(19) Europäisches Patentamt
European Patent Office
Office européen des brevets

(11) **EP 4 557 252 A1**

(12) **EUROPEAN PATENT APPLICATION**

(43) Date of publication:
21.05.2025 Bulletin 2025/21

(21) Application number: **24213276.9**

(22) Date of filing: **15.11.2024**

(51) International Patent Classification (IPC):
G07F 17/32 *(2006.01)*

(52) Cooperative Patent Classification (CPC):
G07F 17/3218; G07F 17/3225; G07F 17/326

(84) Designated Contracting States:
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC ME MK MT NL NO PL PT RO RS SE SI SK SM TR
Designated Extension States:
BA
Designated Validation States:
GE KH MA MD TN

(30) Priority: **20.11.2023 SE 2351320**

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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 extending possible gaming outcomes also in cases of not reaching a matching level being above a predefined threshold. The present disclosure also relates to a corresponding gaming system and to a computer program product.

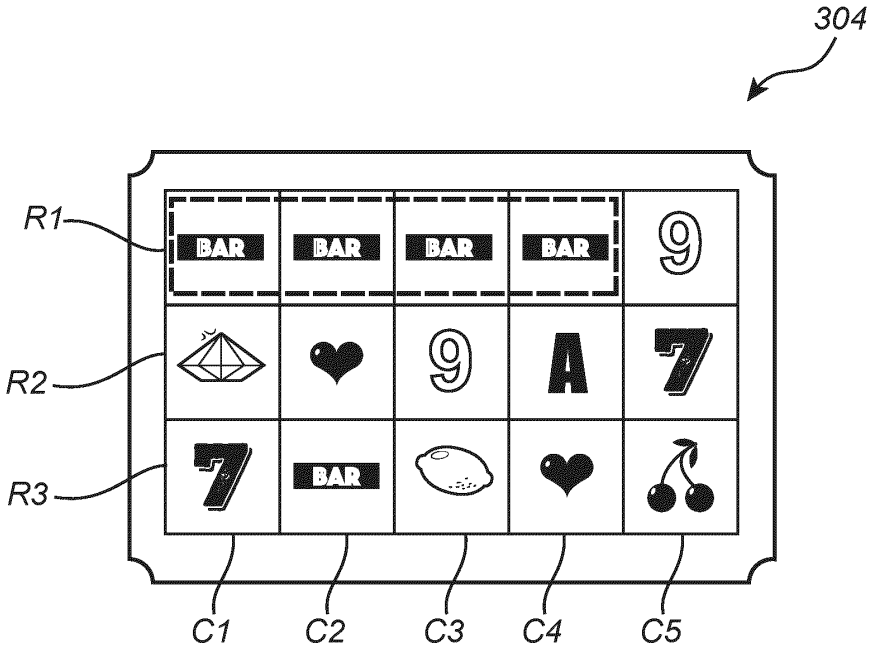

Fig. 3C

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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 extending possible gaming outcomes also in cases of not reaching a matching level being above a predefined threshold. The present disclosure also relates to a corresponding gaming system and to a computer program product.

BACKGROUND

[0002] Games of chance, particularly in the form of online gaming, have become a widely recognized form of entertainment. The sustained success of the gaming industry is heavily reliant on its ability to innovate, introducing novel games and gaming concepts that captivate the gaming audience. This innovative drive is notably evidenced by the industry's adaptation to the digital era, with the Internet and online gaming platforms spearheading a new era of game accessibility and diversity.

[0003] In the online gaming realm, it is a continual pursuit to engage both new and existing players through inventive means, ensuring that they are drawn to, and retained by, the gaming operator's site. One such method involves the introduction of unexpected game scenarios, which hold the potential to both intrigue and motivate players. The allure of these scenarios lies in their ability to emerge unexpectedly, thereby heightening the gaming experience with the prospect of novel and unforeseen outcomes.

[0004] Introducing these elements of surprise within the game can further have the beneficial side effect of increasing the player's potential payout. Such scenarios can augment the value of a player's bet, providing an additional layer of excitement. However, this potential for increased payouts must be carefully regulated by the gaming operator to ensure that the payouts remain within manageable limits. There exists, therefore, a continuous need to balance the game's appeal, via the potential for enhanced payouts, with the imperative for the operator to maintain comprehensive control over the game's operational parameters.

SUMMARY

[0005] According to an aspect of the present disclosure, the above is at least partly met by 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, the gaming system arranged to operate a series of consecutive games, wherein the method comprises, for each of the plurality of consecutive games receiving, at the server, a request from the electronic user device to play a game in the series of consecutive games, 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, determining, using the server and by applying a predefined matching scheme, a matching level between the cells populating the table and each of a plurality of predefined cluster formations stored at the server, determining, using the server, if the matching level is within a matching range defined by an upper threshold and a lower threshold, wherein the upper threshold is arranged lower than a maximum matching level and the lower threshold is arranged higher than a minimum matching level, and providing, using the server and if the matching level is within the matching range, a gaming outcome to the electronic user device, wherein the gaming outcome is dependent on a combination of the wagering bet, a predefined multiplication factor, and a predefined odds value for the matching range.

[0006] In accordance with the present disclosure, the gaming interaction primarily involves a digital representation of a table displayed on the user's device, structured as a grid composed of multiple cells in an organized layout of rows and columns. Each cell is filled with an element, which could range from various symbols to numerical figures, each selected to align with the specific characteristics and rules of the game at hand. For example, where the game is defined as a virtual slot game, it is presented on a screen with virtual elements that simulate the experience of traditional slot machines without the need for physical components.

[0007] Furthermore, in line with the present disclosure the operational scheme according to the present disclosure addresses the limitations of conventional gaming systems, where outcomes are often strictly tied to achieving a high matching level. By introducing a range of acceptable matching levels, the present disclosure ensures that players are engaged and rewarded even in instances where the highest matching levels are not attained. This not only enhances the player's gaming experience but also adds a layer of strategy and excitement to the game, as players navigate through the diverse possibilities of winning outcomes based on different matching levels.

[0008] To facilitate efficient server-side outcome processing, the predefined matching scheme employs a set of fixed matching levels that correspond to specific outcome ranges. These ranges, each defined by a matching level threshold, allow the server to classify results dynamically, evaluating if the achieved matching level is within a defined range (e.g., win, near-win, or loss). By classify-

ing outcomes in this manner, the server can immediately determine the applicable outcome range without recalculating from scratch. Such a streamlined approach reduces server processing requirements, improving computational efficiency for handling high volumes of simultaneous game instances, particularly during peak traffic times. Furthermore, such a classification provides the basis for the varied reward structure applied to each predefined outcome range, thereby enhancing player engagement through a structured and scalable reward system.

[0009] Accordingly, if the player "almost won", then a gaming outcome is still determined and provided to the electronic user device. As indicated above, this gaming outcome is in turn dependent on a combination of the wagering bet, a predefined multiplication factor, and a predefined odds value for the matching range. The scheme according to the present disclosure may thus maintain a player interest using the novel reward system. The ability to reward "near wins" effectively broadens the appeal of the game, making it accessible and engaging for a wider range of players. An example of a "near miss" includes collecting just short of a predetermined number of symbols to enter a bonus round.

[0010] 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. Additionally, allowing for an increased randomization of the game may potentially further increase the security of the game, since known general computer-based issues relating to the generation of randomized material to the game are minimized.

[0011] Furthermore, the operational scheme according to the present disclosure uniquely capitalizes on server-side computational resources to handle both data processing and bandwidth optimization. By streamlining the server algorithms, the system not only reduces computational overhead but also improves the use of network bandwidth. The processed game data is then efficiently transmitted to the electronic user device, ensuring a fluid and seamless gaming experience. This amalgamation of computational efficiency and bandwidth optimization serves a dual purpose, it expedites the gaming process for players while also conserving valuable server resources. Consequently, the system can accommodate a greater number of players without compromising on performance, potentially enhancing both the user experience and the game operator's revenue streams.

[0012] The gaming system may in some embodiments employ a multi-level data compression technique on the server to minimize the volume of data transmitted to each electronic user device. The server in such embodiments prioritizes critical game state information and visual updates, reducing non-essential elements or repetitive game data wherever possible. The suggested compression mechanism not only conserves bandwidth but also enables faster delivery of relevant data to the client devices, ensuring that high-priority information is promptly available on the user's display screen. By compressing outgoing data streams based on the game state and the interaction level, the server enables optimal network use without impacting the graphical quality or responsiveness on the electronic user devices, thus enhancing the overall gaming experience while maintaining server and network efficiency.

[0013] For ensuring that the determination of the gaming outcome is performed with a minimum amount of perceived delay in the progression of the game it is desirable to apply a computational efficient matching scheme. Possible schemes that can be used in relation to the present disclosure include different forms of so-called graph-based image processing methods that today find usage within e.g. the computer vision field.

[0014] The definition of "adjacently" as used above 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 element 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. Other definitions of element formations comprising matching elements are of course possible and within the scope of the present disclosure. Such a further example of an element formation 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.

[0015] Generally, the cells of the table include four sides, formed as rectangles. However, the cells of the table may have any number of sides from three and upwards. Accordingly, the cells may be shaped as triangles, rectangles/squares, octagons, etc. It could also be possible to combine differently shaped cells in the same table.

[0016] As indicated above, the table is populated with a different element, where the elements are selected from a group of predefined element types. The group of predefined element types may in some embodiments comprise the generic element types that are common to slot games, etc., for example including "bar" symbols or elements from a deck of cards. Other element types, possibly specific for the game, are of course possible and within the scope of the present disclosure. The type of elements may also include at least one generic element

type, in some embodiments defined as a wild card or a joker element, that may be matchable to all of the plurality of predefined element types. As such, the generic element type may be equally matchable with e.g. a number as well as a symbol.

[0017] In accordance with an aspect of the present disclosure, when the matching level achieved by a player exceeds the upper threshold, the gaming system is configured to provide an additional gaming opportunity. This feature involves presenting the player with an extra game, distinct from the main series of consecutive games. Consequently, if the player indeed has a matching result that is above the upper threshold and this truly wins (as compared to a "near win"), then the player is rewarded with the mentioned additional game. The outcome of this additional game is intricately linked to, and at least partially dependent upon, the player's initial wagering bet. This additional game not only serves as a reward for surpassing the upper threshold but also introduces a fresh dimension of gameplay, thereby amplifying player engagement and diversifying the gaming experience.

[0018] In some embodiments the additional game is defined as a bonus game. This conditional reward system underscores the game's strategic depth, as players are not only tasked with playing the game but also with seeking out specific elements that unlock additional value. It is possible, and within the scope of the present disclosure, to allow a level of the bonus to be depending on a number of the specific type of the predefined element types being identified from the set of elements within the table including amongst others, collecting a specific number of symbols, collecting a specific number of symbols on certain reels, the appearance of a special symbol. Thus, the bonus awarded is not static but varies according to the quantity of the specific predefined element type identified. This feature introduces a variable reward mechanism, enhancing the game's dynamism. It encourages players to continue playing with the objective of maximizing their identification of the specific element type, thereby potentially increasing their bonus reward. This creates an incremental reward system that can sustain player interest over an extended period, as it provides a continuous incentive for skilled play.

[0019] If the matching level is within a matching range defined by an upper threshold and a lower threshold, then the near miss situation occurs so the additional game will not be triggered but the player may be eligible for a reward. The reward is randomly awarded and may include a multiplier, a cash prize, a physical prize or combinations thereof. Visually, the reward may replace the predefined element on the grid or one or more elements on the grid.

[0020] Preferably, the server of the gaming system comprises a random number generator. The random number generator is in such an embodiment adapted to produce random outcomes, that in turn are used to affect the odds values as used when determining the gaming outcome in the "near win" scenario. The incorporation of a random number generator ensures that the gaming outcomes are fair and unpredictable, thereby maintaining the integrity and excitement of the gaming experience. It should however be understood that the random number generator must not be a "true" random number generator, instead a semi-random number generator could be used, or other means for affecting the odds value.

[0021] In a possible embodiment, the predefined odds value is set as 1 out of X, where X is established to be a minimum of 100. This setting represents a balance between attainability and challenge, ensuring that the odds remain compelling yet achievable for the players. By setting such a parameter, the gaming system guarantees that the likelihood of certain outcomes remains balanced, providing a fair gaming experience while retaining an element of challenge. Possibly, X may in some embodiments be defined to be less than 200. This narrower range serves to fine-tune the balance between the probability of success and the challenge presented to the player. By imposing this upper limit on X, the gaming system ensures that the odds do not become excessively challenging, thereby maintaining player interest and engagement over extended periods of gameplay.

[0022] Preferably, the multiplication factor is arranged to be more than 1. Such a definition of the multiplication actor will dynamically affect the overall outcome of the game. The multiplication factor will also drastically reduce the level of predictability of the game, effectively and drastically increasing the randomness of the game, while being computational efficient for the server performing the novel gaming scheme. The multiplication factor may in some embodiments be dependent on a matching level determined in a previously played game in the series of consecutive games.

[0023] In a possible embodiment, the table is graphically visualized as a plurality of parallel reels. This visualization exploits the visual dynamics of spinning reels, pivotal in generating excitement and anticipation. Each reel's spin harbors the potential for winning combinations, the activation of bonuses thus maintaining gameplay that is visually engaging and emotionally stimulating for the player.

[0024] Additionally, representing the table in this manner is particularly advantageous for game developers and operators. It provides a standardized visual framework that can be easily customized, updated, and themed, allowing for the creation of diverse game offerings within the same structural paradigm. This flexibility in visual design, achieved without altering the core game mechanics, ensures that the gaming method retains its robustness and versatility for various game implementations.

[0025] In a further embodiment, at least a portion of the cells within the table is provisioned with an updated set of elements for each one of the first plurality of consecutive games. This iterative refreshment of elements serves to ensure a dynamic and unpredictable gaming environ-

ment, enhancing the player's engagement by presenting new potential combinations and outcomes with every game played.

[0026] Furthermore, the process of updating the set of elements for each game introduces an element of variety that is crucial to maintaining a user's interest over prolonged gaming sessions. It effectively combats the monotony that can arise from repetitive gameplay, thereby sustaining the excitement and challenge intrinsic to the gaming experience. Furthermore, this feature allows for a strategic depth within the game, as the updated elements can be designed to interact with the game's progression and the player's achievements. This interaction not only reinforces the game's complexity but also allows for a tailored gaming experience, where the evolution of the game's landscape mirrors the player's journey through the game. It may also be possible to utilize the updating of elements as a means to introduce special events or promotions within the game, providing an avenue for game operators to engage with players through time-limited opportunities or rewards.

[0027] In some embodiments of the present disclosure the first game is a game of chance, such as for example a slot game, where the player is placing a bet to be allowed to participate in the game. The gaming outcome may in such an embodiment be dependent on the bet placed by the player.

[0028] As indicated above, the server is in charge of controlling the electronic user device to display the table as well as the gaming outcome at the display screen of the electronic user device. In some embodiments the electronic user device is adapted to present a graphical user interface (GUI) at the display screen. The server may in a corresponding manner be adapted to a graphical representation of at least one of the tables, 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.

[0029] In addition to managing game state updates, the server typically functions as the control center for all player interactions and bet-related processes. Specifically, the server receives and processes each player's bet input, calculating potential gaming outcomes based on the wagering parameters, predefined matching schemes, and applicable multipliers or odds values. By handling these calculations centrally, the server ensures that all bets, outcomes, and rewards are accurately aligned with the game's rules and odds. The client device receives only the resulting outcome and necessary visual updates, preserving both the integrity and fairness of the gaming process while minimizing the client's computational load. Such a centralized approach enables the operator to maintain robust control over game mechanics and regulatory compliance across multiple client devices and locations.

[0030] 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.

[0031] Within the context of the present disclosure the expression "forming a graphical representation" should be interpreted broadly. Specifically, it should be understood that the server in some embodiment may be configured to only form a collection of "meta-data" (here corresponding to the graphical representation) that will be rendered at the frontend, such as within the GUI of the electronic user device. However, in another embodiment it may be the other way around, meaning that the server will essentially form an image (here corresponding to the graphical representation) that then will be displayed within the GUI of the electronic user device. Further alternative implementations along the same mutations are possible and within the scope of the present disclosure. 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.

[0032] 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.

[0033] According to another aspect of the present disclosure there is provided a gaming system arranged to operate a series of consecutive games, 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 server is arranged to, for each of the plurality of consecutive games receive a request from the electronic user device to play a game in the series of consecutive games, 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, direct the electronic user device to display the table at the display screen, determine, by applying a predefined matching scheme, a matching level between the cells populating the table and each of a plurality of predefined cluster formations stored at the server, determine if the matching level is within a matching range defined by an upper threshold and a lower threshold, wherein the upper threshold is arranged lower than a maximum matching level and the lower threshold is arranged higher than a minimum matching level, and provide, if the matching

level is within the matching range, a gaming outcome to the electronic user device, wherein the gaming outcome is dependent on a combination of the wagering bet, a predefined multiplication factor, and a predefined odds value for the matching range. This aspect of the present disclosure provides similar advantages and embodiments as discussed above in relation to the previous aspects of the present disclosure.

[0034] 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.

[0035] 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.

[0036] According to a still further aspect of the present disclosure there is provided a computer program product comprising instructions which, when executed by a computer or processor, cause a gaming system to operate a series of consecutive games, 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 is executed for each of the plurality of consecutive games and comprises code for receiving, at the server, a request from the electronic user device to play a game in the series of consecutive games, 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 determining, using the server and by applying a predefined matching scheme, a matching level between the cells populating the table and each of a plurality of predefined cluster formations stored at the server, code for determining, using the server, if the matching level is within a matching range defined by an upper threshold and a lower threshold, wherein the upper threshold is arranged lower than a maximum matching level and the lower threshold is arranged higher than a minimum matching level, and code for providing, using the server and if the matching level is within the matching range, a gaming outcome to the electronic user device, wherein the gaming outcome is dependent on a combination of the wagering bet, a predefined multiplication factor, and a predefined odds value for the matching range. 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.

[0037] 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 gaming system may be at least partly automated, implemented as e.g. software, hardware and a combination thereof.

[0038] 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

[0039] 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:

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 - 3E present exemplary illustrations of operations of different tables according to different embodiments of the present disclosure, and

Fig. 4 is a flow chart illustrating the exemplary steps for operating the gaming system as shown in Fig. 1.

DETAILED DESCRIPTION

[0040] 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.

[0041] 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.

[0042] 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, Bluetooth, infrared, or similar. As such, the network 112 may be locally and/or globally provided.

[0043] 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.

[0044] 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.

[0045] 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.

[0046] 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.

[0047] 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 of chance in the form of a slot game, visualized within the GUI 202 as comprising a table comprising five individual reels 204 arranged in columns and provided with a plurality of different symbols or elements. The table also comprises three rows. As such, the predefined dimension of the table as shown in Fig. 2 is five times three, thus comprising 15 cells in total.

[0048] The GUI also comprises a "button" 206 to start the game, here provided with the description "SPIN" for initiating a turn of the game. In addition, the GUI 202 comprises an indicator of the current bet 208 (i.e. payment for each turn of the game) and an indicator of the total payment to the player 210. 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.

[0049] Turning now to Fig. 3A, there is shown an exemplary element population of a table 300, here illustrated as a successful outcome within the gaming system detailed in the present disclosure. Fig. 3A features the table 300 as a grid-based table 300, comprising three horizontal rows (R1 - R3) and five vertical columns (C1 - C5). This structure forms the playfield for an exemplary slot game provided in line with the provision of a series of consecutive games managed by the gaming system.

[0050] The gaming system employs in such an embodiment a centralized mechanism for updating the game table on the server, controlling which cells within the table require updating based on game logic and player interactions. Upon determining that a cell update is necessary, the server sends only the modified cell data to the client device, rather than refreshing the entire game state. Such a targeted updating process enhances real-time responsiveness by reducing the volume of data transmitted to the client and lowering the device's pro-

cessing demand, ensuring that players experience smooth gameplay without interruptions. The suggested method allows the server to manage high-frequency updates effectively, supporting fast-paced gaming environments where rapid state changes are common.

[0051] Central to Fig. 3A is the middle row, R2, uniformly occupied by five "diamond symbols" representing a "true win" within the game's context. This rewarding sequence extends across the entire row, intersecting each column from C1 to C5. To visually convey the win to the player, the "diamond symbols" may for example be set apart through a subtle visual modification, in Fig. 3A exemplified with a light gray shading.

[0052] Adjacent to this central row of diamonds, the other cells in the grid are randomly filled with a variety of traditional slot game icons, including but not limited to bars, cherries, and the number seven. These icons provide a visual representation of the range of outcomes elements to be used in conjunction with the slot game according to the present disclosure.

[0053] The determination of if there in fact is a win, and to what level such a win should be treated is in accordance to the present disclosure determined using a predefined matching scheme. The predefined matching scheme utilizes a set of criteria to evaluate the element's arrangement on the grid, identifying matching levels that qualify as winning outcomes. When such an alignment is determined to be above an e.g. previously defined upper threshold, the server 102 responds by provisioning the electronic user device 106 with an indication of a successful gaming outcome. The electronic user device 106 may additionally or optionally be provided with an opportunity to engage in an additional game. Such an additional game may in some embodiments be distinct from the series of consecutive games and offers a gaming outcome that is influenced in part by the original wagering bet and the results of the additional game. This mechanism not only amplifies the excitement of the gaming experience but also aligns with the inventive steps claimed, ensuring that the players' interaction with the gaming system is both dynamic and rewarding.

[0054] Turning now to Fig. 3B, illustrating another exemplary table 302, populated with an although new set of elements. Fig. 3B is directed to a contrasting scenario within the same gaming system, illustrating an instance of a "true loss" where the outcome falls below a predefined lower threshold according to the gaming system's predefined matching scheme. In this figure, a grid-based table, indicated as element 302, is composed of three horizontal rows (R1 - R3) and five vertical columns (C1 - C5), and is utilized for the execution of a slot game, an integral part of the sequence of games facilitated by the gaming system.

[0055] In the instance depicted by Fig. 3B, the arrangement of symbols within the grid does not meet the criteria set by the predefined matching scheme to qualify as a winning or near-win outcome. The matching level derived from the evaluation of the symbol arrangement by the server is determined to be below the predefined lower threshold. The visual representation does not feature the distinctive shading or highlighting used to indicate a win, underscoring the absence of a successful combination according to the game's rules and parameters.

[0056] The significance of the 'true loss' scenario lies not only in its function as a possible game outcome but also in its importance in maintaining the balance and integrity of the game's reward system. By clearly establishing the threshold for losses, the gaming system ensures a calibrated level of challenge and keeps the probabilistic nature of the game intact. The predetermined lower threshold serves as a critical reference point for the gaming system to provide a consistent and fair gaming experience, upholding the principles of chance and probability that are fundamental to the design of such games.

[0057] Turning to Fig. 3C in conjunction with Fig. 4, illustrating a still further example of an exemplary table 304, populated with an although new set of elements. Fig. 3C specifically exemplifies a 'near win' scenario within the gaming system, where the outcome teeters on the cusp of a win according to the predefined matching scheme.

[0058] In accordance with the present disclosure, the depicted process begins with the server 102 receiving, S1, a request from the electronic user device 106 to engage in gameplay. This initial interaction sets the stage for the subsequent gaming activities and decision-making by the server. Following this, the server 102 proceeds to form, S2, a table in the shape of a grid comprising a plurality of cells. The structure of this grid is crucial, as it lays the groundwork for the game's visual and interactive elements.

[0059] Next, the server generates, S3, a set of elements corresponding to the cells within the grid. These elements are derived from a predetermined group of icons and symbols that are central to the slot game's theme and mechanics. Once the elements are generated, the server populates, S4, the cells of the table with this set. The arrangement of these elements is crucial for the gameplay, as it directly influences the determination of wins and losses.

[0060] The server then directs, S5, the electronic user device to display the populated table on the device's screen. This visual representation is what the player interacts with; hence, its accuracy and clarity are paramount. At this juncture, the server applies, S6, the predefined matching scheme, as is elaborated and exemplified above, to determine the matching level. This scheme is a set of rules that assesses the arrangement of the elements on the grid to identify possible winning combinations.

[0061] The server then assesses, S7, whether the matching level falls within a specific matching range, bounded by an upper and lower threshold as discussed above. In Fig. 3C, this is illustrated by four "bar" symbols arranged on row R1, covering columns C1 to C4, a

formation that qualifies as above the lower threshold yet below the upper one.

[0062] Finally, the server provides, S8 a gaming outcome that depends on the predefined odds value associated with the matching range. In this "near win" instance, although the outcome does not trigger the highest reward, it still offers a result that is contingent on the specific range in which the matching level falls. The predefined odds value may in turn connected to a random number generator (not shown) that defines if the near win indeed is to generate any form of positive gaming outcome. That is, in some embodiments the odds value for the near win will result in that no positive gaming outcome is in fact generated. As an example, the odds value may be set to e.g. 1 in 100, meaning that in one out of 100 the near win will generate a positive gaming outcome. The odds value may of course be selected as suitable for the specific game and to ensure that the randomness of the game is keep at a desirable level and in accordance with the general "randomness discussions" above.

[0063] A further exemplary embodiment of a "near miss" scenario is shown in Figs. 3D and 3E. In this further example, it is necessary for the player to "collect" at least three predefined element types (in Fig. 3D e.g. "diamonds") within table 306 to reach above the previously discussed upper threshold for the collection to be defined as a "true win", which in tun may trigger an additional game such as e.g. a set of free spins or a bonus game. Conversely, a "true loss" is defined by a player collecting only one of the predefined element types.

[0064] However, in Fig. 3D player has collected two of the predefined element types in column C1, row R2 and column C3, row R2 of the grid-table 306. The player therefore did not meet the criteria to trigger the upper threshold but instead met the near miss" scenario within the gaming system i.e. the matching level is within the matching range defined by the upper threshold and the lower threshold. In this near miss instance the system randomly awards the player a cash prize as illustrated in column C3 row R2 of Fig. 3E, by replacing the symbol with the cash prize.

[0065] 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.

[0066] 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.

[0067] 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, the gaming system arranged to operate a series of consecutive games, wherein the method comprises, for each of the plurality of consecutive games, the steps of:

    - receiving, at the server, a request from the

electronic user device to play a game in the series of consecutive games, 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,
- determining, using the server and by applying a predefined matching scheme, a matching level between the cells populating the table and each of a plurality of predefined cluster formations stored at the server,
- determining, using the server, if the matching level is within a matching range defined by an upper threshold and a lower threshold, wherein the upper threshold is arranged lower than a maximum matching level and the lower threshold is arranged higher than a minimum matching level, and
- providing, using the server and if the matching level is within the matching range, a gaming outcome to the electronic user device, wherein the gaming outcome is dependent on a combination of the wagering bet, a predefined multiplication factor, and a predefined odds value for the matching range.

2. The method according to claim 1, wherein if the matching level is above the upper threshold, the method further comprises:

- providing, using the server, the electronic user device with an additional game separate from the series of consecutive games,

wherein the gaming outcome is at least partly dependent on the wagering bet and a result of the additional game.

3. The method according to any one of claims 1 and 2, wherein the server comprises a random number generator configured to generate a random outcome corresponding to the odds value.

4. The method according to any one of the preceding claims, wherein the predefined odds value is 1 out of X, and X is defined to be at least 100.

5. The method according to claim 4, wherein X is defined to be below 200.

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

7. The method according to any one of the preceding claims, wherein the multiplication factor is more than 1.

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 claim 2, wherein the additional game is a bonus game.

10. A gaming system arranged to operate a series of consecutive games, 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 server is arranged to, for each of the plurality of consecutive games:

- receive a request from the electronic user device to play a game in the series of consecutive games, 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,
- direct the electronic user device to display the table at the display screen,
- determine, by applying a predefined matching scheme, a matching level between the cells populating the table and each of a plurality of predefined cluster formations stored at the server,
- determine if the matching level is within a matching range defined by an upper threshold and a lower threshold, wherein the upper threshold is arranged lower than a maximum matching level and the lower threshold is arranged higher than a minimum matching level, and
- provide, if the matching level is within the matching range, a gaming outcome to the electronic user device, wherein the gaming outcome

is dependent on a combination of the wagering bet, a predefined multiplication factor, and a predefined odds value for the matching range.

11. The gaming system according to claim 10, wherein if the matching level is above the upper threshold, the server is further arranged to:

- provide the electronic user device with an additional game separate from the series of consecutive games,

wherein the gaming outcome is at least partly dependent on the wagering bet and a result of the additional game.

12. The gaming system according to any one of claims 10 and 11, wherein the server comprises a random number generator configured to generate a random outcome corresponding to the odds value.

13. The gaming system according to any one of claims 10 - 12, wherein the predefined odds value is 1 out of X, and X is defined to be at least 100.

14. The gaming system according to any one of claims 10 - 13, 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.

15. A computer program product comprising instructions which, when executed by a computer or processor, cause a gaming system to operate a series of consecutive games, 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 is executed for each of the plurality of consecutive games and comprises:

- code for receiving, at the server, a request from the electronic user device to play a game in the series of consecutive games, 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 determining, using the server and by applying a predefined matching scheme, a matching level between the cells populating the table and each of a plurality of predefined cluster formations stored at the server,
- code for determining, using the server, if the matching level is within a matching range defined by an upper threshold and a lower threshold, wherein the upper threshold is arranged lower than a maximum matching level and the lower threshold is arranged higher than a minimum matching level, and
- code for providing, using the server and if the matching level is within the matching range, a gaming outcome to the electronic user device, wherein the gaming outcome is dependent on a combination of the wagering bet, a predefined multiplication factor, and a predefined odds value for the matching range.

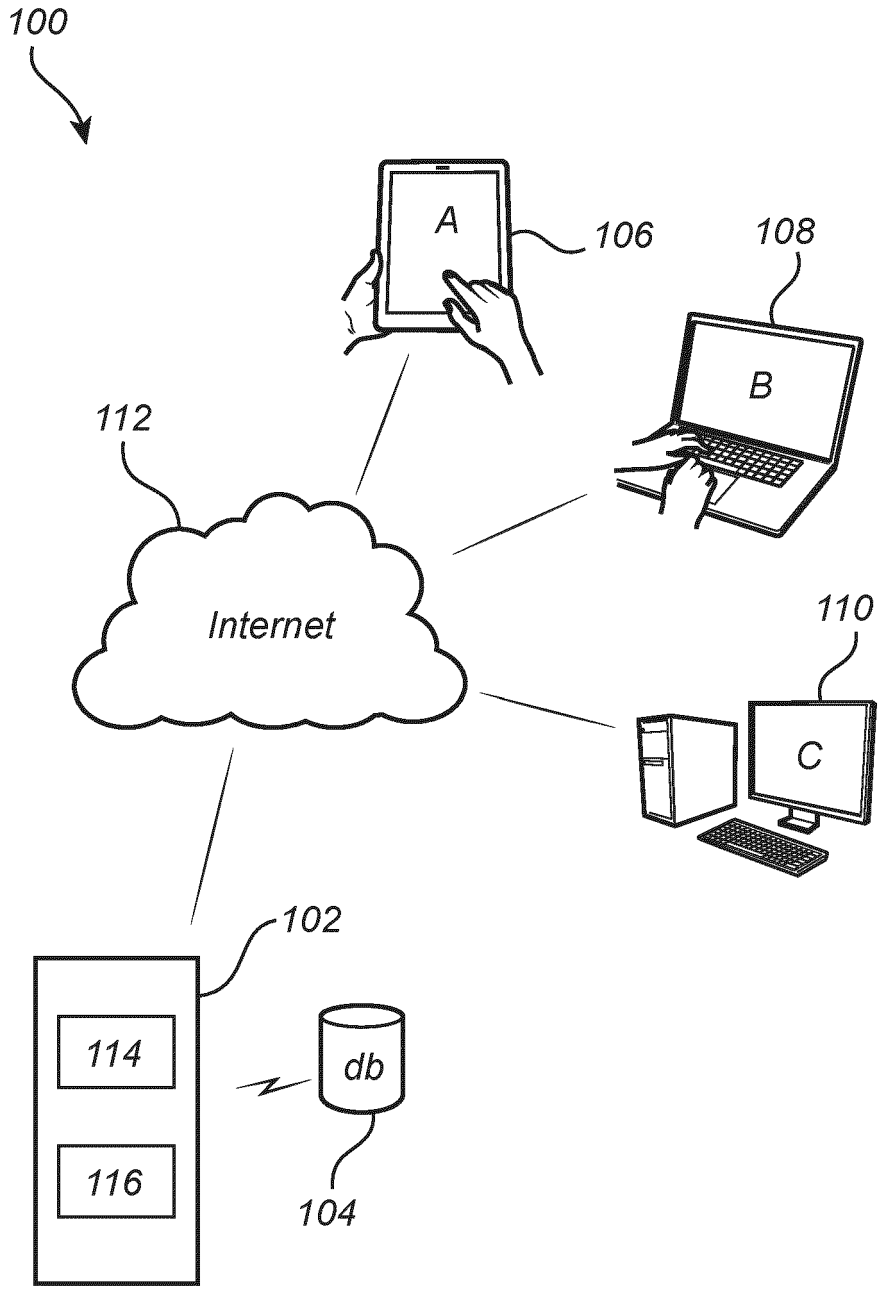
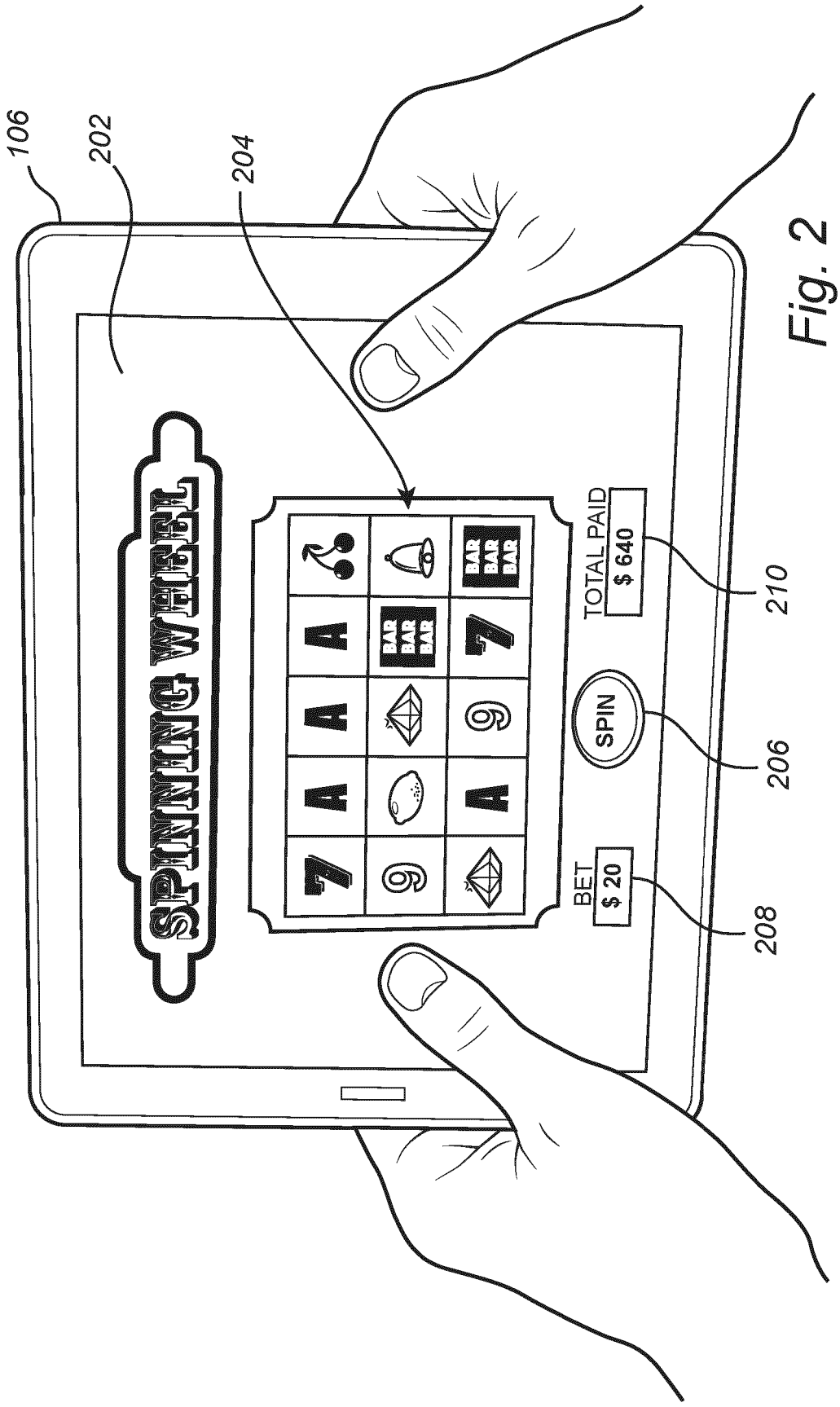


Fig. 1


106
202
204
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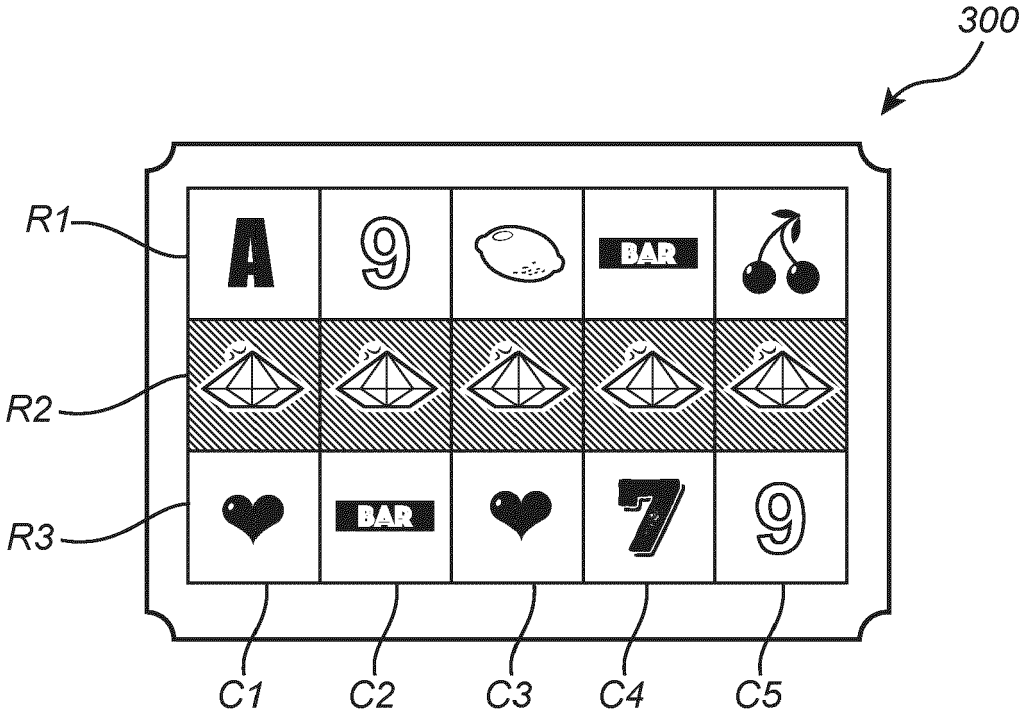
BAR BAR BAR
7
9
A
TOTAL PAID
$ 640
210
SPIN
206
BET
$ 20
208

Fig. 2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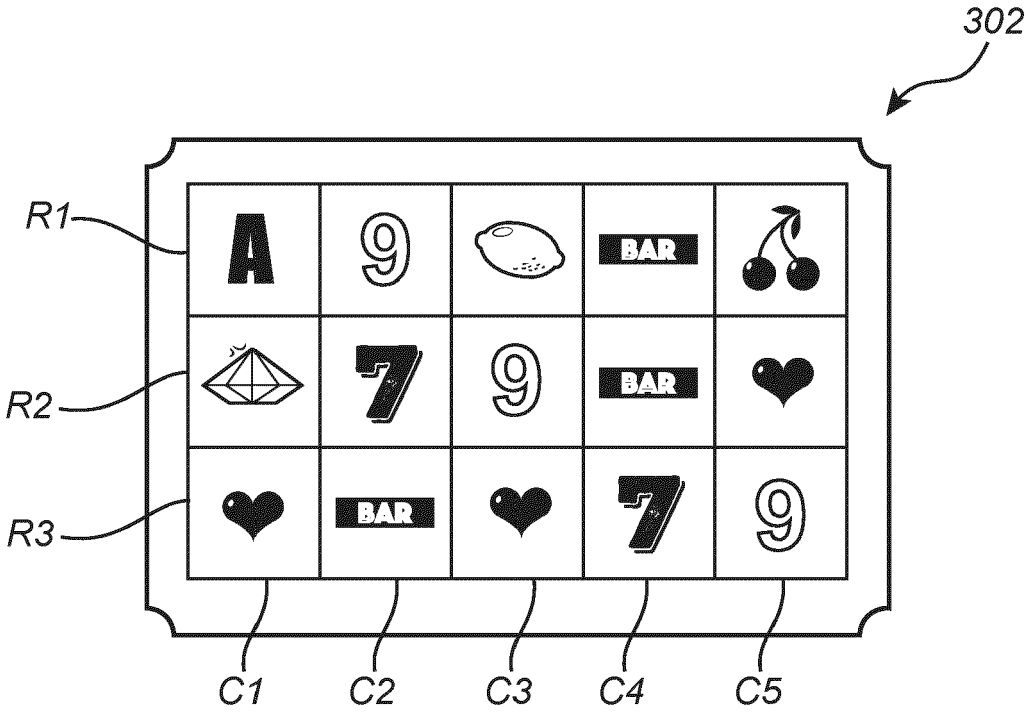
R2
R3
A
9
BAR
BAR
7
9
C1
C2
C3
C4
C5

Fig. 3A


302
R1
R2
R3
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7
9
BAR
BAR
7
9
C1
C2
C3
C4
C5

Fig. 3B

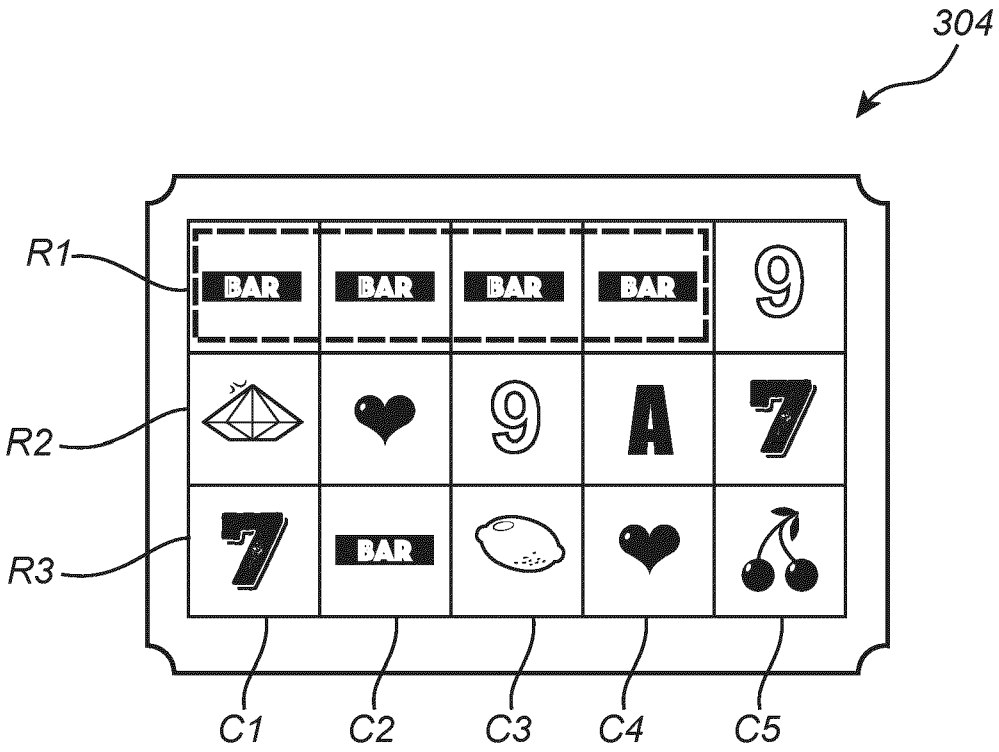
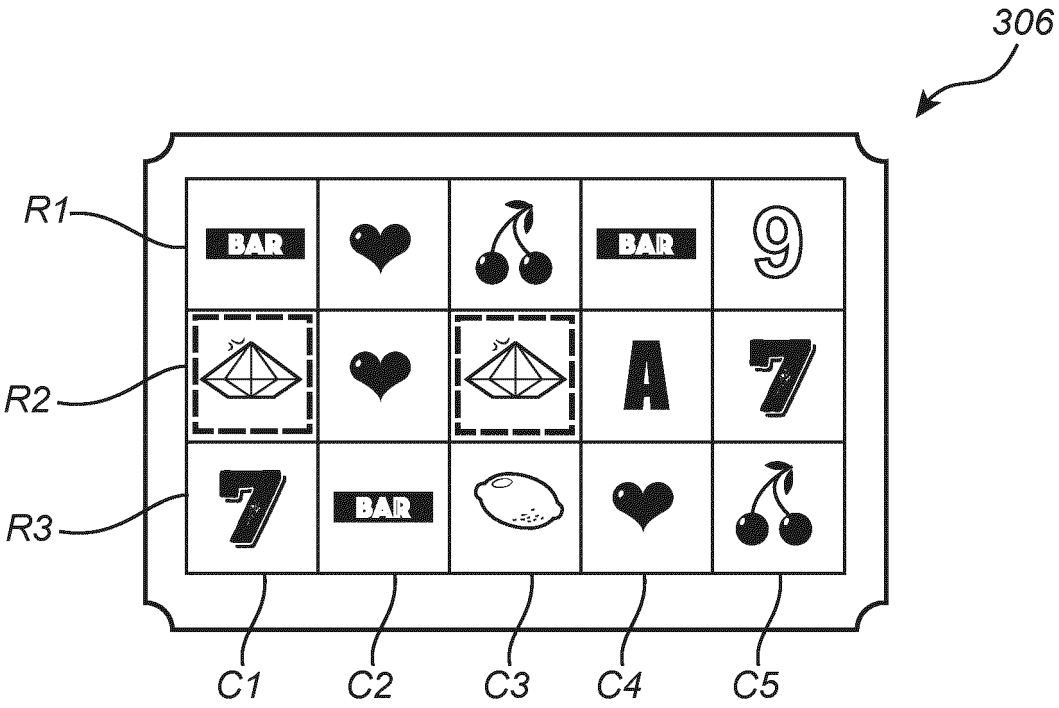


Fig. 3C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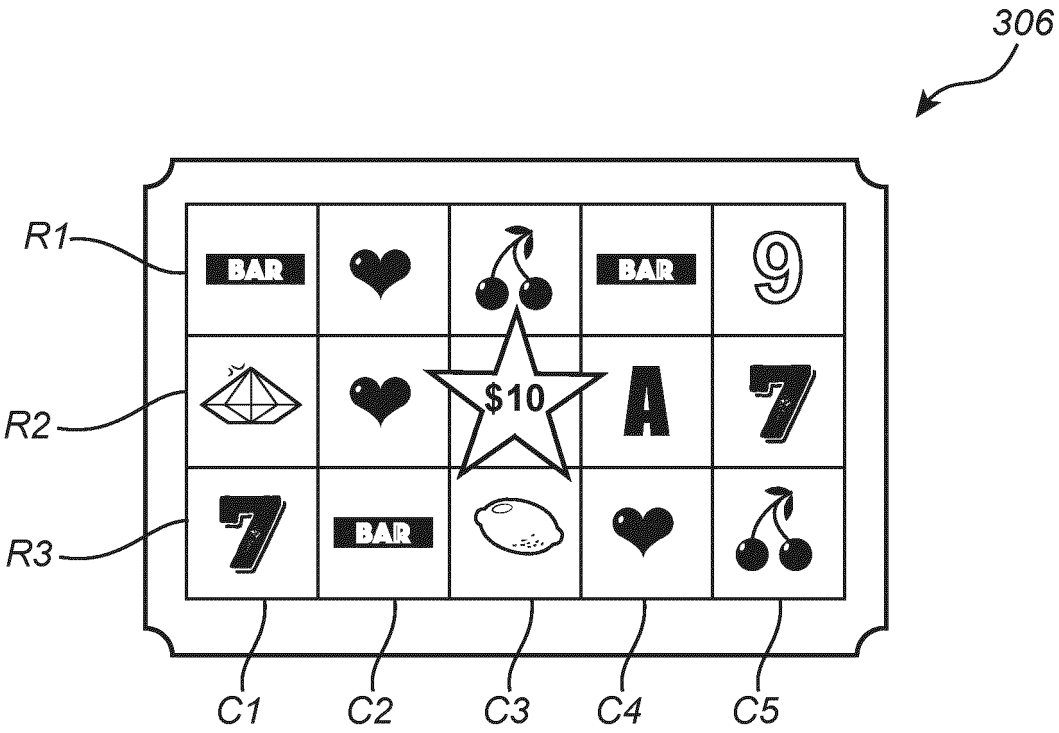
7
7
BAR
C1
C2
C3
C4
C5

Fig. 3D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C1
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C4
C5

Fig. 3E

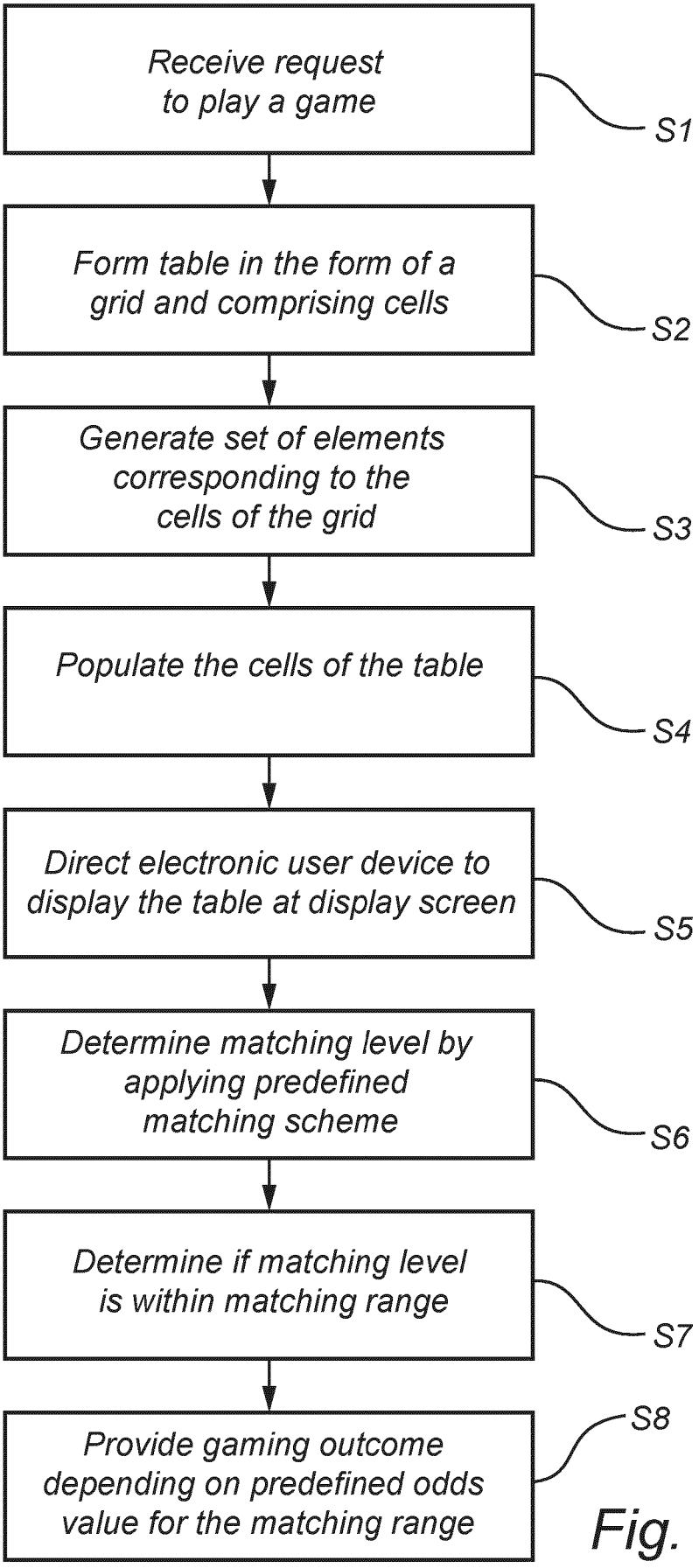
Receive request to play a game
S1
Form table in the form of a grid and comprising cells
S2
Generate set of elements corresponding to the cells of the grid
S3
Populate the cells of the table
S4
Direct electronic user device to display the table at display screen
S5
Determine matching level by applying predefined matching scheme
S6
Determine if matching level is within matching range
S7
Provide gaming outcome depending on predefined odds value for the matching range
S8

Fig. 4

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EUROPEAN SEARCH REPORT

Application Number
EP 24 21 3276

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 2020/043280 A1 (WALSH KEVIN RAYMOND [US] ET AL) 6 February 2020 (2020-02-06) * abstract * * paragraph [0006] - paragraph [0008] * * paragraph [0019] - paragraph [0039] * * paragraph [0054] - paragraph [0068] *	1-15	INV. G07F17/32
X	EP 4 009 295 A1 (PLAYN GO MARKS LTD [MT]) 8 June 2022 (2022-06-08) * abstract * * figures 1-5 * * paragraph [0050] - paragraph [0086] *	1-15	
A	US 2010/203951 A1 (FRICK MICHAEL D [US]) 12 August 2010 (2010-08-12) * 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	29 March 2025	Diepstraten, Marc

CATEGORY OF CITED DOCUMENTS

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29-03-2025

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 2020043280 A1	06-02-2020	AU 2019210488 A1	20-02-2020
		US 2020043280 A1	06-02-2020
EP 4009295 A1	08-06-2022	CA 3140896 A1	07-06-2022
		EP 4009295 A1	08-06-2022
		US 2022180705 A1	09-06-2022
US 2010203951 A1	12-08-2010	NONE	

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