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(54) Title: HARDWARE AND SOFTWARE INTEGRATION PROCESS FOR LOTTERY BETS OPERATION

(57) Abstract

The present Patent Application refers to a "Hardware and Software Integration Process for Lottery Bets Operation" of all kinds, including Instant Prize (scratch-and-win type), either by the Internet or by dedicated equipment, in the first case through the use of Equipments (Hardware) and Computer Programs (Softwares), acting as an Internet Service Provider, in such a way using, in a safe and efficient form, the Internet for the accomplishment of bets with the Official Lottery Provider, utilizing the electronic banking transfer of funds method as a form of payment. In case of using the dedicated equipment use, such equipment is an electronic-mechanical one, of the consult terminal type, capable to accomplish lottery bets with direct interaction between the gambler and the machine, with connection so with the official Lottery Provider, as with the banking net, allowing the immediate payment through cards, what brings advantages of safety, so in the operation as in the payment source identification, avoiding frauds and prize losses, and bringing simplicity and comfort to the operation.

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"HARDWARE AND SOFTWARE INTEGRATION PROCESS FOR LOTTERY BETS OPERATION"

The present Patent Application refers to a Process of Hardware and Software Integration for Operating Lottery Bets of all kinds, including Instant Prize (scratch-and-win type), either by the Internet or by dedicated equipment, in the first case through the use of Equipments (Hardware) and Computer Programs (Software), acting as an Internet Service Provider, in such a way using, in a safe and efficient form, the Internet for the accomplishment of bets with the Official Lottery Provider, utilizing the electronic banking transfer of funds method as a form of payment. In case of using the dedicated equipment use, such equipment is an electronic-mechanical one, of the consult terminal type, capable to accomplish lottery bets with direct interaction between the gambler and the machine, with connection so with the Official Lottery Provider, as with the banking net, allowing the immediate payment through cards, what brings advantages of safety, so in the operation as in the payment source identification, avoiding frauds and prize losses, and bringing simplicity and comfort to the operation. The use of this process for the Internet can be made by any computer terminal that is able to be connected to the Internet, through a World Wide Web (WWW) page to be provided by an Internet Services Provider. This service, which uses and is connected on-line to the banking net, aims to facilitate the accomplishment of bets without need of the gambler displacement, allowing, from an initial centralization, a virtual expansion of bet-making points and substantially simplifying the form of bet payment. This service still provides an economy of time and physical displacement, as well as safety and comfort to the gambler, freedom to make bets out of business hours with the possibility of redrawing and flexibility of functioning time, the non-use of physical means of payment, the possibility of interdict bets from legally non-permitted people, as well as the easiness offered to those disabled to move for several reasons, and the diversification of languages for bet making. Finally, this process can facilitate identification of the origin of the operation and of the bets payment source, helping in the resolution of possible litigations originating from the loss of the game's voucher.

As it is well acknowledged by lotteries users, and in particular by the technicians operating the Lottery, it can be bet nowadays by the following ways:

1. For Lottery of Numbers games or Sports-linked Lotteries as the Superbowl's, it is necessary to go to a lottery shop, to fill a bet card, pass it to an operator, that puts it in the system with electronic validation through a cards reader, with delivery of a printed paper voucher containing the bet informations, the date, the number of the raffle, the amount to pay or other valid information. These bet data are transferred to the Official Lottery Provider, that computes and consolidates them. The amount is then paid by the gambler in money, check, or, if the lottery shop have them, through electronic means as credit card or banking net. The payment system is, this way, totally dissociated of the system of bets, not having a linking among the net of the lottery office and the banking net. The most serious disadvantage of this current system is that, if the gambler win the bet prize, its only comprobatory document is a paper voucher. The prize is then paid to the bearer of the voucher, what allows the possibility of frauds, the loss of the prize when one gets lost the voucher, or the undue payment to people that didn't make the winning bet. Other disadvantages are the need to make the bet at the business hours,

restraining the consumer's freedom of schedule, the inherent cost to the operation of peripherals of two separate nets, besides the low agility and comfort of the transaction for the user of the systems.

2. Dedicated machine of the type calculator-validator-printer installed in the lottery shops and linked on-line to the Official Lottery Provider, in that the bet card is handwritten through paper cards, being the bets marked in such cards electronically validated through a card reader, with delivery of a printed paper voucher containing the bets, the date, the number of raffle, the amount to pay and other valid information, and the voucher. The data of the bet are then transferred to the Official Lottery Provider, that computes them and consolidates them. The value is then paid to the gambler in money, check, or, if the lottery shop have them, through electronic means as credit card or banking net. The payment system is, this way, totally dissociated of the bet system, not having a link between the net of the lottery office and the banking net. The most serious disadvantage of this current system is that, if the gambler win the bet prize, its only comprobatory document is a paper voucher. The prize is then paid to the bearer of the voucher, what allows the possibility of frauds, the loss of the prize when one gets lost the voucher, or the undue payment to people that didn't make the winning bet. Other disadvantages are the need to make the bet at the time in wich the shop works , restraining the consumer's freedom of schedule, the inherent cost to the operation of peripherals of two separate nets, besides the low agility and comfort of the transaction for the user of the systems.

3. Dedicated machine of the type calculator-monitor-printer, installed in places like bars, snack bars and similar stablishments, showing through a video monitor the accomplishment of number bets in recurrent periods of time, like those denominated " Pimba " game in Brazil, these machines being linked on-line with the Official Lottery Provider. This type of machine presents the disadvantages of having the payment system totally dissociated of the bet system, not having a link between the net of the lottery office and the banking net, besides the need to make the bet at the time in wich the shop works , restraining the consumer's freedom of schedule, the inherent cost of the operation of peripherals of two separate nets, besides the low agility and comfort of the transaction for the user of the systems.

4. Dedicated machine of the video-game and/or video-poker type, installed in places like bingos, that play games like the so called "jogo-da-velha" in Brazil, and that are linked on-line with the operator of the lottery office for revenue control. This type of machine presents the disadvantages of having the payment system totally dissociated of the bet system, not having a link between the net of the lottery office and the banking net, besides the need to make the bet at the time in which the shop works , restraining the consumer's freedom of schedule, the inherent cost of the operation of peripherals of two separate nets, besides the low agility and comfort of the transaction for the user of the systems.

5. Games of the Instant-Prize (scratch-and-win type)lottery, like "raspadinha" in Brazil, that are made through the previous purchase of a carton or paper ticket printed with numbers, letters or figures, such printings being covered by a removable opaque film that, on being scraped with the fingernail or with appropriate rasper, looses from the ticket,

showing the content of the game and, consequently, its result. This game system is, currently, sought principally by people that walk around very popular and crowded places, and they should go to the commercialization points to make this, having, eventually, to wait lines to acquire the tickets.

"HARDWARE AND SOFTWARE INTEGRATION PROCESS FOR LOTTERY BETS OPERATION", that is the object of the present patent, was developed to give a new option to the users of lotteries, through use of Internet or through dedicated equipment for the accomplishment of the bets and use of appropriate equipments and computer programs to provide an on-line connection to the Lottery Operation Centers and to banking net and, providing a virtual expansion of points of accomplishment of bets, simplifying the form and guaranteeing the payment of the same ones.

The service using the Internet still provides an economy of time and physical displacement, as well as safety and comfort to the gambler, freedom to make bets out of business hours with the possibility of redrawing and flexibility of functioning time, the non-use of physical means of payment, the possibility of interdict bets from legally non-permitted people, as well as the easiness offered to those disabled to move for several reasons, and the diversification of languages for bet making. Finally, this process facilitates identification of the origin of the operation and of the bets payment source, helping in the resolution of possible litigations originating from the loss of the game's voucher.

The dedicated equipment presents advantages of using a consult terminal (kiosk), where the own gambler interacts with the terminal through the video monitor screen, choosing and accomplishing its game, that is computed immediately and can be stored and transferred periodically to the Lottery Office, for control sake, through disk or magnetic tape, or sent electronically on-line in an automatic way through time/quantity mechanism, or even through the intervention of an authorized operator.

Soon after, the gambler makes the payment by bank or credit cards, using his data, and direct link is established with the banking or cards net. Through this, his bet is dated and identified, with total safety, by his card. Soon after, it receives a printed paper voucher of the operation, containing all the debit information and a verifying of the accomplished games. By this way, the bet coulld ceases to be anonymous, identifying the paying source and being vinculated to the bearer of the card, which can follow the result by its voucher, or, if he loses it, he can even be communicated by the Lottery Office of his eventual award, by letter, electronic mail, phone service or any other media, with total secrecy and protection of his identity, as already happens currently with the bank information. Other advantages are the total flexibility in attendance time schedules, for the terminals can be installed in kiosks with 24 working hours a day, without employees' intervention, the reduction of operational costs inherent to the linking of nets in only one terminal, the possibility to inform, by means of " menu " type option the results, warnings and statistics of previous games, the elimination of physical means of payment, the possibility of attendance in several languages, besides the easiness and speed in the making of the bets.

The accomplishment of lottery games of the scratch-and-win type by this integration process, presents

the advantage of enlarging this type of game utilization, putting at peoples disposition a new practicality for those that possess the modern resources of personal microcomputers and Internet, or have easy access to dedicated game machines (kiosks), aiming to give a new attractiveness to the gambler and fan of lottery games, once it uses Hardware and Software for, in real time, to sell, to present and to allow the "scratching" for the display of the game result in the virtual game card containing hidden numbers, letters or illustrations, everything in a virtual way, presenting a new easy and comfortable option to these players, which won't waste time in lines in the lottery sales points, because they can accomplish this game type through the Internet or directly in dedicated game machines (kiosks) located in strategic places, such as shopping centers, peoples transport terminals, leisure areas, etc., using as form of previous payment, the banking or credit cards. Besides that, there are economic advantages in not being necessary the production, distribution and management of the current game cards elaborated with relatively high cost materials, in addition to being environmentally correct.

For better understanding of the present Patent Application the following drawings are enclosed:

FIGURE 1., that shows the Block Diagram of the Equipments for the Internet-using Process.

FIGURE 2., that shows Block Diagram with the linking of equipments (Hardware) for building of the dedicated bet terminal.

The accomplishment of the Process that uses the Internet happens through an association of computers (Hardware) and computer programs (Softwares) whose purposes are specific, that is to say: search and monitoring of incoming lines of attendance, prioritizing the accesses by arrival order and feeding the services provider; attendance to the incoming solicitations by arrival order and conditioning the communication with the applicant with the safety and necessary speed in all the phases of this communication; consult and electronic transfer of values (of the bets) to the banking and/or cards net in a safe and efficient way; emission of records of accomplishment of bets (sales), sending it to the applicant and storage adequate to the emission of reports and to the transfer to the Lottery Office; communication with the Lottery Office for transfer of values (Total accounting of bets/sales)) and of reports.

The mechanism of operation of the process using the Internet is based on the principles of consult to and commercial operation via Internet. For this are necessary the Services Provider (SP), the Users (U) and the Internet properly.

The (SP) should have a structure based on Computers, Interfaces Specific Computer Programs, ordered in such a way to make the reception of consults to be made by the users (U), to be Host of an Internet Home-Page, to be Access Provider to lottery bets (commercial part) and to accomplish operations of electronic transfer (payments) by the banking net, through cards, as well as to be able to make authentication/emission and sending of vouchers and receipts to the users (U), and to emit internal operational reports and to communicate with the Lottery Office.

The amount and form of linking of the computers is a function of the structure and attendance philosophy, that is to say, of the interface with the necessary communication media for link this provider and the Internet connection point; of the host of the pages of the system of bets attendance; of the

connection with the several servers of the banking or cards system; of a database with the structure of information and bets; of the storage and communication system, for sending and change of information with the Lottery Office.

The user (U), that is to say, the gambler, should have its computer terminal with access to the Internet, should be active customer of the banking or cards net and should possess access password (card). The necessary minimum configuration for Internet operation is inherent to the user and is in agreement with his access provider.

The Softwares will provide the operation principles, that are based on consultation to the Internet, with the following sequence:

a) The user (U) access the net and, when "browsing" (navigating) by the same, access this service page (for example, http://www.lotomídia.com.br), which will guide him to the main menu.

b) The main menu will inform the attendances possible to be rendered, what means, of the bet types disponible to the user (U), as well as will inform the results of previous games assisted by the lottery structure in subject, and finally will give the option to continue or to leave. If one wants to leave it , he will return to the net.

c) To continue, the user (U) chooses by " clicking " (with the mouse) and then accessing the results of previous games or the bet type that it intends to make, and the system will offer him the possibilities together with the pertinent bet prices.

d) If the option is to see the results, the user (U) receives them and will have the option to continue or to leave. If One wants to leave, he will return to the net. If one wants to continue he will return to the main menu mentioned in b).

e) If the option is to bet, the user (U), after the accomplishment of his games, will have as result, in case he has not made any mistake, an overview of these games, as well as of the value of each operation to be accomplished for payment by the banking or cards. He will have the option of still continue to accomplish the game. In case he gives up, he will have the option to continue or to leave. If one wants to leave, he will return to the net, if one wants to continue, he will return to the main menu mentioned in b). In case any mistake happens or one want to cancel, it will appear the reason of the mistake and it will be given to the gambler the option of trying again; In positive case it will go back to the screen to do the bet; in negative case, or after three attempts of doing the bet, the option will be given to continue or to leave. If one want to leave, he will return to the net, if one want to continue he will return to the main menu mentioned in the item b).

f) In case he doesn't give up, it will be made automatically the payment consult, being typed the data for the debit or credit cards, through electronic change of information with the chosen system, and after approved the transaction, the accomplishment of the game will be confirmed and it will happen the recording of the accomplished operation, generating for the user (U), the receipt of the financial operation and emission of a voucher with the game data in the form demanded by the Lottery Provider, making them disponible for the user (U) for obligatory storage and/or printing close to the user terminal. It is possible to pay multiple games with the same payment process.

The process that uses the Internet can, as an alternative, , generate a written communication to the user (U), informing that the same won the bet or even any other general information.

The Hardware to accomplish the process that uses the Internet, possesses a computer arrangement in local net through dedicated ports to the external media, that is to say, for the attendance of the Internet users, for connection with the banking and cards nets and for connection with the Lottery Office or Official Lottery Provider. The number of access ports will be a function of the traffic to be assisted. There will be four microcomputers: one for communication, ordering and sending of messages (COM), one for general processing and attendance (GPA), one for attendance to the Internet (ATI), and one for storage (STO). The four microcomputers should have the following minimum characteristics: Server and attendants Stations with a Processor with minimum clock of 200MHz; with cache memory of 256 Kbytes; with main memory of 64 Mbytes expandable to at least 128 Mbytes; with hard disk of 4 Gbytes, with Fast SCSI-2 interface, with medium time of access of 15 ms or less and with a minimum disk transfer rate of 4Mbytes/s; with a 3,5 " floppy-disk drive for 1.44Mb of formatted memory; with a CD-ROM unit of 600 Mbytes of formatted memory, SCSI-2 interface, form factor 5,25 inches, a minimum sustained rate of transfer of 330 kbps, medium time of access of 300 ms or less, reading/record by ISO 9660, High-Sierra, CD-ROM Kodak Photo CD or similar standard, with minimum eight times the standard speed; I/O unit with a parallel interface Centronics standard, two high-speed serial interfaces EIA RS-232 C/CCITT V 24/V.48 standard and a SCSI-2 Fast/Wide interface; network interface IEEE 802.3 (Ethernet) standard, PCI with an UTP port (100Base-T); a color SVGA 15 " Video Monitor with a resolution of 1024x768 points and 0.28 mm dot pitch non interlaced; expansion with at least two PCI slots, a PCI/ISA slot and 3 ISA slots; 101 keys keyboard; and three buttons mouse with a 400 dpi resolution. The microcomputer (STO) will also be endowed with an external magnetic tape unity for 4 mm DAT tapes (DAT cartridges), with a minimum formatted storage capacity of 8 Gbytes (without compression), SCSI-2 interface(standard ANSI X3.131.-1994) and minimum MTBF 70,000 hours; with a color scanner with capacity for 16.7 million colors, minimum resolution of 1,200 dpi, SCSI/SCSI-2 interface (standard ANSI X3.131-1990/1994), scan area of 8,5x14 inches, support to PICT, TIFF and EPS (minimum), and drivers that run in another platforms. The microcomputer (COM) will also be endowed with multiserial communication interfaces with 12 high-speed ports standard EIA RS-232C/CCITT V.24/V.48 and high-speed interface for connection at 64 Kbps at least.

According to FIGURE 1, the process for use of the Internet occurs in the following sequence: the user (U) will communicate with the Phone Network (PN), which will be bilaterally connected with the Services Provider (SP) that is endowed with 12 external modems (MD) compatible with the interfaces microcomputer (COM) interfaces, with computer (COM) connected bilaterally to the modems (MD) and connection box (HUB), with connection box (HUB) connected bilaterally with the microcomputer (COM), with the microcomputer (PGA), with the microcomputer (ATI) and with the microcomputer (STO), with microcomputer (PGA) connected bilaterally to the box (HUB) and connected unilaterally to the scanner (SCA) and the printer (PRI), with microcomputer (ATI) connected bilaterally to the box (HUB) and with microcomputer

(STO) connected bilaterally to the box (HUB) and the Tape Unit (TU).

The computer programs (Softwares), in the Internet using process, will be ordered and associated in such a way that they will run in local network 100 baseT, and distributed in a way they will work as follow described. The chosen platform will be Windows NT and the specific programs will be distributed like this: - management of the whole system, making specific reports as well as surveillance against intruders input (Fire-Wall), - communication among the units of the local net, communication and ordaining with the access means as well as with the Internet; - storage and database updated in real time; - operational safety with cryptography resources; - electronic data exchanges aiming banking/cards transfers; page hostage and maintenance in the Internet. The necessary Softwares for the Server Stations will have as minimum specification MS-DOS 6.22 or superior, Windows NT, Office Pro, Borland C++ 4.0, Visual Basic 3.0 Pro or superior, SNMP Agent, Lottery Management, Fire Wall, Anti-virus, Electronics Data Exchanges/Banking/cards transfer Interface, Cryptography, HTML Pages Providing, MS Explorer or Netscape, Communication and database software Sybase or Oracle and for the Attendant Stations the following minimum specifications: MS-DOS 6.22 or superior, Windows 95/98, Cryptography, HTML Pages Providing, Communication, SNMP Agent and Access to database.

According to FIGURE 2, the dedicated equipment for lottery bets is composed of a processor (1) for general processing and accesses attendance, with central processor Intel Pentium PRO or equivalent, with the following minimum requirements: clock of 200 MHz, " cache " memory of 256 Kbytes, main memory of 64 Mbytes expandable to at least 128 Mbytes, an auxiliary standard keyboard 101 keys, for access to the databases and the programs by technicians especially authorized, an unit of hard disk for database, with a formatted storage capacity of 4 Gbytes or more, endowed with type " Fast SCSI-2 " communication interface ANSI X3.131-1994 standard, with an access time of 15 ms or less and minimum transfer rate of 4 Mbytes/s, an 3,5 " floppy-disk unit with 1.44 Mbytes formatted capacity, for data storage and transfer, a " DAT " (Digital Audio Tape) tape unit for storage of data that can be periodically transferred to the lottery net, with minimum storage capacity of 8 Gbytes without data compression, with type " SCSI-2 " communication interface ANSI X3.131-1994 standard, with minimum time between failures (MTBF) of at least 70,000 hours, a CD-ROM unit for storage and transfer of data, with minimum speed 24 times greater than standard " MPC ", minimum formatted capacity of 600 Mbytes, type " SCSI-2 " communication interface, form factor of 5,25 inches, sustained transfer rate of 330 kbps or more, medium time of access of 300 ms or less, reading/record by ISO 9660, High-Sierra, CD-ROM X-A, and Kodak Photo CD and a soundboard unit for sound alarm, a video monitor (2) type touch screen where the gambler will make its choices through a " menu " and will inform his data bank after making the bet, said monitor with the following minimum requirements: color, 14 " super VGA standard, with a resolution of 1025x768 points, 0.28 mm " dot pitch ", non interlaced, touch sensitive, a communication interface set(3) for communication (through the public phone system) with the banking, cards and lottery nets, multiserial with a minimum 6 ports, EIA RS-232C/CCITT V.24/V.48 standard and 6 modems compatible with the described interfaces and a speed of 33,6 Kbps, a magnetic cards reader unit (4), for reading of the gambler's debit or credit card, speaker (5), for sounding of the screen touches and user warnings,

a printer unit (6) for printing of the bets vouchers and payments on the gambler's part, and the electric current source (7)

The Softwares that allow the access and operation of the dedicated equipment accomplish the following sequence of events:

a) The gambler is introduced to the start screens , with alternating screens in way to avoid the burning of the video monitor (phosphorus). He should press a Start " key " at the touch sensitive monitor to the touch to access the " main menu ";

b) The " main menu " screen offers the following options: to verify the result of previous games, and to choose the possible game types (type I game, type II game, type III game, and so on). In case the system stays stable for more than 2 minutes, without any choice on the part of the gambler, it comes back at the start screens (stage a);

c) In case the gambler has opted for verifying the result of the previous games, he is presented to a " menu " screen with the following options: the date of the wanted extraction, the extraction number, or the return to the " main menu ". After opting, it is presented the requested results. In case the system stays stable for more than 2 minutes, without any choice on the part of the gambler, the system comes back to the " main menu " (stage b);

d) If, in the stage b, the gambler has chosen one of the offered games types, the system requests a confirmation of the accomplishment of the wanted game. If the option is " do not accomplish game ", the system comes back to the " main menu " (stage b). If the option is "accomplish game ", the system executes the (stage e);

e) The game accomplishment " menu " offers the possible options for accomplishment of the bet, such as dozens, combinations of letters, illustrations, etc., according to the type of game chosen. After confirmation on the gambler's part, the system checks the validity of the bet, avoiding such mistakes as repetition of numbers, etc. In case mistakes had happened in the bet, the system indicates them and offers a new trying option. After a limit of 3 wrong trying, the system comes back to the " main menu " (stage b). When the bet is validated by the system, it goes to the stage f);

f) The system offers the option " to leave the game ". In case the answer is affirmative, the system comes back to the start screen (stage a). In case the answer is negative, the system passes to the stage g);

g) The " menu " of bank/credit card choice allows the gambler to indicate its bank or credit card operator for payment of the bet. After the choice, it goes to the (stage h);

h) The gambler passes his magnetic card in the card reader and his data are transferred to the banking or cards net;

i) The gambler types his data and tries to validate the payment by the system current in the banking or cards net, that is, with confirmation and a limit of 3 incorrect attempts. There is a return to the stage (f) after this limit; and

j) The system prints the bet and payment voucher, containing the necessary data for the gambler to verify the results. The system comes back to the "main menu" (stage b).

The mentioned Software and Hardware to use the Internet or the dedicated equipment will provide conditions of accomplishment of lottery bets of the "scratch-and-win" type, that in addition uses Software that realizes a process that creates two layers: the superior (covering) that can be removed by means of previous conditions that shall be obeyed (and demonstrated as follows), and the inferior layer (permanent) superimposed by the superior layer which will contain information's that are typical for this game type (prizes, information, messages, etc.).

Each virtual game card will be available or liberated only after the payment operation is concluded and it will contain the indication of a prominent region on the screen, so that the removal of the covering (erasing) can begin. This region, the gambler should click with the mouse (Internet) or should touch with finger point (kiosk), to begin the removal of this superior layer. This process, once begun, is irreversible. In case the award is won, it will appear in the screen, for posterior printing, a ticket with all this operation information, from which the player will opt for receiving its prize via electronic bank operation or via authorized bank. The payment of the prize can be made automatically by means of deposit in the gambler's bank account (eventually, the same account used previously to pay the virtual "scratch-and-win" game), a voucher of the values deposited in bank account being emitted.

The superior layer will be removed, and it will only be altered once with the "scratching", by use of the mouse, in the case of a microcomputer linked to the Internet, or by the use of the finger, in the case of dedicated game machine (kiosks); These layers will be assembled a priori, taken into account the information previously established by the Lottery Office and by this type of game administrator, appropriately coded, and they will be open by the Software so that it is made a number of virtual game cards controlled by this office, properly numbered and coded, and whose control will be done by means of on-line operation, providing that the liberation of the winning virtual game card can be a random, sequential or criteria one. The inferior layer will be fixed and never will have conditions of being altered, its information will be valid in any situation and they will be recognized by any agent authorized by this game provider office. For this, can be printed in specific format, so much in the dedicated game machines, with common paper and with a characteristic printing, when the award happens (otherwise the impression won't be liberated), as in microcomputer terminals linked to the Internet or to the consults terminal, with normal printing paper also with a characteristic printing and in identical way in the case of award.

CLAIMS

1. "HARDWARE AND SOFTWARE INTEGRATION PROCESS FOR LOTTERY BETS OPERATION", characterized by, utilization of Internet with the following sequence: the user (U) will communicate with the Phone Network (PN), which will be bilaterally connected with the Services Provider (SP) that is endowed with 12 external modems (MD) compatible with the interfaces microcomputer (COM) interfaces, with computer (COM) connected bilaterally to the modems (MD) and connection box (HUB), with connection box (HUB) connected bilaterally with the microcomputer (COM), with the microcomputer (PGA), with the microcomputer (ATI) and with the microcomputer (STO), with microcomputer (PGA) connected bilaterally to the box (HUB) and connected unilaterally to the scanner (SCA) and the printer (PRI), with microcomputer (ATI) connected bilaterally to the box (HUB) and with microcomputer (STO) connected bilaterally to the box (HUB) and the Tape Unit (TU) and utilizing microcomputers (COM,GPA,ATI and STO)with the following minimum characteristics: Server and Attendants Stations with a Processor with minimum clock of 200MHz; with cache memory of 256 Kbytes; with main memory of 64 Mbytes expandable to at least 128 Mbytes; with hard disk of 4 Gbytes, with Fast SCSI-2 interface, with medium time of access of 15 ms or less and with a minimum disk transfer rate of 4Mbytes/s; with a 3,5 " floppy-disk drive for 1.44Mb of formatted memory; with a CD-ROM unit of 600 Mbytes of formatted memory, SCSI-2 interface, form factor 5,25 inches, a minimum sustained rate of transfer of 330 kbps, medium time of access of 300 ms or less, reading/record by ISO 9660, High-Sierra, CD-ROM Kodak Photo CD or similar standard, with minimum eight times the standard speed; I/O unit with a parallel interface Centronics standard, two high-speed serial interfaces EIA RS-232 C/CCITT V 24/V.48 standard and a SCSI-2 Fast/Wide interface; network interface IEEE 802.3 (Ethernet) standard, PCI with an UTP port (100Base-T); a color SVGA 15 " Video Monitor with a resolution of 1024x768 points and 0.28 mm dot pitch non interlaced; expansion with at least two PCI slots, a PCI/ISA slot and 3 ISA slots; 101 keys keyboard; and three buttons mouse with a 400 dpi resolution. The microcomputer (STO) will also be endowed with an external magnetic tape unity for 4 mm DAT tapes (DAT cartridges), with a minimum formatted storage capacity of 8 Gbytes (without compression), SCSI-2 interface(standard ANSI X3.131.-1994) and minimum MTBF 70,000 hours; with a color scanner with capacity for 16.7 million colors, minimum resolution of 1,200 dpi, SCSI/SCSI-2 interface (standard ANSI X3.131-1990/1994), scan area of 8,5x14 inches, support to PICT, TIFF and EPS (minimum), and drivers that run in another platforms, being the microcomputer (COM) will also be endowed with multiserial communication interfaces with 12 high-speed ports standard EIA RS-232C/CCITT V.24/V.48 and high-speed interface for connection at 64 Kbps at least, and with the following minimum Softwares to the Server Stations: MS-DOS 6.22 or superior, Windows NT, Office Pro, Borland C++ 4.0, Visual Basic 3.0 Pro or superior, SNMP Agent, Lottery Management, Fire Wall, Anti-virus, Electronics Data Exchanges/Banking/cards transfer Interface, Cryptography, HTML Pages Providing, MS Explorer or Netscape, Communication and database software Sybase or Oracle and for the Attendant Stations the following minimum specifications: MS-DOS 6.22 or superior, Windows 95/98, Cryptography, HTML Pages Providing, Communication, SNMP Agent and Access to database, or utilization of dedicated equipment with the following sequence:

a) The gambler is introduced to the start screens , with alternating screens in way to avoid the burning of the video monitor (phosphorus). He should press a Start " key " at the touch sensitive monitor to the touch to access the " main menu ";

b) The " main menu " screen offers the following options: to verify the result of previous games, and to choose the possible game types (type I game, type II game, type III game, and so on). In case the system stays stable for more than 2 minutes, without any choice on the part of the gambler, it comes back at the start screens (stage a);

c) In case the gambler has opted for verifying the result of the previous games, he is presented to a " menu " screen with the following options: the date of the wanted extraction, the extraction number, or the return to the " main menu ". After opting, it is presented the requested results. In case the system stays stable for more than 2 minutes, without any choice on the part of the gambler, the system comes back to the " main menu " (stage b);

d) If, in the stage b, the gambler has chosen one of the offered games types, the system requests a confirmation of the accomplishment of the wanted game. If the option is " do not accomplish game ", the system comes back to the " main menu " (stage b). If the option is "accomplish game ", the system executes the (stage e);

e) The game accomplishment " menu " offers the possible options for accomplishment of the bet, such as dozens, combinations of letters, illustrations, etc., according to the type of game chosen. After confirmation on the gambler's part, the system checks the validity of the bet, avoiding such mistakes as repetition of numbers, etc. In case mistakes had happened in the bet, the system indicates them and offers a new trying option. After a limit of 3 wrong trying, the system comes back to the " main menu " (stage b). When the bet is validated by the system, it goes to the stage f);

f) The system offers the option " to leave the game ". In case the answer is affirmative, the system comes back to the start screen (stage a). In case the answer is negative, the system passes to the (stage g);

g) The " menu " of bank/credit card choice allows the gambler to indicate its bank or credit card operator for payment of the bet. After the choice, it goes to the (stage h).

h) The gambler passes his magnetic card in the card reader and his data are transferred to the banking or cards net;

i) The gambler types his data and tries to validate the payment by the system current in the banking or cards net, that is, with confirmation and a limit of 3 incorrect attempts. There is a return to the stage (f) after this limit; and

j) The system prints the bet and payment voucher, containing the necessary data for the gambler to verify the results. The system comes back to the "main menu" (stage b), and that utilizing Hardware with a processor (1) for general processing and accesses attendance, with central processor Intel Pentium PRO or equivalent, with the following minimum requirements: clock of 200 MHz, " cache " memory of 256 Kbytes, main memory of 64 Mbytes expandable to at least 128 Mbytes, an auxiliary standard keyboard 101 keys, for access to the databases and the programs by technicians especially authorized, an unit of hard disk for

database, with a formatted storage capacity of 4 Gbytes or more, endowed with type " Fast SCSI-2 " communication interface ANSI X3.131-1994 standard, with an access time of 15 ms or less and minimum transfer rate of 4 Mbytes/s, an 3,5 " floppy-disk unit with 1.44 Mbytes formatted capacity, for data storage and transfer, a " DAT " (Digital Audio Tape) tape unit for storage of data that can be periodically transferred to the lottery net, with minimum storage capacity of 8 Gbytes without data compression, with type " SCSI-2 " communication interface ANSI X3.131-1994 standard, with minimum time between failures (MTBF) of at least 70,000 hours, a CD-ROM unit for storage and transfer of data, with minimum speed 24 times greater than standard " MPC ", minimum formatted capacity of 600 Mbytes, type " SCSI-2 " communication interface, form factor of 5,25 inches, sustained transfer rate of 330 kbps or more, medium time of access of 300 ms or less, reading/record by ISO 9660, High-Sierra, CD-ROM X-A, and Kodak Photo CD and a soundboard unit for sound alarm, a video monitor (2) type touch screen where the gambler will make its choices through a " menu " and will inform his data bank after making the bet, said monitor with the following minimum requirements: color, 14 " super VGA standard, with a resolution of 1025x768 points, 0.28 mm " dot pitch ", non interlaced, touch sensitive, a communication interface set(3) for communication (through the public phone system) with the banking, cards and lottery nets, multiserial with a minimum 6 ports, EIA RS-232C/CCITT V.24/V.48 standard and 6 modems compatible with the described interfaces and a speed of 33,6 Kbps, a magnetic cards reader unit (4), for reading of the gambler's debit or credit card, speaker (5), for sounding of the screen touches and user warnings, a printer unit (6) for printing of the bets vouchers and payments on the gambler's part, and the electric current source (7).

2. "HARDWARE AND SOFTWARE INTEGRATION PROCESS FOR LOTTERY BETS OPERATION", as cited at claim 1,characterized by, provide accomplishment of lottery bets of "scratch-and-win" type, with the following sequence of process:

a)it creates two layers: the superior (covering) that can be removed by means of previous conditions that shall be obeyed (and demonstrated as follows), and the inferior layer (permanent) superimposed by the superior layer which will contain information's that are typical for this game type (prizes, information, messages, etc.);

b)Each virtual game card will be available or liberated only after the payment operation is concluded and it will contain the indication of a prominent region on the screen, so that the removal of the covering (erasing)can begin. This region, the gambler should click with the mouse (Internet) or should touch with finger point (kiosk), to begin the removal of this superior layer. This process, once begun, is irreversible;

c)In case the award is won, it will appear in the screen, for posterior printing, a ticket with all this operation information, from which the player will opt for receiving its prize via electronic bank operation or via authorized bank. The payment of the prize can be made automatically by means of deposit in the gambler's bank account (eventually, the same account used previously to pay the virtual "scratch-and-win" game), a voucher of the values deposited in bank account being emitted;

d)The superior layer will be removed, and it will only be altered once with the "scratching", by use of the mouse, in the case of a microcomputer linked to the Internet,

or by the use of the finger, in the case of dedicated game machine (kiosks); These layers will be assembled a priori, taken into account the information previously established by the Lottery Office and by this type of game administrator, appropriately coded, and they will be open by the Software so that it is made a number of virtual game cards controlled by this office, properly numbered and coded, and whose control will be done by means of on-line operation, providing that the liberation of the winning virtual game card can be a random, sequential or criteria one; and

e) The inferior layer will be fixed and never will have conditions of being altered, its information will be valid in any situation and they will be recognized by any agent authorized by this game provider office. For this, can be printed in specific format, so much in the dedicated game machines, with common paper and with a characteristic printing, when the award happens (otherwise the impression won't be liberated), as in microcomputer terminals linked to the Internet or to the consults terminal, with normal printing paper also with a characteristic printing and in identical way in the case of award.

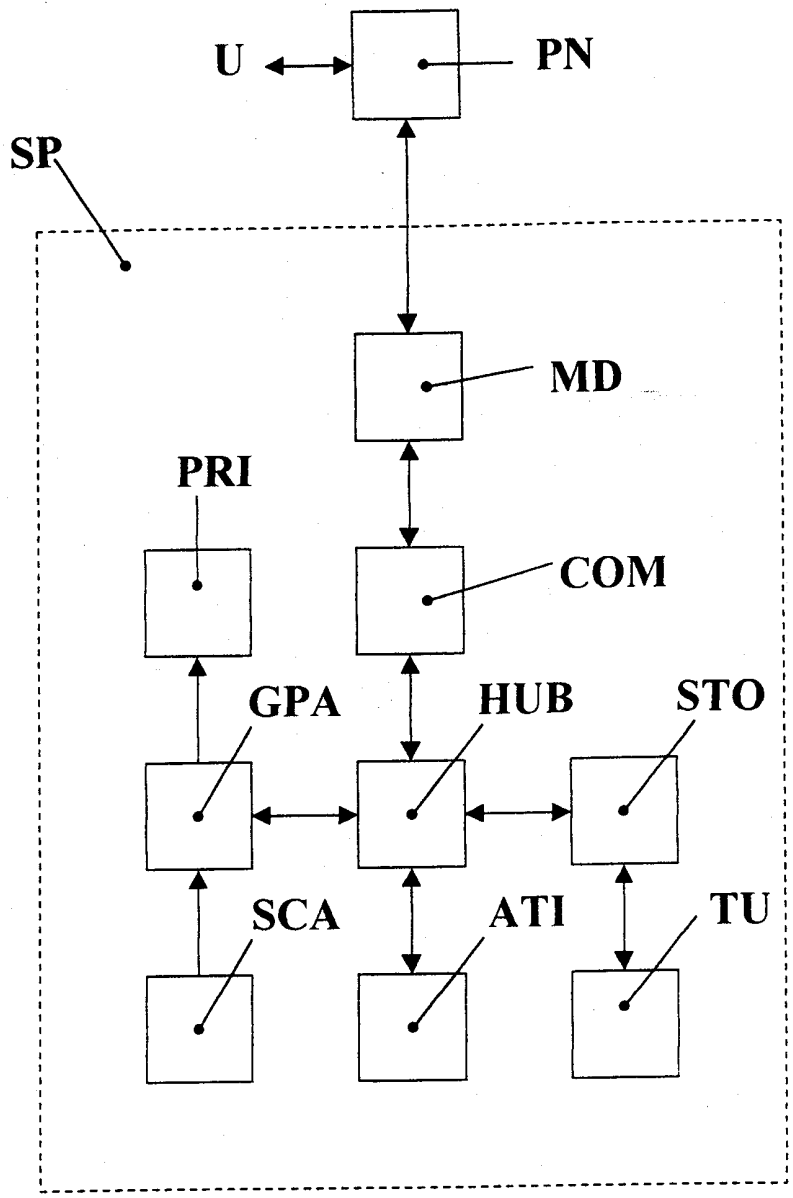


FIG. 1

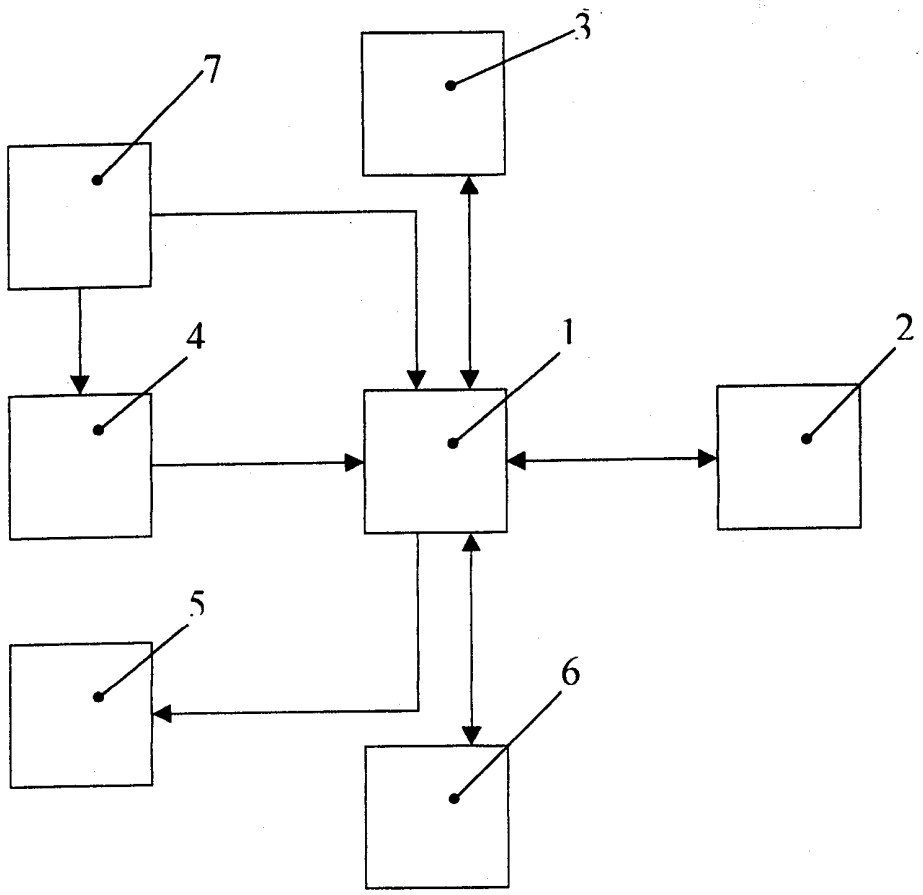


FIG. 2