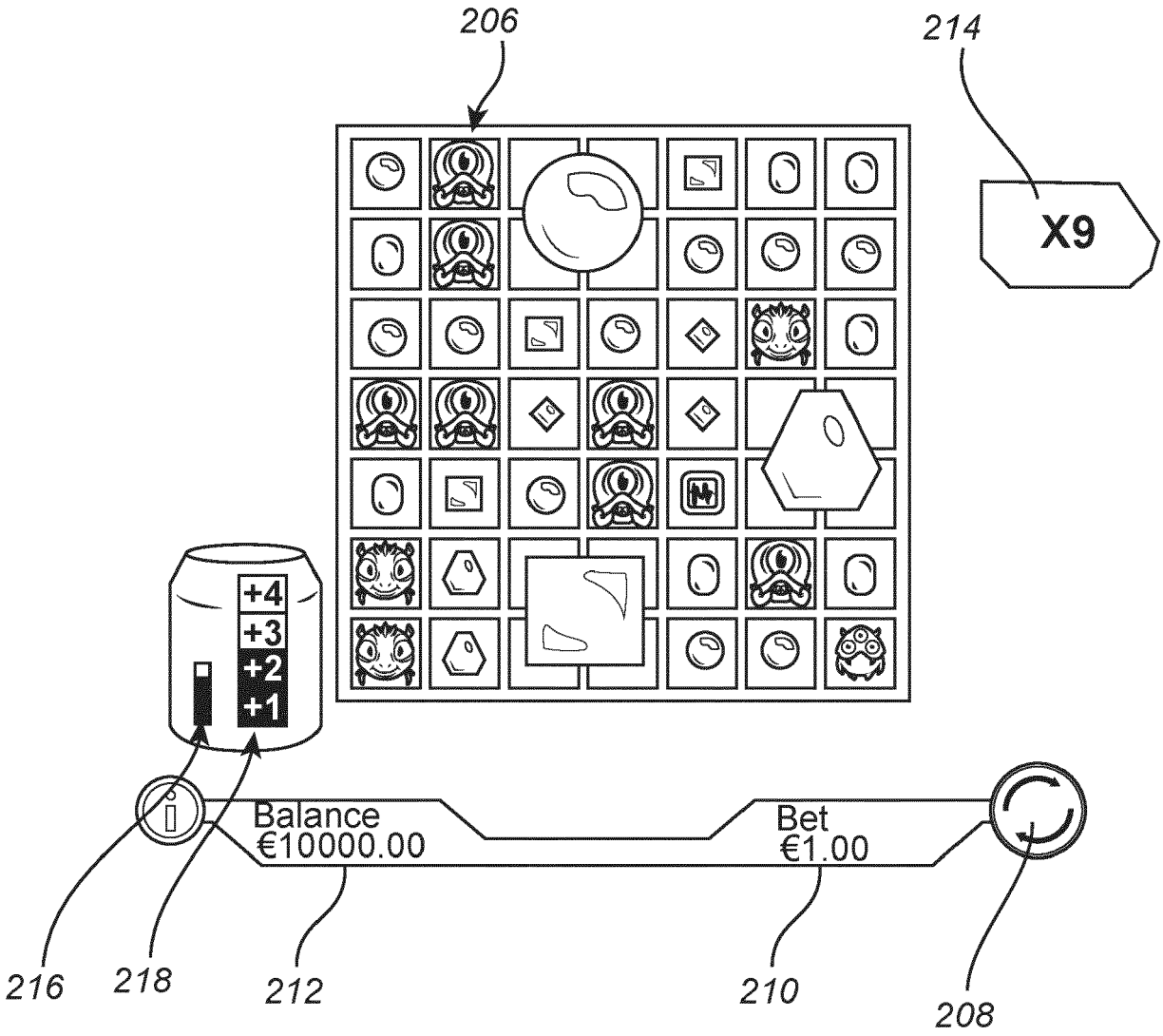

Fig. 4B

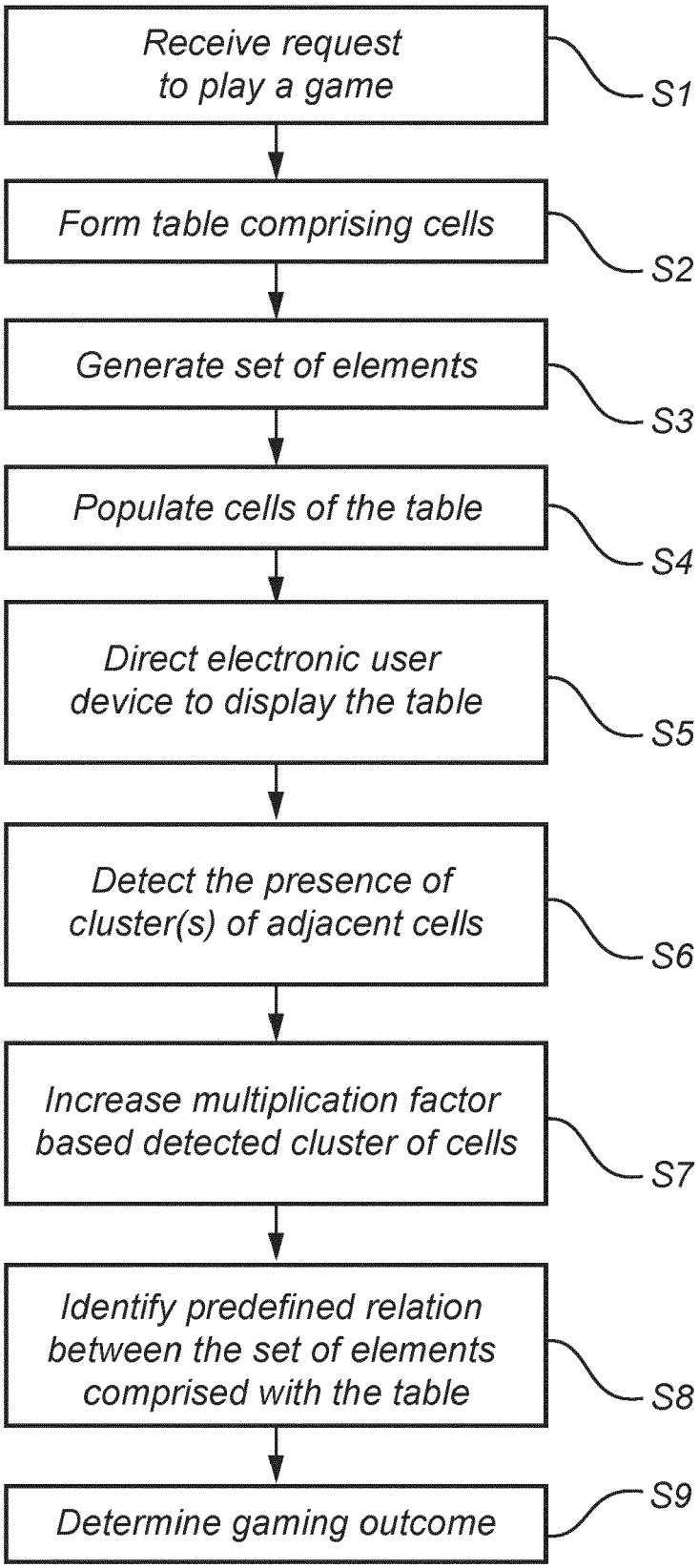
Receive request to play a game
S1
Form table comprising cells
S2
Generate set of elements
S3
Populate cells of the table
S4
Direct electronic user device to display the table
S5
Detect the presence of cluster(s) of adjacent cells
S6
Increase multiplication factor based detected cluster of cells
S7
Identify predefined relation between the set of elements comprised with the table
S8
Determine gaming outcome
S9

Fig. 5

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EUROPEAN SEARCH REPORT

Application Number
EP 24 17 3021

DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
X	US 2022/084357 A1 (MILIZIANO CHARLOTTE [MT] ET AL) 17 March 2022 (2022-03-17) * abstract * * figures 1-5 * * paragraph [0006] - paragraph [0032] * * paragraph [0047] - paragraph [0061] *	1-15	INV. G07F17/32
X	US 2023/051858 A1 (BODOSCI ENDRE [MT] ET AL) 16 February 2023 (2023-02-16) * the whole document *	1-15	

TECHNICAL FIELDS SEARCHED (IPC)

G07F

The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
The Hague	9 September 2024	Diepstraten, Marc

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09-09-2024

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		EP 3971850 A1	23-03-2022
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		EP 4134928 A1	15-02-2023
		US 2023051858 A1	16-02-2023

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