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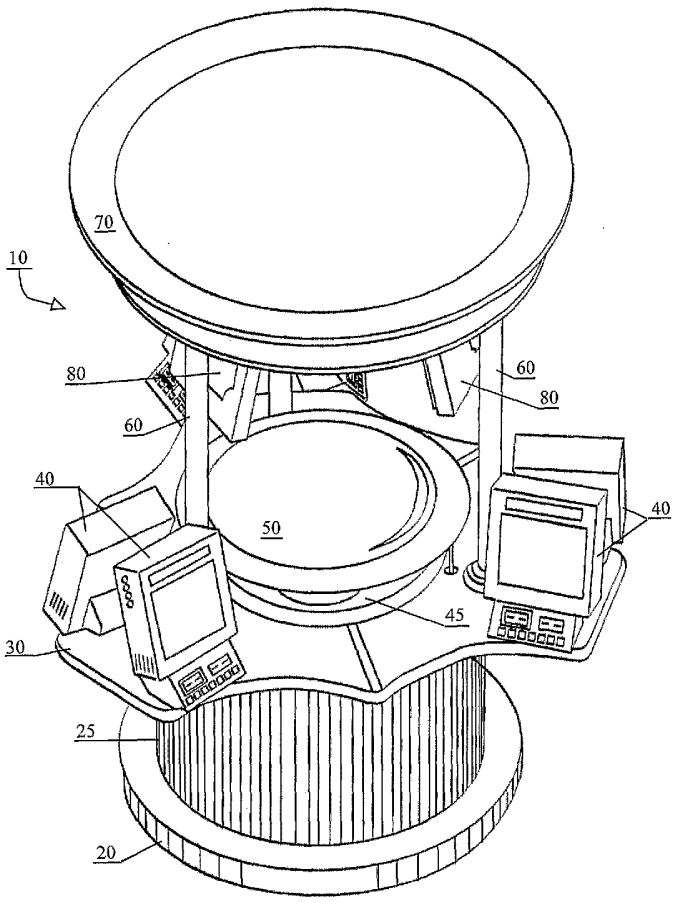

(57) Abstract: The invention consists in an automated gaming system comprising a central section comprising an outcome generation system, and satellite player stations. The outcome generation system generates game outcomes and signals each generated game outcome to the player stations adapted to play a game based on received outcome signals. The player stations are operated through input means disposed on an operative face of each player station and which substantially faces a side of an operative player facing toward the outcome generation system. Thus, a clear view is provided to the player to witness the outcome generated by the outcome generation system.

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AUTOMATED GAMING ASSEMBLY PROVIDING A GAME VISUAL ENHANCEMENT

CROSS-REFERENCE TO RELATED APPLICATIONS

[001] This application claims priority under 35USC§119(e) of US Provisional Patent Application serial no. 60/551,833, filed on March 11, 2004 and entitled "Automated Gaming Assembly Providing a Game Visual Enhancement", the specification of which is hereby incorporated by reference.

FIELD OF THE INVENTION

[002] The invention relates to a new device, and more specifically its structure suitably designed to offer a casino-type automated game. The invention further relates to an environment suitable for a plurality of players to place wagers on individual player stations and for these wagers to be resolved based on an automated gaming device outcome.

TECHNICAL PROBLEM

[003] A technical problem to be solved by the invention is to provide players with better view of the automated game functionalities and, furthermore, of the automatically generated outcomes and of its generating process without having to use an electronic representation or retransmitted captured representations of the process. The player's view resulting from the invention is a direct view wherein obstacles between the players and the automated game outcome are reduced to almost nothing. Accordingly, the resulting enhanced view of the outcome and outcome generation process promotes players' confidence vis-à-vis the game.

[004] Another technical problem to solve is one of space. There is a need to provide an automated gaming environment that is less voluminous than currently used automated gaming environments. Accordingly, the automated gaming environment of the invention becomes advantageous for operators thanks to a more efficient space management, which results in an increase in the number of wagering players per gaming facility area unit.

[005] Another problem the current invention aims to solve is providing a gaming environment in which the players will experience more pleasure. By combining an objective of increasing player's confidence; an environment wherein players sees the action as it occurs without any need of electronic equipment; an interactive gaming environment and a game players love, the problem is efficiently solved.

SOLUTION TO THE STATED PROBLEM

[006] Accordingly, the solution provided by one embodiment of the present invention is a new automated gaming environment, more specifically in a first embodiment, an automated roulette environment.

[007] In an embodiment of the present invention, the gaming environment comprises an automated gaming system comprising a central section and player stations. The central section comprises an outcome generation system generating outcomes and signalling corresponding outcome signals to player stations. The player stations are adapted to register wagers a player enters using input means, to resolve the registered wagers based on an outcome generation system provided outcome signal, and to maintain a player's account according to registered credits, wagers and prizes. The automated gaming system is further adapted to receive player stations with their operative face pointing toward a side of the player operating the player station when the player faces the outcome generation system.

[008] According to another embodiment, the invention is an automated gaming assembly comprising an outcome generation system, a platform typically surrounding the outcome generation system, and extending sections adapted to receive player stations. The outcome generation system and the platform are suitably designed for a player located beside the platform and looking at the outcome generation system to have a direct view of an outcome. The extending sections are adapted to receive player stations having an operative face pointing toward a player's side when the player looks at the outcome generation system. Thus, the player has an unobstructed view of the outcome generation system and of generated outcomes.

BRIEF DESCRIPTION OF THE DRAWINGS

[009] Further features and advantages of the present invention will become apparent from the following detailed description, taken in combination with the appended drawings, in which:

[0010] Figure **1** is a perspective view of an automated gaming system comprising six player stations;

Figure **2** is a top view of the six-player station automated gaming system of Figure **1**;

Figure **3** is side view of the automated gaming system of Figure **1**;

Figure **4** is a top view of the six-player automated gaming system of Figure **1** without head 70;

Figure **5** is an exploded view of a player station attachment on the platform of the automated gaming system of Figure **1**;

Figure **6** is a top view of the roulette system used to establish outcomes in the six-player station automated gaming system of Figure **1**;

Figure **7** is a screen shot representative of the image displayed on an electronic screen of a player station during the play of a round of roulette;

Figure **8** is a block diagram illustrating components of the automated gaming assembly and of the player stations of Figure **1**;

Figure **9** is a flow chart illustrating steps involved in the play of a round of roulette with the automated gaming system of Figure **1**;

Figure **10** is a top view of an alternative embodiment suitably designed to play a die game;

Figures **11a and 11b** are block diagrams illustrating components of a system comprising the embodiment illustrated on Figure **10**; and

Figure **12** is a top view of another embodiment according to the present invention.

[0011] It will be noted that throughout the appended drawings, like features are identified by like reference numerals.

DETAILED DESCRIPTION OF EMBODIMENTS OF THE INVENTION

[0012] In a first embodiment, illustrated on Figure **1**, the invention is an automated mechanical roulette system **10**. The system **10** comprises a base **20**; a body **25**; a platform **30** on which player stations **40** are disposed; an automated driven roulette system **45** protected by a dome **50**; and a series of support members **60** supporting the system head **70** and complementary screens **80** suitable for providing game history information. Complementary screens 80 may also provide special feature information or advertising information if suitable set. On this view, a portion of the roulette system **45** is visible when the dome **50** is elevated as illustrated for maintenance.

[0013] Figure **2** illustrates the system **10** through a top view wherein only a portion of the platform **30** and of the player stations **40** are visible; the head **70** hiding most of the player stations **40**, the dome **50** and the roulette system **45**.

[0014] Figure **3** provides a side view of the system **10**. On this view, a portion of the roulette system **45** is visible when the dome **50** is down.

[0015] As illustrated on Figure **4**, the platform **30** comprises in its central portion a cut-out (under dome 50) for disposing the roulette system **45 (see Figure 6).**The platform **30** has a generally triangular shape with two player stations **40** disposed back to back on each tip. A support member **60** is also disposed at each tip near the player stations **40** closer to the roulette system **45**. The dome **50** is disposed above the roulette system **45** to perform a protective function; i.e., preventing interference by anyone which could influence the course of the ball during a roulette outcome generation process.

[0016] As illustrated in Figure **4**, a player **99** being placed face to a player station **40** may place wagers using player station input means such as a touch screen defining the operative face of the player station **40**. Once a roulette outcome generation process is

initiated, the player **99** may rotate either his head or himself about 40 degrees left (in this example) to look at the ball determining the roulette outcome. When looking directly toward the roulette system **45**, the player has almost nothing obstructing his view from the process, only the dome **50** and a portion of the platform **30** are between him and the roulette system **45**; the first one being transparent and the second being at the same level as the roulette system **45**. Thus, no obstacle or unnecessary distance prevents player **99** from witnessing the outcome generation process.

[0017] The type of attachment used to secure player stations **40** on the platform **30** offers the benefit of allowing attaching different models of player stations **40**. The attachment illustrated on Figure **5** is based on a cylindrical connector **41** used as a stop-pin in combination with an arc-shaped aperture **42** located in the platform **30.** Power and communication wires **43** pass from the player station **40** to under the platform **30** through said cylindrical connector **41**. The player station **40** rotates according to an attachment axis defined by the securing assembly **44** rotatably attaching the player station **40** to the platform **30**. Accordingly, the maximum rotation the player station **40** may perform is determined by the length of the arc-shaped aperture **42** performed in the platform **30**. A metal plate (not shown) attached to the under surface of the platform **30** prevents access to the wires **43**. The plate **30** may further be at least partially covered by a decorative triangularly shaped support moulding (not shown) disposed between the platform 30 and the system body **25** supporting part of the station weight. Thus, the resulting assembly permits reversible mounting and exchange of player stations **40** offering a certain freedom of rotation for enhanced player comfort.

[0018] Figure **6** illustrates the roulette system **45,** particularly the roulette structure and the ball **92** used to generate the outcome. The roulette structure comprises a series of identified slots **90** suitably designed to receive the ball **92** at the end of its course. The slots **90** are individually identified by a number and a color. The numeral identifications are non-repetitive and are from 0 (or 00) to 36. The coloring identifications are divided in three colors: green for the 0 (and 00 in appropriate cases) identified slot(s), red for half of the over 0 identified slots **90**, and black for the remaining part of the slots **90**; the colors alternating to never have to adjacent slots **90** of the same color (not shown on the roulette of Figure **6** to ensure clarity). The

roulette structure **45** presents slopes that are suitably designed to provide the same probabilities to each slot **90** of receiving the ball **92** at the end of its course while preventing the ball **92** to land anywhere else. Canoes **94** are disposed around the slots **90** to modify the ball course and therefore render the prevision of the ball landing slot **90** more difficult. The roulette structure **45** comprises an edge **100** limiting the ball course into the roulette system **45**. As the ball **92** decelerates, the ball **92** is forced by the slope to travel form the edge **100** toward the center of the roulette structure to end its course in one slot **90**. Outcome identification means, comprising a light emitting diode **96** and light detecting sensors **98**, permit the roulette outcome identification. Each slot 90 has a corresponding light detecting sensor 98. When the ball **92** lands in one slot **90**, the corresponding light detecting sensor **98** does not receive any light signal from the light emitting diode **96** and therefore identifies the ball landing slot **90** to a processor which translates the light detecting sensor **98** position into the roulette outcome.

[0019] To generate a roulette outcome, the section of the roulette structure **45** that bears slots **90** is driven in one rotational direction, namely clockwise, while the ball **92** is propelled onto the roulette structure **45** through an ejection conduit **102** disposed on periphery of the roulette structure edge **100** over the normal course of the ball **92**. Thus, as the ball **92** starts its course on the roulette structure **45**, the ball **92** first follows the edge **100**, decelerates, potentially bumps onto one or more canoes **94**, and ultimately lands in one slot **90**.

[0020] Securely disposed in the assembly base **25**, an airflow motor (not shown) propels the ball **92** into a conduit (not shown) leading the ball **92** into the ejection conduit **102** when needed, a roulette motor (not shown) drives the rotation of the rotating section of the roulette structure, and a gaming controller **120** (schematically shown on figure **8**) controls the airflow motor and the roulette motor. The gaming controller **120** also controls the means detecting the roulette outcome, namely the light emitting diode **96** and the light detecting sensors **98**. It further controls the means retrieving the ball **92** from the roulette structure once the outcome is generated and identified, what is performed by elevating a portion of the roulette structure for the ball **92** to fall in a receiving container disposed under the elevated portion of the roulette structure and leading the ball back in the airflow fed conduit. Furthermore,

the gaming controller **120** is in communication with the player stations **40**. The gaming controller **120** may also be in communication with other components, such as a sound controller, a complementary screen controller, a management system, security and detection systems, and a player tracking system through a local area network (LAN) or a wireless communication network.

[0021] As stated, the player stations **40** are in communication with the gaming controller **120**. Each player station **40**, in the described embodiment, comprises a player station controller **140** exchanging data and signals with other player station components. An electronic screen **142** visible by the player provides information to the player on the conduct of the game, as illustrated on Figure **7**. The electronic screen **142** provides a image of a wagering mat **110**; a series of counters **112** informing the player on statuses such the amount of credits wagered **112b**, the credits remaining available **112a** to wager, and the prize won **112c**; a message box **114** informing on game state as if wagers are either or not possible to place; and an outcome area **116** informing players on last outcomes. The player stations also comprise player input means **144** embodied as touch screens, buttons and/or other sensing surfaces; monetary input means **146** such a coin hopper, card receiving means or a ticket reader; and an awarding means such as a ticket printer. Player stations **40** also comprise memory **150** maintaining programs used by the player station controller, data and counter information such as wagering information.

[0022] Figure **8** schematically illustrates functional relationship existing between a player station **40** and the automated gaming assembly. The player station controller **140** exchanges signals with the player station components to player the game, and with the gaming controller **120**. According to gaming controller signals, different states are set in the game played on the player station **40**, resulting in the game being at different steps of its process. For its part, the gaming controller **120** exchanges signals with the roulette mechanism **122** (such as the different motors) influencing the roulette and ball state **124**, outcome identification means **128**, and protecting means **126** including protection-related sensors and dome mechanism. The assembly comprises memory **130** used by the gaming controller **120** to keep programs and registered information.

[0023] Figure **9** illustrates steps involved in playing roulette. The process starts with the gaming controller **120** secured in the automated gaming system **10** signalling the player stations **40** that a round is ready to start (step **150**). In accordance, the player stations **40** activate the credit receiving process (step **152**) and the wagering process (step **154**). During these processes, the players may place new credits in their player stations **40** and used the credits available to place wagers on the next roulette outcome. An end wagering process (step **156**) is also performed to prevent new wagers from being placed (step **158**) when the outcome generation process fulfills an advancement criterion. Thus, the roulette play involves initiation of the roulette game outcome generation (step **170**) taking form of the gaming controller **120** sending signals to the motor for the ball **92** to be propelled on the roulette structure. According to settings, the end wagering process (step **156**) may involve evaluation of the ball speed or a ball travelling duration. After the wagering process has ended on player stations **40** (step **158**), the ball **92** ultimately lands in one slot **90**, the outcome is identified, and the gaming controller **120** transmits the roulette outcome to the player stations **40** (step **160**). Each player station controller **140** resolves registered wagers (step **162**) based on the received outcome signal; and pays the player accordingly, typically by increasing and decreasing counter values (**164**). Then, when the time is up, usually the time to retrieve the ball **92** from its landing slot **90**, a new round is initiated (step **150**).

[0024] Figure **10** illustrates another embodiment of the invention wherein the game played is a die game (such as a crap game) with the playing stations disposed around the outcome generation assembly **160** being of two kinds: a) wagering stations **180** comprising a ticket reader , an electronic screen with touch screen and a station controller (not visible), and b) player stations **190** with a ticket reader **192**, enhanced electronic screen and touch screen comparable to wagering stations **180**, and a station controller (not visible). A player using a wagering station **180** may place wagers on the die outcome while a player using a player station **190** may further apply some control over the outcome generation process, such as, depending on the game played, holding die, modifying die toss settings, etc.

[0025] Communicatively linked to the automated gaming assembly **160** but disposed aside is a service station **170** permitting players to transfer money entered in the

service station **170** into credits available to be wagered. Thus, a player feeds the service station **170** with the amounts he wants to wager at the beginning of its play session, receives a ticket identifying his account, goes to a wagering station **180** or a player station **190**, and places his ticket into the ticket reader **182** or **192**. The station **180** or **190**, after reading the ticket, communicates with an accounting system, transfers founds to the station **180** or **190** where the credits become available for the player to wager. When the player desires to ends his session, he removes the ticket from the station **180** or **190**, places it into a service station **170** wherein the ticket is exchanged for a redeemable voucher an attendant may exchange for standard currency.

[0026] Thus, the block diagram illustrating the system for the play of an automated die game using the assembly of Figure **10** is slightly different from the one hereinabove depicted. Figure **11** illustrates the system comprising the automated gaming assembly **200**, the player station(s) **220**, the wagering stations **240**, and the service station(s) **260**. A network (LAN) **290** links the service station(s) **260**, the automated gaming assembly **200** and a central server **280** wherein an accounting database **282** maintains information on found transfer, such as money deposited in service station(s) **260**, credit transferred to a player station **220** or a wagering station **240**, and credits transferred into vouchers redeemable by attendants. A secured network **292** maintains communication between the gaming controller **202** and the station controllers **222** and **224**.

[0027] As illustrated, each service station **260** comprises a controller **262** that: a) maintains communication with the central server **280**; b) commands the printing of tickets and vouchers by a printer **264** for allowing player to play or to redeem prizes won; c) commands reading tickets to be read by a reader **266** when a player ends its session; and d) accesses memory **268**.

[0028] The automated die assembly **200** comprises protecting means **206** (including a dome) preventing players from fraudulently influencing the outcome, an outcome generation mechanism **204** being partially controllable by a player at a player station using outcome control inputs, die **208**, and die identification means **210** including image capturing and analysing means. These components are more or less controlled

by the gaming controller **202** depending in part from signals received from a player station for the outcome generation. The assembly further comprises memory **212** for storing necessary programs and registering information.

[0029] The player station(s) **220** and wagering stations **240** are composed of a controller **222** and **242**; an electronic screen **224** and **244** adapted for their particular needs; input means **226** and **246** also adapted for their particular needs; a ticket reader **228** and **248**; and memory **230** and **250**. As stated, the needs of a wagering station **220** differ from the ones of a player station **240**. The latter permits a player to influence the outcome generation process while the wagering station **220** capability is limited to placing wagers regarding die outcomes. Thus, an outcome generation process includes signal exchange between the gaming controller **202** and a player station controller **222**.

[0030] Figure **12** illustrates another configuration for an automated gaming assembly. In this other embodiment, the player stations **280** are all facing the same direction, which is clockwise in the illustrated figure. Though, by preventing players **99** to face one another, the anonymousness players **99** experience is as important as playing on individual gaming machines.

[0031] Other physical embodiments are possible according to the kind of stations that are suitable for the game, the available equipment, and the services that have to be offered at the player stations. For instance, the stations may essentially be located on the platform or partially to almost totally embedded in the platform. Touch screen, buttons, matting with wired sensors underneath, one screen or many screens of different dimensions, or even no screen can be used according to the needs.

[0032] Another example is a player station remotely located from the automated gaming system, and receiving both outcome signals and captured images from the automated gaming system. In this case, the player would witness the outcome through the captured image rather than witnessing live the outcome.

[0033] Another example could be an assembly wherein an attendant would participate in the game even if the wagers are resolved by player stations.

[0034] As the above embodiments were disclosed for the play of roulette and die games, other games may benefit from similar gaming systems. The list of suitable games includes bingo, keno, electronic card games, or even automated race games.

[0035] Furthermore, the automated gaming assembly and player station controllers may be adapted for the play of a pari-mutuel game. Accordingly, wagering information would be continuously exchanged between player stations. In consequence, the wagering resolution process, rather than demanding knowledge only of the outcome and of a static pay schedule, would demand more information from other sources, at least wagering information from other player stations. The information exchange would be different but the assembly would essentially remain the same. Other embodiments could also differ regarding programs, games, communication, game control, etc. without departing from the scope of the invention.

[0036] It is intended, while block diagram illustrates system components communicating with each other, that those skilled in the art will recognize that the invention may be embodied through a combination of hardware and software components. These components are illustrates as such in the appended block diagrams solely to teach their functionalities and relationship. Thus, programmable computers, computer applications or operating systems may be suitable to perform functions illustrated by one or more illustrated components without departing from the scope of the invention.

[0037] Furthermore, in case of some functional components being possible to be embodied as functional methods, these methods may be embodied in a machine or a system, carried out as a computer readable medium, a processing-readable memory, or communicated as an electrical or electro-mechanic signal.

[0038] Thereupon, the intent of the above document is to efficiently teach the invention through exemplary embodiments, while solely the appended claims are intended to define the scope of the invention.

CLAIMS

1. An automated gaming system (10) comprises:

- a central section comprising an outcome generation system (45); and

- a plurality of player stations (40) substantially disposed in periphery of the central section,

wherein player stations (40) are adapted to register wagers depending on received wagering inputs from players using input means (144) disposed substantially on one operative face of each player station, and to resolve wagers based on an outcome signal received from the outcome generation system (45), and

wherein the automated gaming system (10) is adapted to receive a substantial portion of the player stations (40) with their operative face facing substantially tangentially with respect to the outcome generation system (45) thereby substantially facing a side of a player operating said player station when said player faces toward the outcome generation system (45).

2. The automated gaming system (10) of claim 1, wherein each player station (40) further comprises:

- a screen (142) providing game information;

- memory (150) registering credit and wagering information;

- communication means communicatively linking the player station (40) to the outcome generation system (45); and

- a controller (140) adapted to provide a game environment to a player wherein the player inputs wagers and wherein the wagers are resolved based on an outcome signal received from the outcome generation means (45) whereby registered credit and wagering information are modified.

3. The automated gaming system (10) of claim 1, wherein the outcome generation system (45) comprises:

-outcome generation means (122,124) generating a game outcome;

-outcome identification means (128) identifying the generated game outcome;

-communication means transmitting a game outcome signal to the player stations (40); and

- a controller (120) adapted (a) to signal the outcome generation means (122,124) to initiate a game outcome generation process, (b) to receive an outcome signal from the

outcome identification means (128) and (c) to transmit the game outcome signal to the player stations (40).

4. The automated gaming system (10) of claim 3, wherein the game controller (120) of the outcome generation system (45) is further adapted (d) to receive from the player stations (40) a signal, and (e) to generate a response signal resulting in a modification in one of (i) a game outcome generation process and (ii) a wager resolving process.

5. The automated gaming system (10) of claim 1, wherein the player stations (40) are disposed in pairs, the paired-player stations (40) being substantially disposed back to back.

6. The automated gaming system (10) of claim 1, wherein a player stations (40) is reversibly attached to the automated gaming system (10) whereby exchangeable for another player station (40).

7. The automated gaming system (10) of claim 1, wherein a player station (40) is rotatably attached to the automated gaming system (10) whereby orientation of said player station (40) becomes adjustable.

8. The automated gaming system (10) of claim 3, wherein the game outcome is one of roulette, a die game, a ball game, and a virtual card game.

9. The automated gaming system (10) of claim 3, wherein the game outcome is one generated using at least one of balls, cards, electronically generated images, and die.

10. The automated gaming system (10) of claim 3, wherein the game outcome is one generated using symbols, with said symbols being provided either by reels, wheels or electronic displays.

11. The automated gaming system (10) of claim 3, wherein the outcome generation system (45) comprises a roulette system using a roulette spinning portion and a rolling ball (92) at a speed gradually decreasing during the outcome generation process, the

automated gaming system (10) further comprising a speed evaluation means (a) that evaluates the speed of the ball (92), and (b) that signals the outcome generation system controller (120) when a predetermined speed criterion is reached which, upon a successful evaluation of the speed criterion, signals the player stations (40) to prevent wagers from being registered .

12. The automated gaming system (10) of claim 1, wherein the automated gaming system (10) is communicatively linked to a player station (40) structurally remote from the automated gaming system (10).

13. The automated gaming system (10) of claim 1, further comprising an attendant station where an attendant stands to participate in an outcome generation process.

14. The automated gaming system (10) of claim 1, further comprises an additional display (80) suitable for providing one of: a) special feature information, b) game history information, and c) advertising information.

15. The automated gaming system (10) of claim 1, further being communicatively linked to a service station (260) wherein a player performs monetary processes permitting the player to register credits available to register wagers on a player station (40) and to redeem prizes won according to the resolution of said wagers.

16. The automated gaming system (10) of claim 15, wherein the service station (260) is structurally remote from the automated gaming system (10).

17. The automated gaming system (10) of claim 1, wherein the operative face substantially facing a side of a player comprises the operative face pointing substantially vertically with the operative face being located substantially beside the player when the player faces the outcome generation system (45).

18. An automated gaming assembly comprising:
- an outcome generation system (45);
- a platform (30) disposed in periphery of the outcome generation system (45) at an appropriate height for a player facing toward the outcome generation system (45) to

have a direct view of an outcome generated by the outcome generation system (45); said platform comprising platform sections adapted to attach player stations (40) to be communicatively linked to the outcome generation system (45) for a player to play an outcome generation system associated game with the player operating a player station (40) by using input means (144) disposed on an operative face of each player station (40),

wherein the automated gaming assembly (10) is adapted to attach a player station (40) with the operative face of the player station (40) substantially facing a side of the player operating said player station (40) when the player faces toward the outcome generation system (45).

19. The automated gaming assembly of claim 18, wherein the platform section extends outwardly with respect to the outcome generation system (45), whereby said platform (30) takes a tipped-shape where at least one player station (40) is attached.

20. The automated gaming assembly of claim 18, wherein two player stations (40) are disposed back to back.

21. The automated gaming assembly of claim 19, wherein the player stations (40) are either installed on or embedded in the platform (30).

22. The automated gaming assembly of claim 18, wherein the outcome generation system (45) generates roulette outcomes.

23. The automated gaming assembly of claim 18, wherein the outcome generation system (45) generates outcomes using at least one of balls, cards, electronically generated images, and die.

24. The automated gaming assembly of claim 18, wherein the outcome generation system (45) generates outcomes using symbols, with said symbols being provided either by reels, wheels or electronic displays.

25. The automated gaming assembly of claim 18, wherein the platform section is suitably designed for an attached player station (40) to be adjustable according to its orientation in regard with the outcome generation system (45).

26. The automated gaming assembly of claim 18, wherein the operative face substantially facing a side of the player comprises the operative face pointing substantially vertically with the operative face being located substantially beside the player when the player faces the outcome generation system (45).

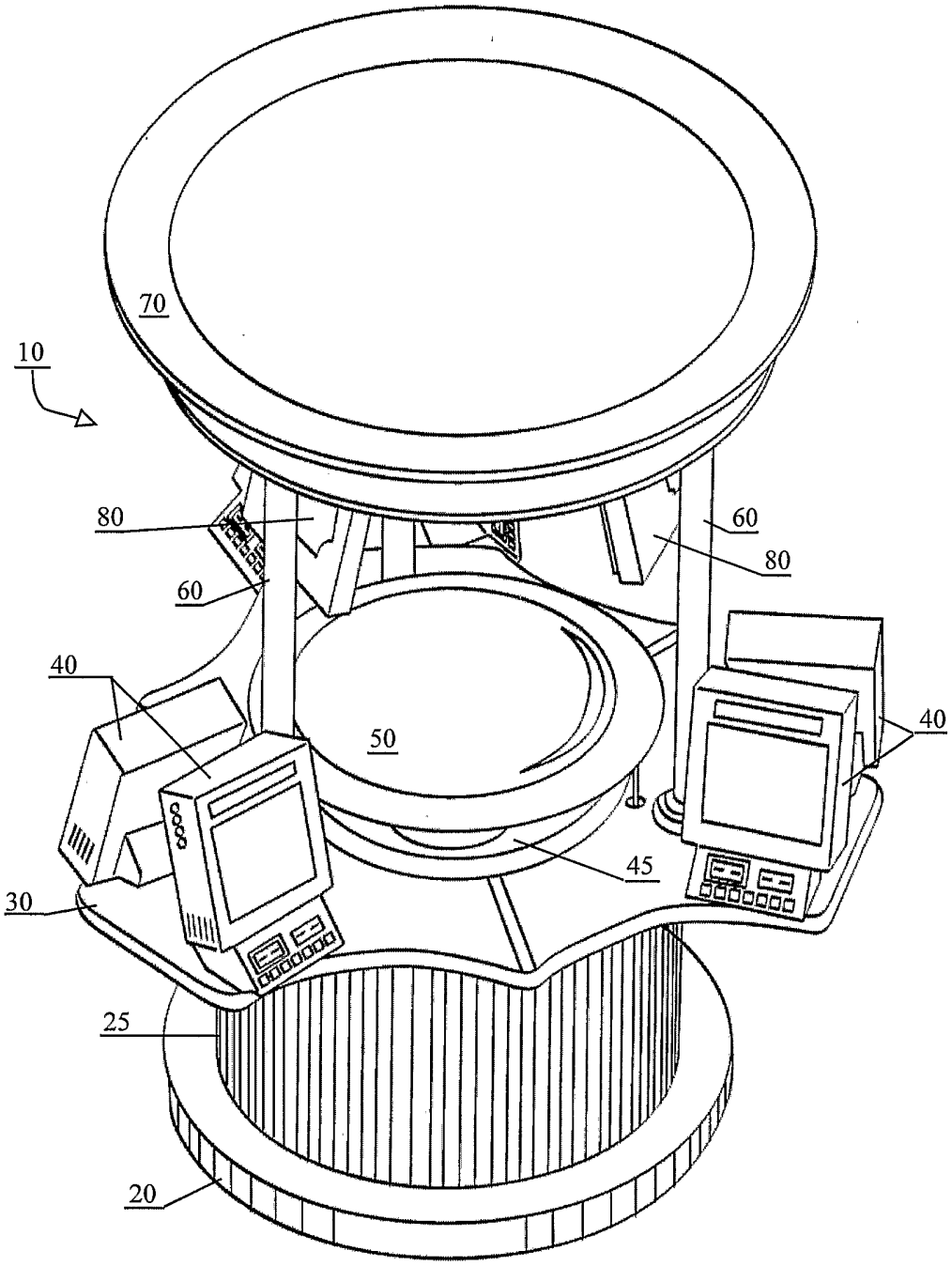

Figure 1

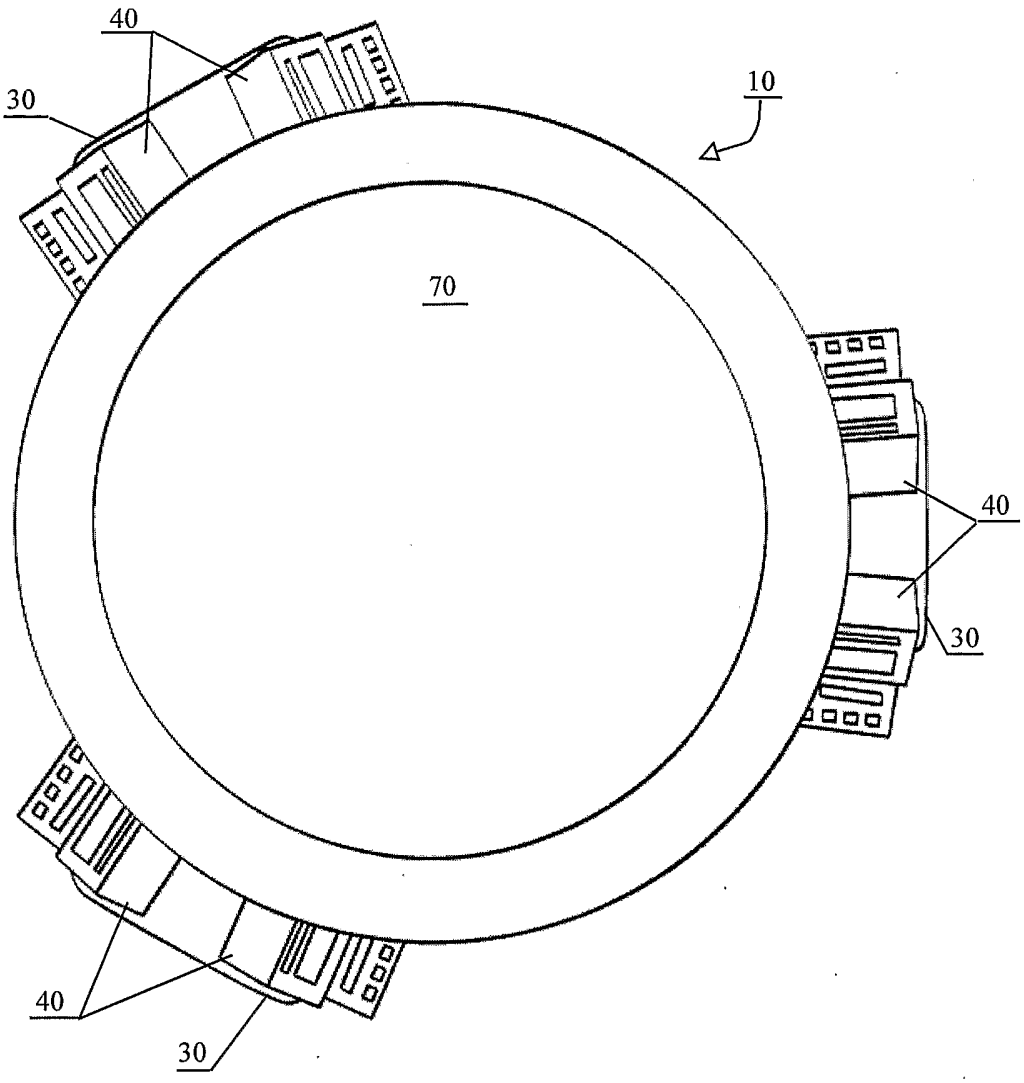

Figure 2

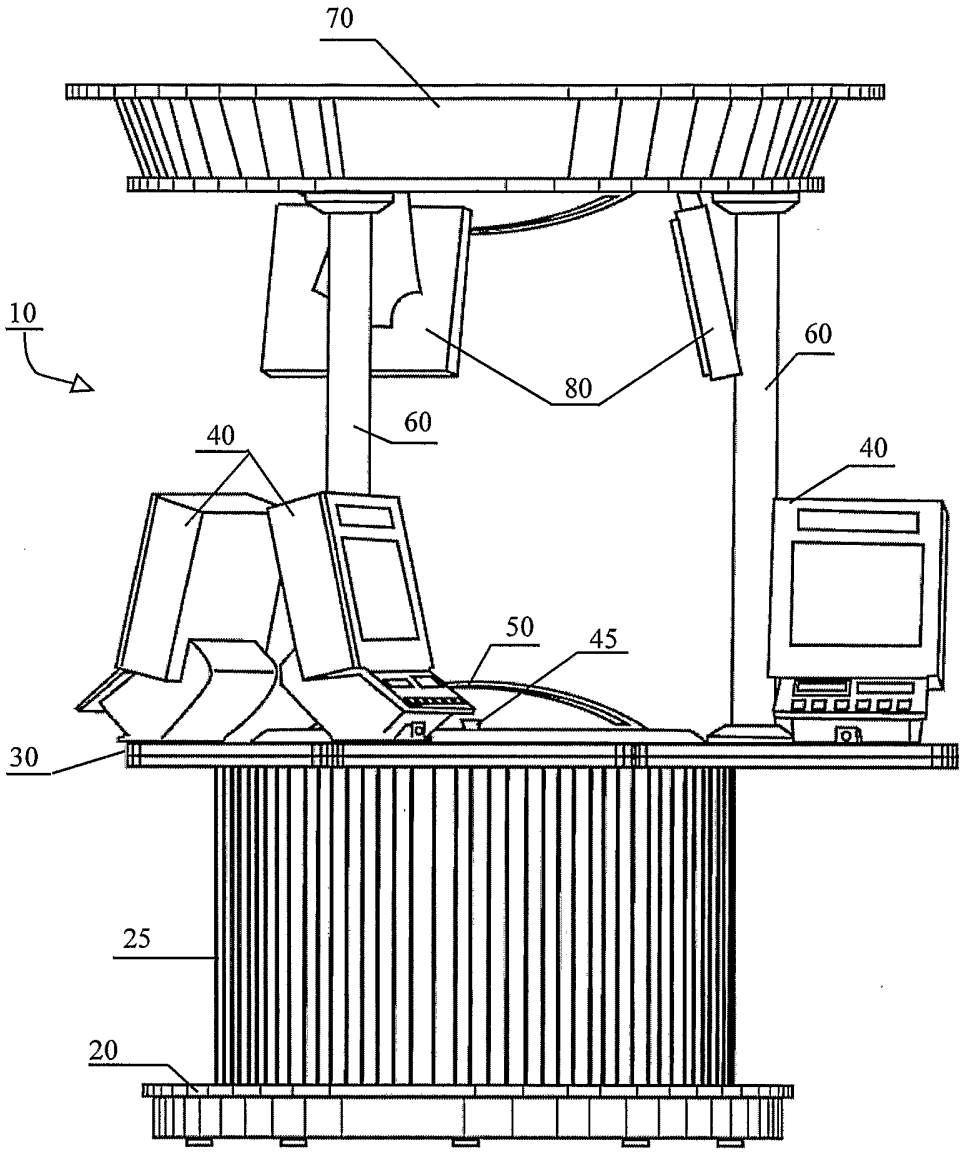

Figure 3

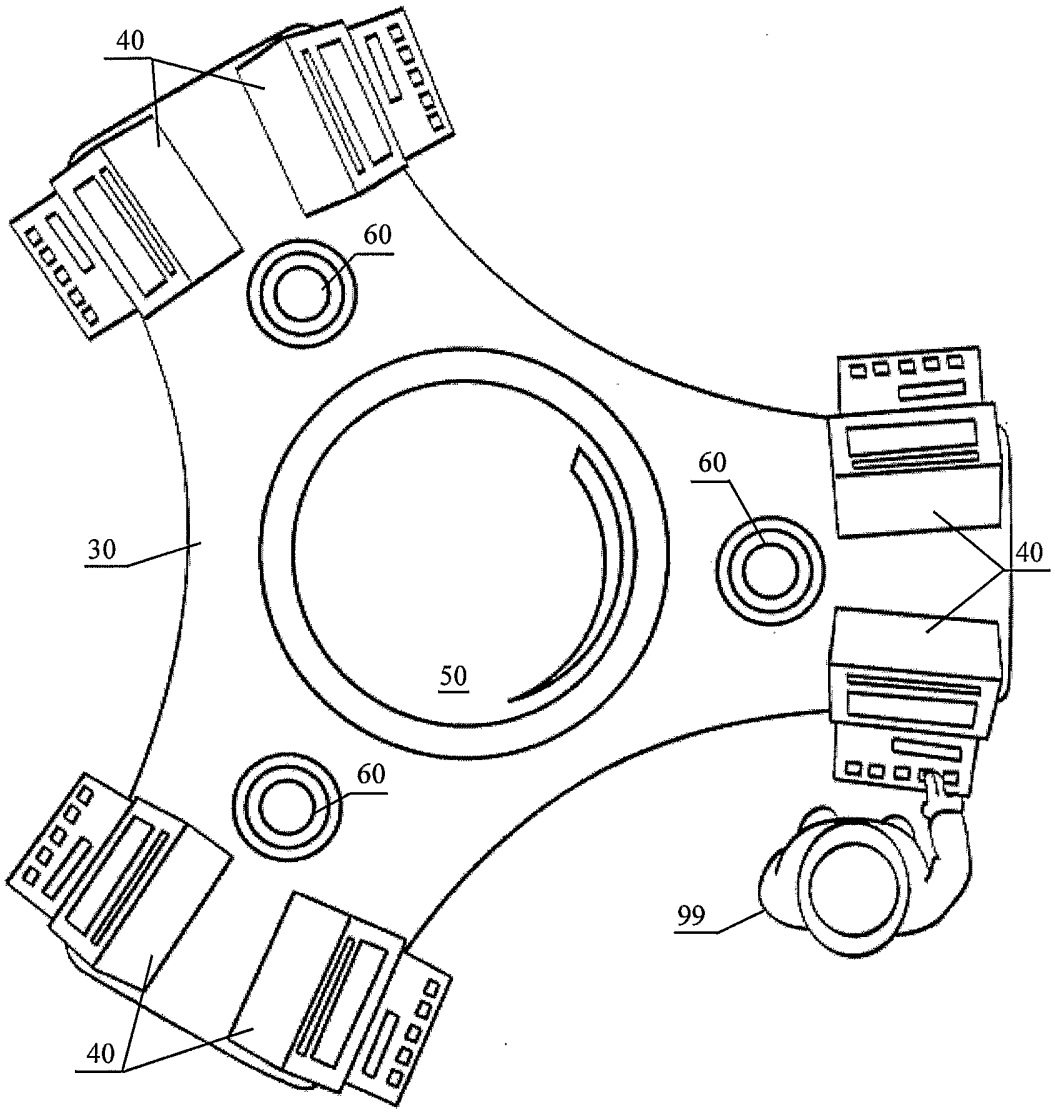

Figure 4

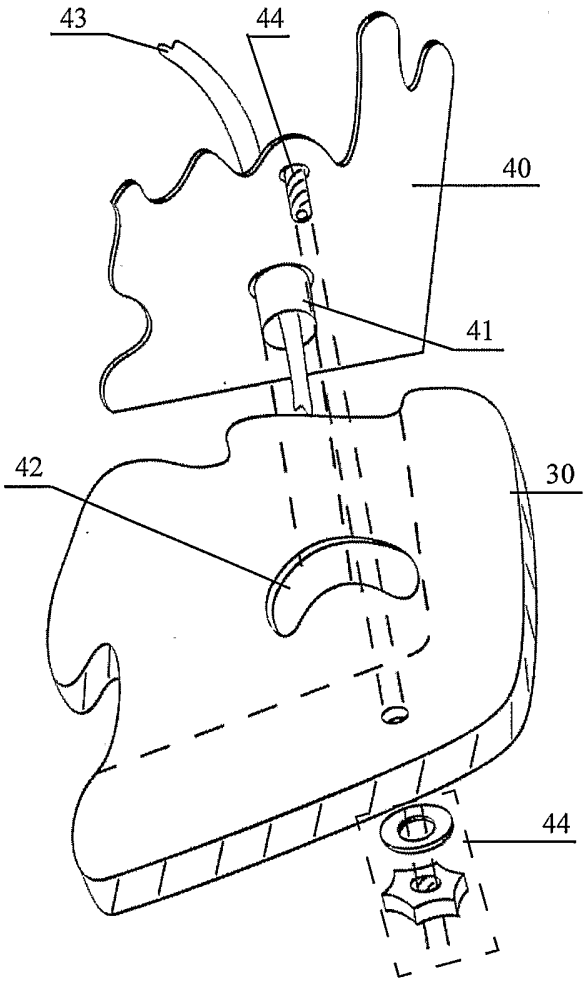

Figure 5

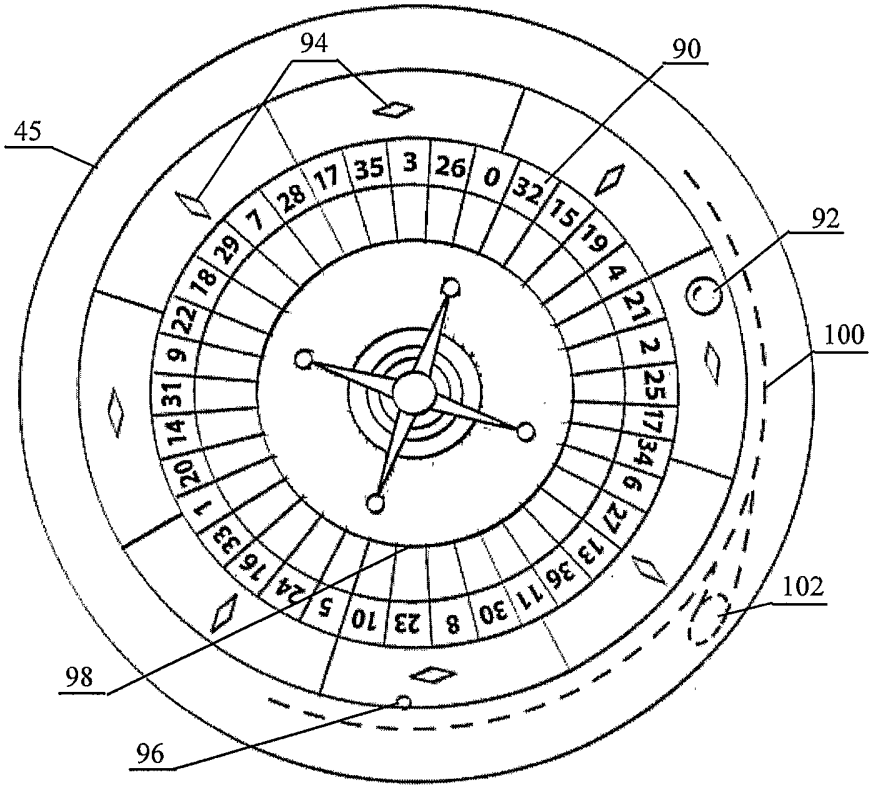

Figure 6

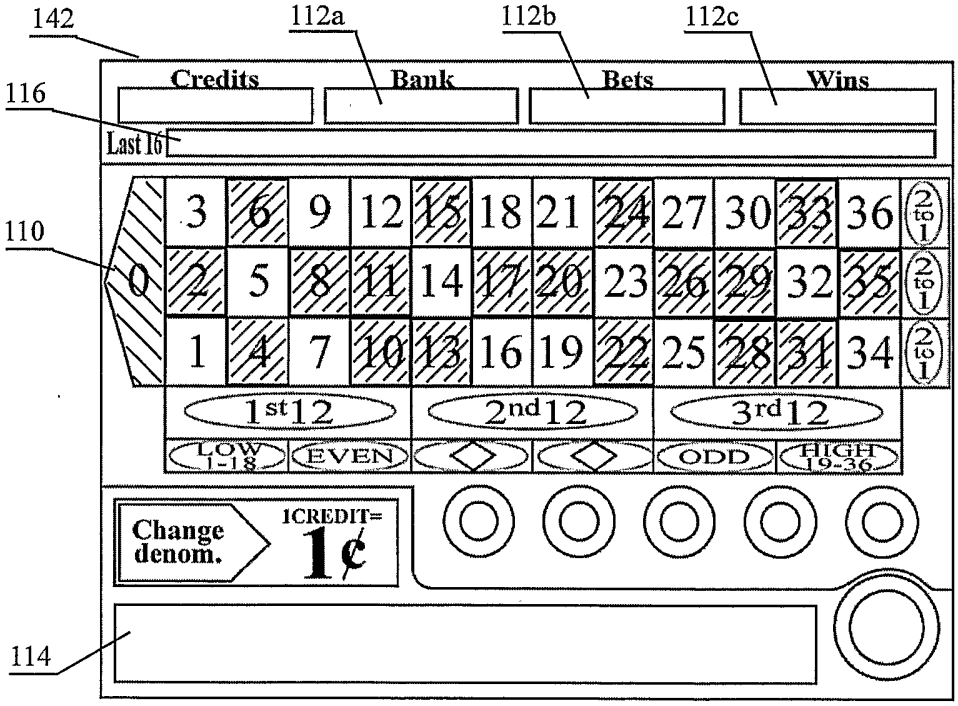

Figure 7

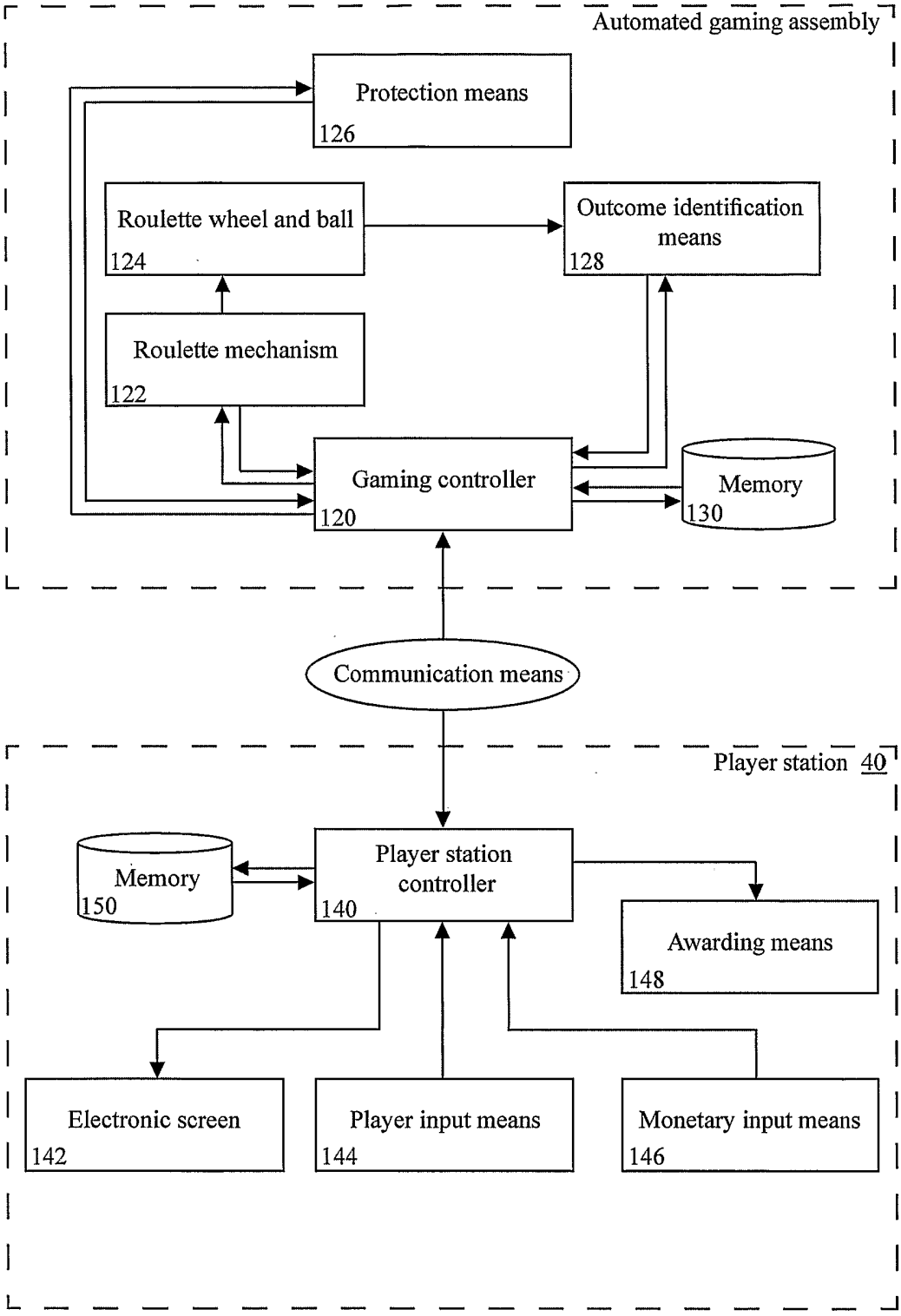
Automated gaming assembly
Protection means
126
Roulette wheel and ball
124
Outcome identification means
128
Roulette mechanism
122
Gaming controller
120
Memory
130
Communication means
Player station 40
Memory
150
Player station controller
140
Awarding means
148
Electronic screen
142
Player input means
144
Monetary input means
146

Figure 8

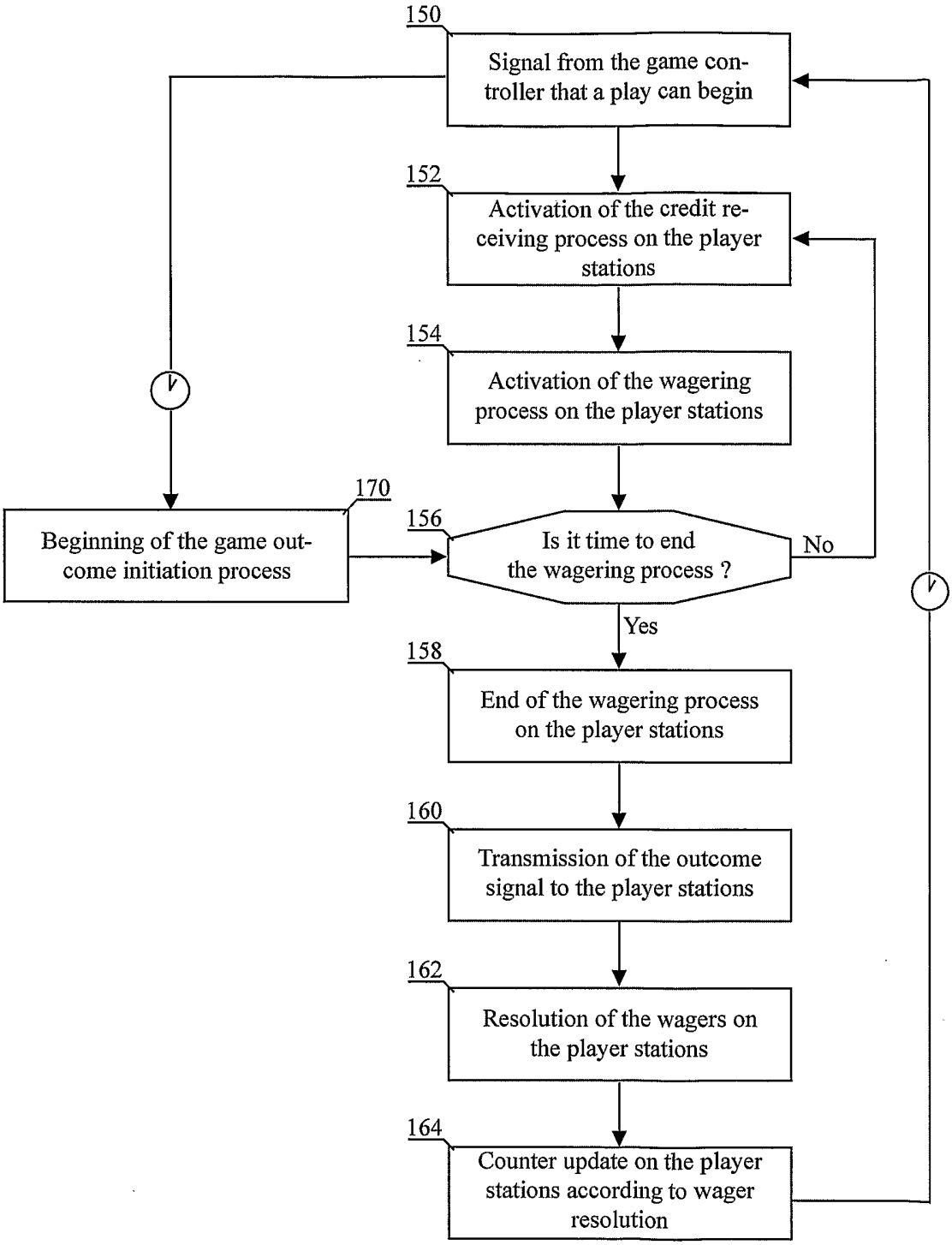
150
Signal from the game controller that a play can begin
152
Activation of the credit receiving process on the player stations
154
Activation of the wagering process on the player stations
170
Beginning of the game outcome initiation process
156
Is it time to end the wagering process ?
No
Yes
158
End of the wagering process on the player stations
160
Transmission of the outcome signal to the player stations
162
Resolution of the wagers on the player stations
164
Counter update on the player stations according to wager resolution

Figure 9

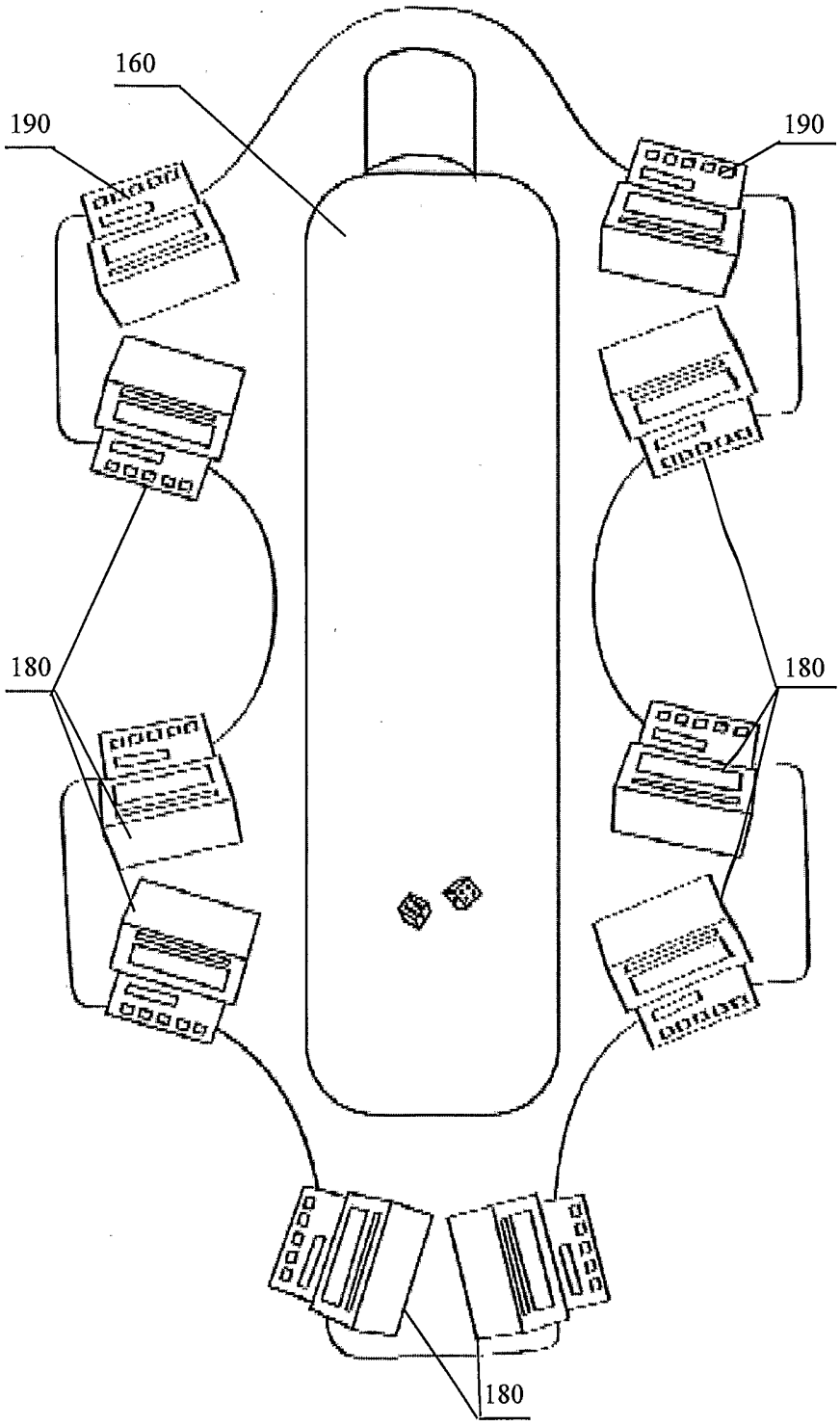

Figure 10

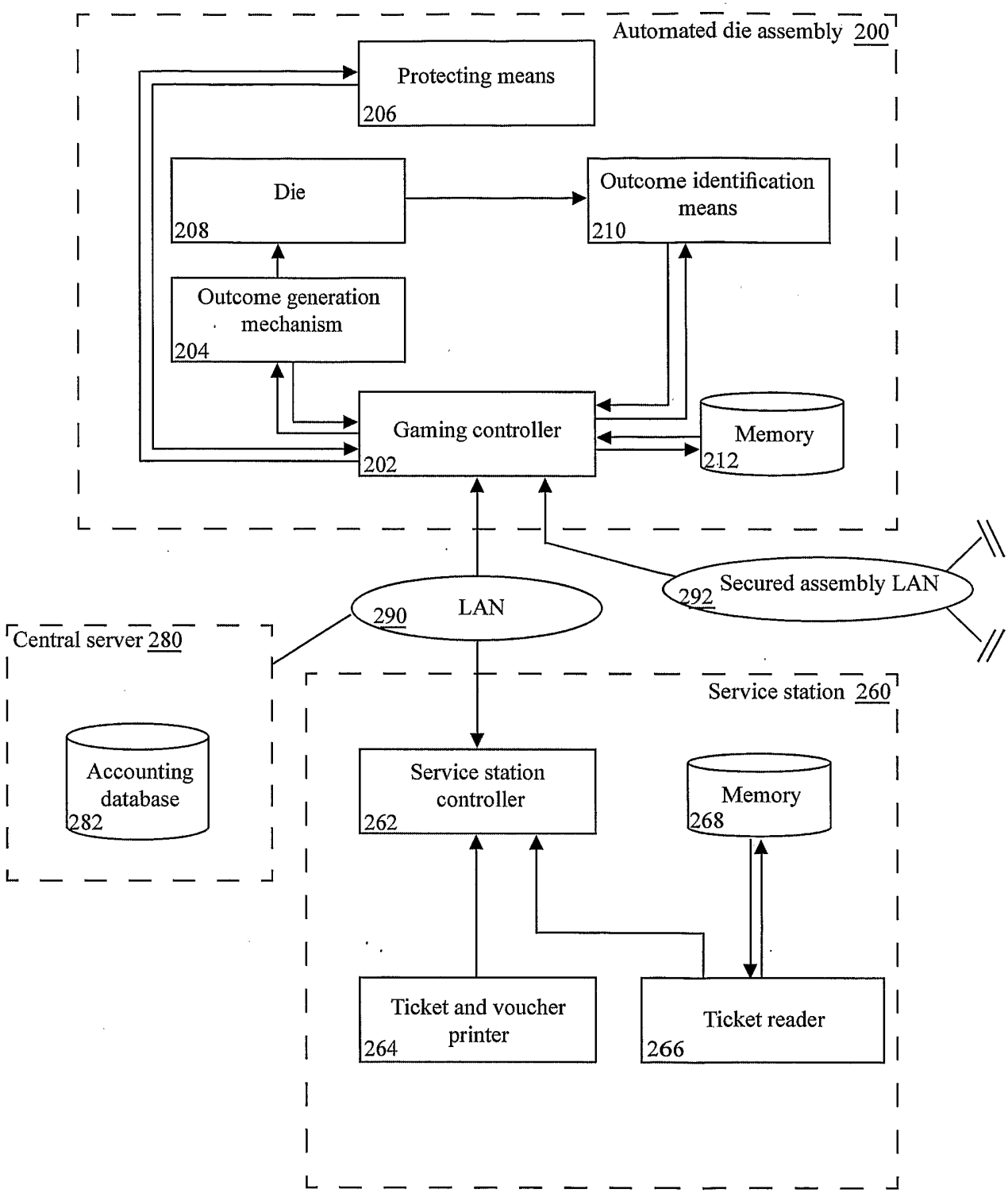
Automated die assembly 200
Protecting means
206
Die
208
Outcome identification means
210
Outcome generation mechanism
204
Gaming controller
202
Memory
212
Secured assembly LAN
292
LAN
290
Central server 280
Service station 260
Accounting database
282
Service station controller
262
Memory
268
Ticket and voucher printer
264
Ticket reader
266

Figure 11a

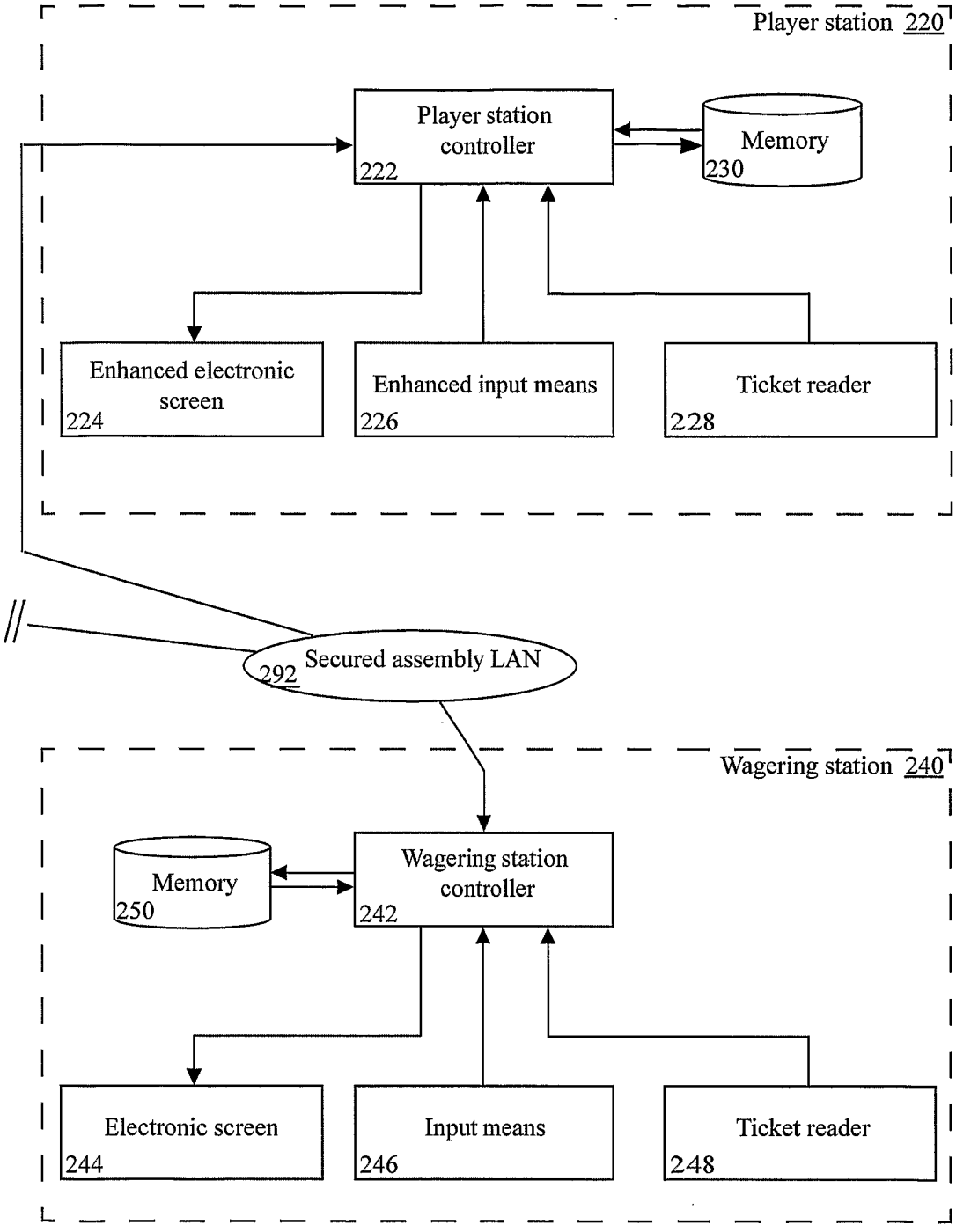
Player station 220
Player station controller 222
Memory 230
Enhanced electronic screen 224
Enhanced input means 226
Ticket reader 228
Secured assembly LAN 292
Wagering station 240
Memory 250
Wagering station controller 242
Electronic screen 244
Input means 246
Ticket reader 248

Figure 11b

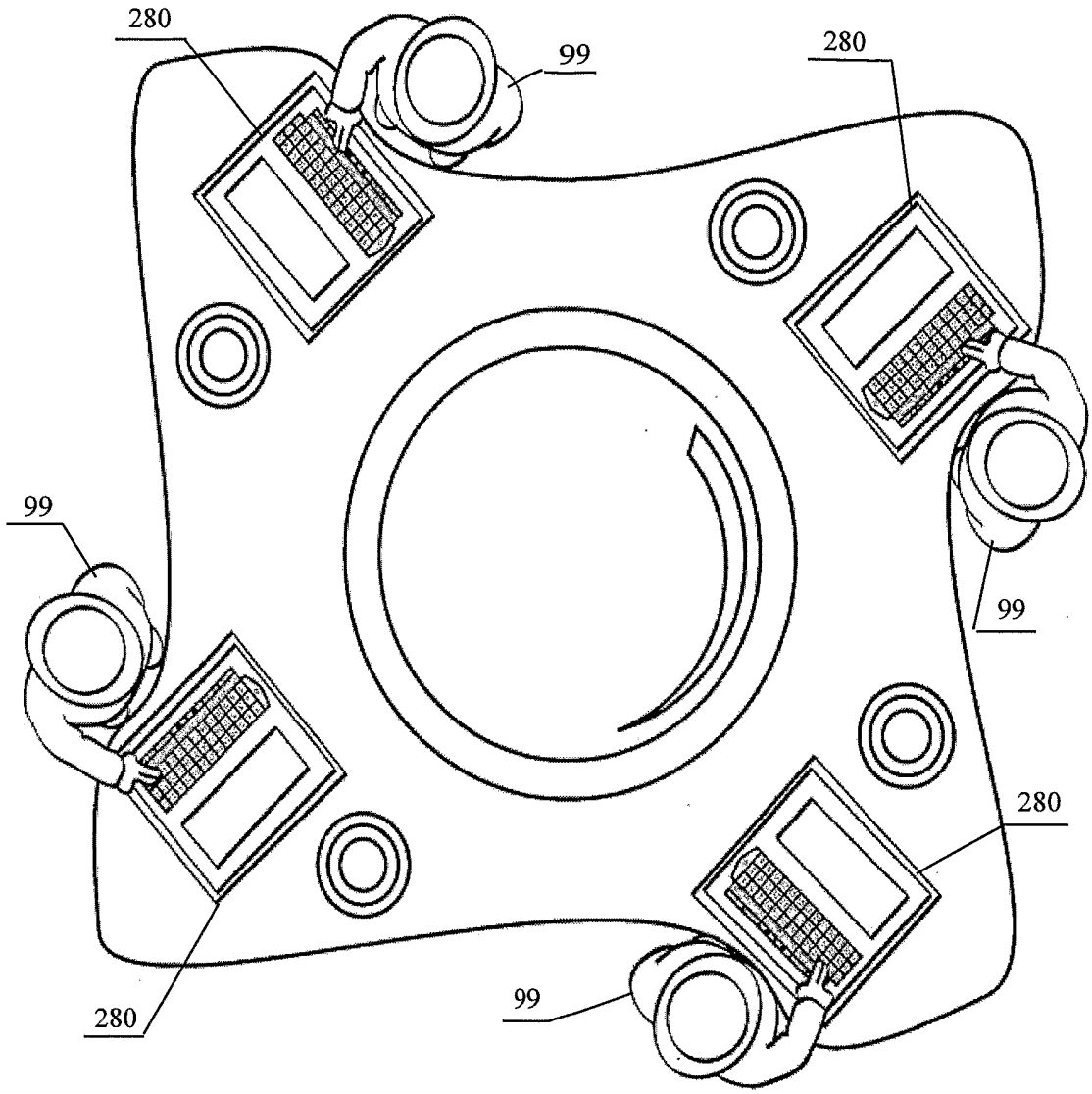

Figure 12

INTERNATIONAL SEARCH REPORT

International application No.
PCT/CA2005/000382

A. CLASSIFICATION OF SUBJECT MATTER

IPC[7]: G07F 17/32
According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC[7]: G07F

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic database(s) consulted during the international search (name of database(s) and, where practicable, search terms used)
Databases: USPTO WEST (full-text, pre-grant, foreign abstracts); Canadian Patent Database
Terms used: game(s) / gaming / player / user / station / terminal / wager(s) / bet(s)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the	Relevant to claim No(s).
X	EP 0 599 769 B1 (MENENDEZ DE LUARCA) 18 August 1999 (18-08-1999) Figure 1	1 to 4, 8 to 13, 15 to 18, 21 to 24 and 26
Y	column 5, line 50 to column 6, line 22 column 6, lines 42 to 48	14
Y	US 5 588 650 (EMAN ET AL.) 31 December 1996 (31-12-1996) Figure 1 column 4, lines 34 to 57 column 5, line 43 column 6, lines 27 to 36	1 to 4, 8 to 11, 15 to 18, 21 to 24 and 26

[X] Further documents are listed in the continuation of [X] See patent family annex.

* Special categories of cited documents :

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier application or patent but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&" document member of the same patent family

Date of the actual completion of the international search	Date of mailing of the international search report
14 April 2005 (14-04-2005)	18 May 2005 (18-05-2005)
Name and mailing address of the ISA/CA Canadian Intellectual Property Office Place du Portage I, C114 - 1st Floor, Box PCT 50 Victoria Street Gatineau, Quebec K1A 0C9 Facsimile No.: 001(819)953-2476	Authorized officer Tara Derickx (819) 997-4502

INTERNATIONAL SEARCH REPORT

International application No.
PCT/CA2005/000382

C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the	Relevant to claim No(s).
Y	US 6 659 866 B2 (FROST ET AL.) 9 December 2003 (9-12-2003) column 3, lines 8 to 32	1 to 4, 8 to 18, 21 to 24 and 26
A	US 6 299 533 B1 (PARRA ET AL.) 9 October 2001 (9-10-2001) entire document	1 to 26
A	US 5 688 174 (KENNEDY) 18 November 1997 (18-11-1997) entire document	1 to 26

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.
PCT/CA2005/000382

Patent Document Cited in Search Report	Publication Date	Patent Family Member(s)	Publication Date
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		BR 9 304 588 A	31-05-1994
		DE 69 326 049 D1	23-09-1999
		DE 69 326 049 T2	25-05-2000
		ES 2 070 050 A2	16-05-1995
		ES 2 136 119 T3	16-11-1999
		PL 301 227 A1	30-05-1994
		PT 101 414 A	31-10-1994
US5588650	31-12-1996	NONE	
US 6 659 866	09-12-2003	AU 2 492 201 A	13-09-2001
		AU PQ 610 700 D0	30-03-2000
		AU PQ 999 500 D0	05-10-2000
		CA 2 319 932 A1	08-09-2001
		EP 1 151 768 A2	07-11-2001
		US 2004 116 177 A1	17-06-2004
		ZA 2000 04 958 A	18-03-2002
US 6 299 533	09-10-2001	US 5 876 283 A	02-03-1999
		US 6 592 459 B2	15-07-2003
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