



Europäisches Patentamt
European Patent Office
Office européen des brevets



(11) **EP 0 871 132 A1**

(12) **EUROPEAN PATENT APPLICATION**
published in accordance with Art. 158(3) EPC

(43) Date of publication:
14.10.1998 Bulletin 1998/42

(21) Application number: **95944287.2**

(22) Date of filing: **30.11.1995**

(51) Int. Cl.⁶: **G06F 15/28**

(86) International application number:
PCT/RU95/00257

(87) International publication number:
WO 97/20275 (05.06.1997 Gazette 1997/24)

(84) Designated Contracting States:
AT BE CH DE DK ES FR GB GR IE IT LI LU MC NL PT SE
Designated Extension States:
LT LV SI

(71) Applicants:
• **Kasparov, Garri Kimovich**
Moscow, 119049 (RU)
• **Ivanov, Valery Filippovich**
Moscow, 111578 (RU)

(72) Inventors:
• **Kasparov, Garri Kimovich**
Moscow, 119049 (RU)
• **Ivanov, Valery Filippovich**
Moscow, 111578 (RU)

(74) Representative:
Eddowes, Simon et al
Hepworth Lawrence Bryer & Bizley,
Merlin House,
Falconry Court,
Bakers Lane
Epping, Essex CM16 5DQ (GB)

(54) **METHOD OF PLAYING A LOTTERY GAME AND SUITABLE SYSTEM**

(57) The proposed method of playing a lottery game or sporting totalisator involves the following: each participant (3) in, for example, the lottery uses a storage unit (4) with a timing system (25), memory unit (23) and data input-output device (27, 29); time data, which is forwarded from the timing system (25) at the moment the hypothetical data issued by the participant (3) using the data input device (27) is stored (51) in the internal memory unit (23), is stored (52) in the latter; for the purpose of comparison with actual data, use is made only of that part of the hypothetical data which is issued via the output device (29) from the memory unit (4) and originally input into its internal memory unit (23) before the moment the actual data appeared. A method of this type can be realised with the aid of the above memory unit (4) and a data collection centre (9) containing means for outputting data from the internal memory (23) of the storage devices (4). In addition, the timing system (25) is designed in such a way that for any time interval, the difference between the time value accumulated by this unit during interval and its actual duration is positive.

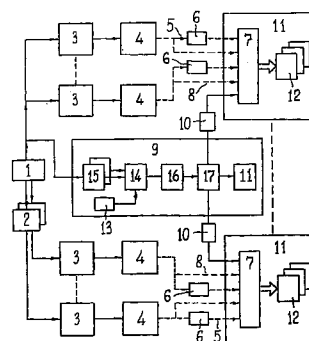


FIG. 1

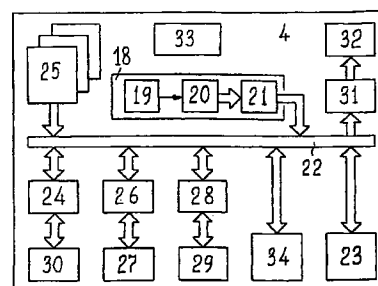


FIG. 2

EP 0 871 132 A1

Description

Technical field

The given invention relates to the organization and running of gaming processes, in particular to methods and systems for organizing lottery games and sporting totalizators.

Prior art

The analogue of the present invention is the well known method of playing the lottery as implemented in the game of "Sportloto", and comprising the distribution of special numbered tickets bearing an information datablock, their drawing by a random law at a previously established time, and the determination and issue of a monetary prize or prize in kind (Russian Federation Patent No. 2023307, Cl. B G07C 15/00).

It must be said that the negative qualities of the analogue include an inadequate involvement in the game, and also the absence of gaming factors which raise or develop the intellectual qualities of the participants in the game. The shortcomings mentioned are due to the fact that the role of a player and his participation in the gaming process when composing the winning combinations of figures does not require the application of his intellectual abilities, general knowledge or operational thinking. The fact that when determining winnings no account is taken of such sporting criteria as speed and the operational nature of decision making also lowers the gaming entertainment and the attractiveness of the gaming process of the lottery. The deficiencies of this lottery must also be said to include the impossibility for a participant to withdraw from it with minimum losses when the draw goes unfavourably.

Other known types of lotteries (the bingo lottery run in the USA and England, and having an annual turnover in the USA alone of 2 million dollars, the "National", France and others), comprising sporting pools and forecasts, are also based on guessing some arbitrarily selected numbers, that is to say all that is required of a person is to buy a ticket and then to follow carefully the course of a draw or to fill up a coupon received (as in the case of various sporting forecasts and totalizators), although it is clear that from the point of view of reducing some of the deficiencies mentioned above, which are connected with the lack of need to apply intellectual abilities in filling in cards, sporting forecasts are the more favourable type of lottery.

The deficiency of sporting totalizators or forecasts is their primitiveness, since virtually all stakes are generally bet on some team or sportsman winning (losing), that is to say on the result of a contest. Thus, for example, in England the most widespread variant of the football totalizator is the requirement to indicate the results of three separate football matches (Taylor, F. Professionally: Futbol protiv futbola [Professionals: football

against football]/translated from English - Moscow: Fizkultura i sport, 1985, page 57). Even in such an intellectual game as chess, a monetary stake on the result of a chess match is the most widespread type of totalizator (64-Shakhmatnoe obozrenie [64-Chess Review], No. 9, 1995, page 25). In this case, the fans act as extras, since the inherently direct nature of a sporting contest cannot influence the variant of the outcome of the contest indicated in the stake. A common deficiency of the considered methods of organizing events is the need for a large outlay bound up with the preparation, despatch and processing of a large quantity of cards (coupons, forms) used in lotteries and sporting totalizators. Confirmation of the large number of tickets intended for processing is to be seen, firstly, in an analysis by American experts which was conducted with the aim of establishing the specific weight of the sporting totalizator in the general structure of the gaming business in the USA and showed that each year average Americans spend more than 10,000,000,000 dollars on stakes in sporting totalizators and, secondly, in the data relating to other countries, from which it follows that, for example, more than 60,000,000,000 tickets are distributed every year in Japan on the official sporting totalizator (Wykes, Alan. Entsiklopediya azartnykh igr [Dictionary of games of chance]. Translation from English - Moscow: Tovarishchestvo "Efrat" 1994, - pages 60,149). However, no account has been taken here of amounts spent on racecourse totalizators. The abovementioned large outlays are bound up not only with processing and sending cards, but also with precautionary measures adopted because of possible tricks in results or any other type of fraud. The reason for this is that the winnings of a participant in a lottery or sporting totalizator can reach several tens of millions of dollars. Some idea of the volumes of the abovementioned expenditure can be gained from the example of the substantial complex of defensive measures developed by the organizers of one British football pools company (Wykes, Alan Entsiklopediya azartnykh igr [Encyclopedia of games of chance]. Translation from English - Moscow: Tovarishchestvo "Efrat" 1994, - page 184). The number of employees of said company is 10,000, the majority of whom are involved in checking coupons. Moreover, several thousand postal workers are involved in circulating the pools, and in theory they are able to insert a coupon with the correct results into an envelope after the announcement of the score of this or that football match. General precautionary measures include the following actions: spot checks of employees; four different coded stamps recorded on each coupon received; changing the stamp codes at randomly selected time intervals; personal supervision of all postal assignments and collections by a specially engaged guard drawn from a large number of former policemen; inspection and sealing of all windows and doors in every one of the numerous departments of the company where checking is performed immediately after the arrival of the results

of the next football match; a stop on all telephone calls in rooms where coupons are checked after the start of the match, and mandatory monitoring of this by the security service; secret checking of the employees of the security service themselves by an independent secret monitoring service of the company, and also a complete ban on any means of radio and telecommunications in company buildings. Moreover, all the coupons are kept in sealed bags in special safeguarded rooms. Every coupon which arrives after the stipulated deadlines is subjected to careful checking and investigation irrespective of whether its owner later requests payment of a prize or not. Special observation is set up for those pools participants who have been lucky in winning a prize two or more times in a row. All genuine winning coupons are carefully checked. A general check is conducted in the case when the winner is a newcomer participating for the first time in the pools, or if he has suddenly changed his traditional playing system which he had adhered to earlier, and also if he despatched the coupon later than usual. All coupons and envelopes in which they were sent in the course of a current run are entered in a card-index and kept in a special file. Coupons belonging to especially successful players are subjected to a detailed analysis with the aim of revealing any deviations and special features. Special and numerous precautions against any attempted fraud are an inherent feature of practically any large lottery.

In other known methods and arrangements for eliminating some of the deficiencies enumerated, it is proposed to use a telephone communication line, transmitting by it, for example, hypothetical chess moves. Thus in the invention described in International Application PCT (WO) 93/05483, Cl. 5 G07C 15/00 (example of prior art), to exclude cards from the lottery its participant may win by dialling one telephone number indicated in a special list. At the end points, the lottery participants are instructed by voice in order to obtain the requisite numerical data, for example telephone number, age, insurance policy number, or driving licence. Moreover, the serial number of the player and the date and time of the calls are recorded. All these data enter the data collecting centre and are used in subsequent processing. Identifying data on the players are confirmed by various methods with the aid of means for preliminary data processing. Players can be distributed in different categories according to set rules and sequence. According to one set of playing rules, the winner can be selected by defining the number of the random winning sequence or the winning number received from the random number generator. In another variant, the identifying data are received at the last moment for the purpose of determining the owner of the grand prize by using different methods of data processing with the aid of an appropriate computer.

The deficiency of this and also of other analogous inventions is the limitation on the number of participants of one or other event because of the low transmitting

capacity of the telephone communication channel. Moreover, a participant in a sporting event experiences great inconvenience bound up with the need for simultaneously transmitting the hypothetical data on the telephone network (for example, chess moves) and carefully following the course of the contest, which is situated where it is being conducted.

Disclosure of the invention

The object of the present invention is to create a method for organizing various events bound up with the running of lotteries or sporting totalizators which is such that its practical implementation does not require, firstly, the application of various special tickets nor, secondly, of communication channels used as means for transmitting hypothetical data to the data collecting centre.

According to the invention, the essence of the achievement of the object set consists in that each or several participants use, at least, a storage device having a timing unit, an internal memory and a data input/output device; timing data arriving from the timing unit are stored in the internal memory at the moment when the participant issues the hypothetical data, which are also stored in the internal memory by the participant using the data input device, and for the purpose of the abovementioned comparison with actual data use is made only of that portion of the hypothetical data issued via the output device from the storage device which was input into its internal memory up to the given moment of appearance of the actual data.

Moreover, it is possible by means of the given method to determine the time for recording data in the internal memory of the storage device by calculating the algebraic sum of the current time for reading data from the internal memory, data with the sign minus the value of the time of the timing unit which it has at the moment of reading said data, and data of the timing unit which were recorded in the internal memory at the moment of data recording. In the case of using the system for running a lottery, sporting totalizator and also other events connected with the participants of said events guessing actual data, the system comprises a source of actual data and, at least, one data collecting centre comprising means for preliminary data processing and connected to a computer intended for processing the results of data proposed by the participants, said system is characterized in that the participants have storage devices, each of which contains an internal memory and also a timer connected thereto, both of which are connected to a control unit and to one or several data input/output devices, the data collecting centre having means for outputting data from the internal memory of the storage devices.

Moreover, the system can be fitted with one or several actual data sensors and a timer, which are connected to the central storage device connected to the means for preliminary data processing.

The advantage of the considered method for running a lottery and of the system for implementing it is the exclusion of the necessity to make use in one gaming event or another of cards or coupons and also of other analogous means. The other advantage of the given invention is the complete independence of the participants of the gaming events from those means of communication which are used to transmit hypothetical data into the data collecting centre. Other features and advantages of the invention will be clear from the detailed description, and also from patent Claims 3-15.

Brief description of the figures of the drawings

The invention is explained below by describing variants of its implementation which although specific do not limit the invention, and by means of the appended drawings, in which:

Figure 1 shows a general diagram of the system for running lotteries and sporting totalizators;

Figure 2 shows a functional diagram of the portable storage device;

Figure 3 shows one of the variants of the external appearance of the portable storage device; and

Figure 4 shows a block diagram of the algorithm for running a lottery or sporting totalizator.

The best variants for implementing the invention

In the description of the considered variant of the implementation of the method being applied for to run lotteries, which is shown in the figures, use is made for clarity of a concrete, narrow nomenclature. However, the invention is not limited by the terms adopted, and it must be remembered that each such term covers all equivalent elements operating in a similar way and used to accomplish the same tasks, which include organizing lotteries, a totalizator, in particular a sporting one, and also other events connected with guessing events and organizing various competitions, quizzes etc. It must also be noted that the concept of "user" will be understood below as a participant or group of participants who have one individual storage device in the process of playing in the lottery or on the totalizator.

In Figure 1, the numeral 1 denotes an actual data source which is a totality of actions or events, the result of the i -th event or action being determined at the moment in time $T(i)$. The moments of the beginning and end of the i -th event or action will be denoted correspondingly by $T1(i)$ and $T2(i)$. An event may be understood as, for example, events such as running a lottery with the use of a lototron, a chess tournament, a chess match, football game, basketball game, and also a contest in a type of sport which can be transmitted via the communication channels 2, for example via television or radio communication channels. Here and below, the term "communication channel" is always understood as

the totality of technical means and physical media intended for transmitting data (signals) from a transmitter to a receiver (user). The fundamental technical means included in the composition of a communication channel are: actual data sensors, transmitters, receivers, signal amplifiers, coding and decoding devices, modulators and demodulators, commutators, filters, interfaces etc. The technical means and physical media ensuring propagation of the signals from the transmitter to the receiver form a communication line in their totality. The transmission medium can be compound and include segments of different types, for example, wire and optical-fibre lines between which an appropriate transformer must be arranged in this case. In the transmitter, the message (data) from the actual information source 1 is transformed into the digital or analogue signals which are then fed to the input to the communication line; upon receiving the signal at the output of the communication line, the receiver reproduces the transmitted message. Depending on the nature of the signals, a distinction is made between electric communication lines (wire and radio), sound (acoustic) and light (optical communication) (Elektronika: Entsiklopedicheski slovar/Gl.red. V. G. Kolesnikov, M.: Sov. Entsiklopediya, 1991, s.189) [Electronics: Encyclopedic dictionary]/Ch. ed. V. G. Kolesnikov, Moscow:] [Sov. Encyclopedia], 1991, page 189). The representation of the actual information can be transmitted to the user 3 directly from the source 1 or via representation devices included in the communication channel 2. The representation devices are devices of visual and acoustic (television sets) or only acoustic (radio receivers) representation of actual data. The presence of several communication channels 2 is explained by the possibility of transmitting data from the source 1 along several television and radio channels. At $t(i)$, each user 3 can record the data he proposes in the storage device 4, which will be designated as a PSD (portable storage device) in order to emphasize that it is not one of the many functional elements, but is designed in the form of a finished portable construction. One of the fundamental conditions for the hypothetical data to be admitted to the draw is for one of the following inequalities to be satisfied: $t(i) < T(i)$, $t(i) < T1(i)$, $t(i) < T2(i)$. The selection of one or other of the inequalities is determined by the rules established by the organizers of the event, and is a function of the moment of appearance of the actual data. The dotted lines 5 mark the connections which are used after the conclusion of any gaming event to connect the PSD 4 to the comparison devices (CD) 7, via the communication channels 5, for which computers may be used. The dotted lines 8 mark the connections which are used to connect the PSD 4 to CD 7 directly that is to say without the use of any communication channels. The aim of connecting the PSD 4 to CD 7 is to compare the actual data kept in the data collecting centre 9 with the hypothetical data kept in the PSD 4. The data collecting centre 9 and CD 7 are connected via communi-

cation channels 10. The comparison device 7 is included in the terminals 11, each of which is a subscriber's (user's) point intended for processing and outputting the results of data comparison arriving in it from the PSD 4 and data collecting centre 9. The composition of each terminal 11 includes a CD 7, for which a microcomputer can be used, and output devices 12, for which it is possible to use printers, cash dispensers, adaptors for a communication line etc. The data collecting centre 9 comprises a precision timer 13 whose output can be connected to an exact time signal former and a central storage device (CSD) 14 at whose input a signal arrives from one or several actual data sensors 15. The output of the exact time signal former (not shown in the drawing) can be connected to a code specifier (not shown in the drawing) (for example, to a numerical code specifier) and to the transformer of the code into the signal fed to the input of the communication channels 2. The requisite data kept in the CSD 14 can be sent with the aid of preliminary data processing means 16 to the input of the calculator 17, for which a computer can be used. It may be noted that one of the terminals 11 can be arranged inside the data collecting centre 9. All the elements included in the system described are known or standard ones. Thus, a transmitting television camera can be used for the actual data sensor 15, a video recorder for CSD 14, and a human operator for the preliminary data processing means 16. The standard design of the other elements is given in the text. Moreover, as mentioned above, the actual data sensor 15 can be a component part of one or several communication channels 2.

Figure 2 represents a functional diagram of the portable storage device. The functional diagram of the PSD 4 is constructed on the basis of the functional diagram of a standard microcomputer. The number of portable storage devices 4 must be not less than the number of users participating in the lottery or sporting totalizator. A secondary element included in the PSD can be a decoding element 18. The decoding element 18 comprises a receiver 19 of the signal connected to the decoder 20, which is connected to the internal memory 23 via a controller 21 and an inner tyre 22. The internal memory 23, for its part, is connected via the inner tyre 22 to one or several independent timing units 25 inside which corresponding controllers are contained. Moreover, the internal memory 23 is connected to one or several data input devices 27 via a controller 26, and to one or several data output devices 29 via a controller 28. Moreover, the internal memory is connected to a mains adaptor, containing, in particular, a transceiver 24 and connecting block to the communication line 30, and to a LCD display 32 via a controller 31. All the elements included in the PSD 4 are fed from the internal source 33. All the elements interact with the internal memory 23 by means of a processor 34. All the elements presented here can be constructed using known diagrams, or it is possible to use as these elements standard units

(monocrystalline microcomputers, LSI watch circuits etc.), applicable in communication systems and in computer technology. Moreover, the PSD can comprise additional units linked, in particular, to a change in external influences (external radiation, mechanical acceleration). Type PIC microcontrollers, which have a low power consumption, can be used in the simplest variant of the PSD. All the PIC have built-in ROM (0.5-4 K) and Smm (32-256 bytes). Moreover, the PIC are fitted with timers (from 1 to 3 pieces), a built-in resetting system, a watchdog timer and an internal clock-pulse generator which can be started from the quartz resonator. In more complicated variants of the PSD, use may be made of additional independent microcomputers intended for fulfilling additional auxiliary functions: inputting data into the PSD from the user's voice, receiving and processing data arriving from the data collecting centre 9, issuing variants of hypothetical data etc. Other variants of the PSD can be specialized, for example, intended only for participation in chess totalizators.

Figure 3 represents one of the variants of the external appearance of the PSD, on the front panel of which there are arranged a panel 35 of the liquid-crystal display 32, an alphanumeric or only numerical keyboard 36 of non-fixed pushbutton switches, and a keyboard 37 of functional keys each of which, when pressed, inputs an appropriate command. The event code and action code are input respectively by pressing on the keys 38 and 39. Short-lived pressing on the key 40 cancels an input command or deletes data recorded in the memory block 23 of the portable storage device 4. The keys 41 and 42 are intended for inputting data having a double-alternative character when the hypothetical result, specified by the user, of some event or action is linked only to two possibilities of their outcome "yes" or "no". Pressing on the key 43 records data in the internal memory 23 which have been composed by the user using the switch relating to the keyboard 36. The keys 44 and 45 are connected to pushbutton switches, one of which is used to correct the timing unit 25, while the other is used to switch off the power source 33 from the electronic circuit servicing the part of the internal memory in which data entered by the user are kept. Of course, depending on structural features, complexity and also on purpose (only for chess tournaments, only for running lotteries, and multifunctional designation), there may be different keys in different types of PSD and, moreover, a combined function regime can be provided which permits the use of each key to carry out two or even three operations.

Figure 4 represents a block diagram of the algorithm for running a lottery or a sporting totalizator. Let us give some names to the numerical designations which are not fully indicated in Figure 5. Numeral 47 designates the action "pressure on key 44 at the moment of transmitting the signal s(t)", numeral 48 designates the condition "will the readings of the timing unit 25 be corrected?", numeral 49 designates the action "setting of

the event code", numeral 50 designates the action "setting of the action code", numeral 51 designates the action "inputting and storing of the hypothetical data", numeral 52 designates the action "automatic storage of the data arriving from the timing unit 25", numeral 53 denotes the condition "will the set codes be changed?" and numeral 54 designates the condition "will these be a continuation?". If, while lotteries are running, it is required to set only the event code or only the action code, the presented block diagram of the algorithm is simplified by excluding action 49 or action 50 from it.

The system for running lotteries and sporting totalizators is operated in accordance with the block diagram of the algorithm represented in Figure 4, and is based on the totality of the following two fundamental ideas. The first of these ideas is bound up with the fact that the hypothetical result of one or other event (result of running the lottery, the next move in the chess game, result of the football match), which was marked earlier on a special card or communicated by phone (telegraph, computer net, etc.) can be recorded in the memory of the individual storage device. The second idea consists in that, with the aim of checking that only hypothetical data have been recorded, it is sufficient automatically to store in the memory of the storage device the time of recording said data. The result of this is not only to exclude any dependence of the user on the communication means at the time of running one or the other event, but, as will be shown below, also to bring the observation process, for example after one or other sporting contest, to a qualitatively new level requiring some intellectual effort from the fans. The given algorithm is realized in practice with the aid of special software which is kept, firstly, in the permanent storage device, located in the internal memory 23 of the PSD 4 and, secondly, in the permanent storage devices of the computers 7, 17, which are included in the system under consideration. Let us suppose that after pressing on key 45, that is to say after supplying the feed voltage (action 46) to the elements of a PSD 4, which service the internal memory 23 and timing unit 25, there is no need for a correction of its readings ("NO" in condition 48) which is connected with bringing them into a unique correspondence with a given error with the readings of the timer 13. A possible refusal to correct the timing unit 25 can be, for example, in the case when, after the last correction of said block, an insufficiently large time period has passed. Other cases of refusal of a correction will be considered below. The further functioning of the system depends on the nature of the event, the data source of which is denoted by numeral 1, and also the nature of the user's 3 participation in it. If the user is a participant of the lottery or sporting totalizator without desiring to predict the actions of, for example, sportsmen in the course of the game itself, as a result of the termination of one or several actions included in some event the hypothetical data are recorded in the memory of the PSD before it starts. The term event can be understood

as running a lottery, chess match or game, a heavy-weight boxing match, a tennis match, basketball game, game of roulette etc. In this case, some actions could be cited which are going to exist in these events: dropping the winning number out of the lototron, moves in the chess game, efforts of the boxer to prolong the bout after he has missed a knockout blow, drawing of the next ball (tennis, basketball, football, water polo etc.) penalty ball throw. The requisite data on all events and actions which participate in the lottery or totalizator are stored in the memory of the computer 17, after which they arrive in the memory of the CD 7. A preliminary selection of the requisite data is carried out with the aid of the preliminary data processing means 16, the functions of which, as was mentioned above, can be fulfilled by a human operator selecting data participating in the draw from the CSD 14, which is constructed, for example, in the form of a video recorder at whose input data arrives, firstly, about the event from the source 1 with the aid of one or several actual data sensors 15 or via one of the communication channels 2 and, secondly, from the timer 13. The exchange of data between the computer 17 and terminals 11 is effected via the communication channels 10 which, in particular, contain specialized adaptors: universal synchronous-asynchronous transceivers (USART). If, after the termination of the event, the user won a large prize, he evidently must present the PSD at one of the points where the terminal 11 is arranged where, after direct connection marked by the dotted line 8 in Figure 1, firstly, the appropriate data are read from the memory of the PSD to the memory of the CD 7, secondly, said data are compared with those data which have arrived in the memory of the CD 7 from the data collecting centre 9 and, thirdly, the sum of the winnings is calculated in accordance with the result of this comparison and also with the conditions and rules set out by the organizers of the event. The winnings may be handed over to the user in cash or transferred without cash to his account or card through one of the data output devices 12. In the case of small winnings, the reading of the appropriate data from the memory of the PSD to the memory of the CD 7 can be performed via one of the communication channels 5. To identify the user in the data collecting centre 9 or where the terminal 11 is arranged in the permanent internal memory of a PSD, it is possible to keep a corresponding code. Connecting the PSD to the communication channel 8 is also expedient in the case when there is a prize draw intended to attract viewers to the event being run. The following indices can be taken into account in the above-mentioned data comparison: the level of coincidence between the hypothetical and actual data, the difference $T1(i)-t(i)$, the difference $T2(i)-t(i)$, and the difference $T(i)-t(i)$. Some variants in the concrete use of said indices when calculating the amount of the winnings will be considered below. As already mentioned, the communication channels 8, 10 serve to connect the interface devices included in the PSD to the terminals 11 or to

other interface devices included in said terminals. It may be noted that the basic type of said channels which are used in teleprocessing systems is the separate (dedicated) telephone channel. At the same time, it is usual to envisage the possibility of using switched telephone channels, telegraph channels and, in certain cases, broadband channels with a higher transmission speed. A range of methods is possible for organizing the connection between terminals (subscriber points), the data collecting centre 9 and the PSD 4. The following basic types of systems can be named among them: those with direct connections (radial systems), those with multipoint communication lines, those with concentrators (multiplexers), those with packet-type or normal radio communication, and those with local networks. Of course, in real computer networks it is possible to use different combinations of the systems indicated, depending on the needs arising. It is, of course, also possible to transmit data, for example, recorded on a magnetic carrier, by post or by courier to the point where the terminal 11 is arranged. It is very convenient for the user to be able to make a preliminary check of the results of the draw on their home PC, which in this case is used as the CD 7. Data, and also software required for such checking can be received through communication channels 6, for which it is possible to use the internet, for example. Recording the hypothetical result of the termination of the selected i -th event in the memory of the PSD is performed after storing the event code in said memory, and this is done by pressing on the key 38 "input code". The process of recording in the memory consists in sequentially composing appropriate signs (figures or letters) with the aid of keys included in the keyboard 36, and subsequently pressing on the key 43, in which process all the abovementioned data are represented on panel 35. The numerical (alphanumeric, letter) codes of all the events are set up, as a rule, once and not changed subsequently. An example which can be given is the possible numerical codes which can correspond to certain events (basketball - 01, football - 02, boxing - 03, chess match - 04, chess game - 05, "sport-loto" lottery 06, "policy" game - 07), and also certain actions included in said events (free throw in basketball - 01.1, throw of the ball from the three-point zone in basketball - 01.2, an eleven-metre penalty kick in football - 02.1, selection of the hypothetical move in a chess game - 05.1, guessing the result of a chess game in a chess match - 04.2). At the same time as the hypothetical data composed by the user 3 are recorded, the current time value, which has been established by the timing unit 25, is also recorded in the internal memory 23; in this case, the term current time is understood as only one point (date and current time or the start of time reading after recording in the memory of the PSD of the corresponding data) which point lies on the time axis. In other variants of the PSD, when the hypothetical data are first input the timing unit 25 is switched on and operates, in this case, as a timer. The possibility of simulta-

neous recording in the internal memory 23 of the hypothetical data and the current time value, and also of carrying out other actions connected, for example, to inputting and outputting said data from the PSD is ensured with the aid of appropriate software and a standard microprocessor structure which can be implemented on a monocrystalline microcomputer constructed in accordance with KNOP - a technology which is of low power consumption (10-100 μ W). A typical microcomputer comprises the following, connected by the common internal bus 22: the processor 34, the internal memory 23, the controllers 21, 24, 26, 28, 31 and the bus adaptor, which contains at least the transceiver 24 and the interface block with the communication line 30. A continuation of the internal bus is the external bus, to which it is possible in our case to connect input devices (interfaces of the communication line) of one of the communication channels 6 or a controller included in the microcomputer 7. The PSD contains a decoding element 18 as one of the input devices. The following may be used, for example, as output devices 29: contactless (optical, ultrasonic, acoustic, electromagnetic) radiators, a magnetic storage device on microcassette. The controllers are intended for interfacing corresponding devices 25, 20, 32, 29, 27 with the internal bus 22 of the microcomputer. The adaptor of the buses fulfils the function of electric and, possibly, logical interfacing. It should be noted that in the example given above the user can refuse the correction of the timing unit 25, since after the acquisition of the PSD by the user, or after his last correction, the readings of the timing unit may not be very significantly lead the readings of the timer 13. Thus, in order for the hypothetical data (action 51) to participate in the next draw of the i -th event, it is sufficient to record them not later than the time value $T(i)-g$, where g is the maximum error accumulated in the PSD after its last correction. Note that for the purpose of practical implementation of the possibility presented (participation in the game without correction of the PSD) the timing unit 25 must be set in such a way that the relative error of the time reading is only positive under any condition. In other words, at any moment of time (except for the moment of the correction itself) the timing unit 25 must be ahead of the actual time fixed by the timer 13. Let us examine below the general functioning of the system on the basis of some concrete examples. We may take as first example, as mentioned above, the most widespread variant of the football totalizator, where it is necessary to guess the results of three separate football matches. To participate in said totalizator, the user must make a stake by any known method and at any time prior to the start of the first of the three matches. Similarly, at any time prior to the start of the first of these matches or prior to the start of any of said matches, if permitted by the rules, the user 3 records in the memory of the PSD the code of said variant of the totalizator and the hypothetical score of each match. All the data (code, results of the matches) are indicated on the panel 35. In

the case where the user is participating in the lottery, it is necessary to record in the memory of the PSD the lottery code and the desired quantity of variants of the numbers participating in said lottery. The presence of the elements 15, 14, 16, 13, 17, 7, 12, 10 is not obligatory for the variants under consideration, since after conclusion of the series of football matches or of the lottery the comparison, and also the calculation of the amount of winnings can be carried out manually (of course, after reading in the data collecting centre 9 or in the place of the arrangement of the terminal 11 from the memory of the PSD the hypothetical data and the time coordinate of its recording) on the basis of the currently existing technology. As has already been mentioned, data from the internal memory of the PSD can be read both by contact methods and by contactless ones. Let us further examine one of the variants of the construction of the PSD directly during the course of some event, using the example of games of basketball, chess, football, and also boxing. If, before the start of running said event a sufficiently long time has elapsed after the last correction of the PSD, it is desirable (though not obligatory) to run it again ("YES" in condition 48), since the presence of an error in the time measurement can falsify the value $t(i)$, and thus the parameters taken into account when determining the extent of the winnings. Note that depending on the complexity of the timing unit 25, the frequency of the required correction can be within the limits of several weeks up to several months. Given an average relative error equal to $1/6 \times 10$, the process of correcting the PSD for relatively slow types of sport (classic and active chess, figure skating) can be carried once a month. A correction itself is carried out directly using a contact or contactless method by transmitting to the timing unit 25 a special correcting signal intended to bring the readings of the timing unit 25 into unique correspondence with the readings of the timer 13 or with the current value of exact or world time. In the case of using a contact method, the correcting signal arrives via one of the input devices 27, which is constructed in the simplest case in the form of a connector. In the case of a contactless method, an input signal arrives at the input to the decoding element 18 and is used to derive a correcting signal by amplification, preliminary processing and decoding. Amplification and preliminary processing are performed in the receiver 19, and decoding in the decoder 20. The type of receiver 19 and decoder 20 is selected as a function of the type of input signal (radio signal, optical and acoustic ones) and its type of modulation. Let us consider below several variants of conducting the correction process. The first variant is related to the PSD correction carried out in the place specially set aside therefor. In the case of the use of this variant, it is expedient or even necessary to transmit together with the correcting signal a certain non-repeating code which, after storage in the PSD, will serve to ensure the truth of the correcting signal. If the correction is carried out in an arbitrary place using

acoustic, telephone or radio signals of exact time, in the case of subsequent reading with the aim of excluding deliberate attempts to reduce the readings read by the timing unit 25, it is desirable to check the truth of such a correction. One of the possible methods of such checking consists in separately determining and comparing the relative errors of the timing unit 25 relating to two time periods. The first period falls within its two last corrections, and the second between the last correction and the moment of the abovementioned reading. If the signal of exact time is true, and not a preliminary recording, for example on a tape recorder, the values of the relative errors will be equal, to the given accuracy. To increase the trustworthiness of such checking, it is necessary to have several identical independent timing units 25, the value of the time reading of each of which is recorded and kept in the corresponding memory area of the PSD. In this case, a conclusion on the trustworthiness or falsity of the exact time signal used is reached on the basis of the criterion of achieving a given number of such timing units 25 which passed the abovementioned checking. The other variants of correction can comprise the following operations: joint transmission of the correcting signal and code, which is repeated twice (once prior to the start of the event, and a second time prior to its conclusion), joint transmission of the correcting signal and code. Note also the method of storing the time $t(i)$ which in no way requires correction of the readings of the timing unit 25. The essence of this method consists in the fact that the time coordinate which is fixed by the PSD at the moment of recording the hypothetical data is "attached" at the moment they are read. In other words, after data are recorded in the memory of the PSD, one or several timing units 25 start to function as timers, each of which separates two events. One of these events is the moment of storing the data (after pressing on the key 43, 41 or 42), while the other is the moment they are read (after pressing, for example, on the corresponding key located on the PSD or CD 7). If the exact time at the moment of reading the hypothetical data from the memory of the PSD and the values of the timing unit 25 at the moment at which said data was stored is designated as t_0 , the exact time of inputting the hypothetical data relating to the i -th event or action will be determined by the difference $t_0 - t_1(i)$, where $t_1(i)$ is the time period accumulated by the timing unit and relating to the i -th event or action. The possibility of influencing the unit 25 by various factors which destabilize its functioning in order to reduce the magnitude of $t_1(i)$ must be considered as a deficiency of said method. To reduce or completely exclude the said deficiency, it is expedient to use one of the units 25 as an electronic clock. Moreover, it is desirable to install inside the PSD special sensors which fix in its memory various deviations from given parameters characterizing the external conditions of use, which may be taken to include ambient temperature, acceleration, the PSD under test, and external radiation fluxes of various natures. A complete

refusal of a correction can also occur in the case of the use of one or several units 25 used as a timing device (date and current time of day) or as a time accumulator. The exact time of recording the data relating to the i -th event (event code, code of the action included in said event, hypothetical data) will then be determined in the form of an algebraic difference $t_0 - t_3 + t_2(i)$, where $t_2(i)$ is the reading of the unit 25 at the moment of recording relating to the i -th event, and t_3 is the reading of the unit 25 at the moment of reading the data from the memory of the PSD. Evidently, the circuit of the PSD which does not require correction of the time of the timing unit 25 must be without the decoding element 18. In the case of the use of several timing units 25 functioning, for example, as clocks, $t_2(i)$ and t_3 can be taken to be the average time calculated inside the PSD. Thus, if the user has a confirmation of the stake payment which was effected prior to the start of running the selected event (the confirmation of payment must also include data on the code of the event or action), and it is necessary to correct the time ("YES" in condition 48), before it is started the key 43 is pressed and held (action 47) up to the moment the correcting signal is terminated. During the running of the lottery or sporting competition, the user employs the key 39 to set one or several action codes which, firstly, can be in the given event and, secondly, are paid for or for guessing which the prize has been announced. Initialization of said codes, for example in the form of their blinking, can be performed ("YES" in condition 53) at any moment by pressing on the corresponding key of the PSD. Until the key 43 is pressed, the composed codes can be corrected or deleted by pressing the key 40. All the hypothetical data input by the user into the memory of the PSD relates only to the initialized code. Keys 41, 42 are used in the event that after the conclusion of one or another action the result is of a double-alternative nature or, in the extreme case, a triple-alternative nature. After pressing on the keys 41, 42, the data is quickly recorded in the memory of the PSD. This is explained by the fact that the user has only seconds for taking decisions on the possible results of certain actions of a double-alternative nature. Thus, if prior to the taking of an 11-metre penalty kick in football or a free throw in basketball the key 41 (42) was pressed, and after the taking of the penalty or free throw a "goal" (miss), or a drop into the basket (miss), said hypothetical results kept in the memory of the PSD are considered as having been guessed. Of course, the probability of guessing rises significantly if the user seated in front of the television screen or in the stadium will take into account the personality of the sportsman, and also his physical and moral condition before each free throw or penalty kick. Let us propose below that before the basketball game (or football match) each of 500,000 people has put up a monetary stake in the amount of 10 to 100 US dollars for a simple guess of the results of free throws (penalty kicks from the game) which will be designated in the course of the

entire game; in this case, for a 100% guess the sum is allotted to the extent of 10% of the sum allotted for prize payments and equal, for example, to 1,200,000 dollars. Then, if 20 free throws were made during play and three people guessed their results, each of them will receive 40,000 dollars. The remaining money is distributed in accordance with rules established earlier among those users who exhibited worse results. The payment of winnings is performed after the expiry of a certain time period in the course of which it is necessary to transmit data from the internal memory of the PSD along the communication channel 6 to the data collecting centre 9 or to the terminal 11. It is most expedient to use the following technology for quick checking of the results of the totalizator. The entire game is recorded on a video recorder which, in the given case, fulfils the function of the CSD 14. At the same time, a numerical representation of the current time initiated by the timer 13 is recorded on said video recorder. The entire video data on the game arise at the input to the video recorder from the actual data sensors 15 or from other means included in the composition of the communication channel 2 (television set, tuner). During preliminary data processing, which is carried out by a human operator 16, he is viewing the game and visually allotting all those moments $T(i)$ after which the ball was thrown (in some cases it is possible to allot those moments $T(i)$ after which the result of a free throw is definitive). Each time the abovementioned moment is allotted, the video recorder is put on hold, after which the human operator reads the value of the current time from the monitor screen and inputs it into the computer 17. All these input values of the moments $T(i)$ will be accumulated in the computer 17 under a separate file relating to the corresponding event code also recorded in the computer memory which can also carry out functions of the CD 7. The comparison of the hypothetical data recorded in the internal memory of the PSD 4 and the determination of the size of the winnings do not exhibit any special features, being completely determined by the corresponding software and also by the conditions and rules set up by the organizers of the totalizator. In certain cases, during viewing of the sporting contest television companies can envisage the transmission of a special signal (acoustic or visual) during which the hypothetical result can be recorded in the memory of the PSD. In conclusion, using the example of a chess game let us describe the interaction of the user with the PSD, which is characteristic of any events during the running of which numerical data forecasting the results of some actions are also being recorded. In the chess totalizator, the operations of inputting data and storing it are connected, principally, with guessing moves. It is possible to name an infinite number of variants with the aid of which it is possible to organize a totalizator or to distribute free prizes, for example from companies and firms placing their advertisement during the chess game. People who play and support the game can make stakes on guess-

ing the largest number of moves in their uninterrupted series etc. From the point of view of the authors of the given invention, the most interesting is a stake on the speed of guessing, for example, 29 moves by white and 32 moves by black. In this variant, it is necessary as quickly as possible to record in the memory of the PSD the 29th move by white and the 32nd by black, it being desirable for the number of moves to be communicated to the television audience or the viewers at the playing venue after the game has begun. This is achieved by the exclusion of preliminary agreement between the chess players or with any user. Particular interest in this variant of the totalizator stems from the fact that even a person who has only recently become acquainted with the game of chess can receive a large monetary prize in it. Indeed, as the chess position progresses to the 29th move for white and to the 32nd move for black on the one hand there is an increased probability of its being guessed while, on the other hand, there is a decrease in the probability of receiving large winnings. However, the probability of guessing increases, basically only for experienced chess players, that is to say over the relatively long time period up to the performance of the 29th move the probability of guessing it is approximately equal for all the participants of the chess totalizator. The hypothetical chess move (action 51) is input by pressing on the appropriate keys of the keyboard 36 and, if the numerical representation of the chess move indicated on the panel 36 has been composed without errors, it is recorded in the memory of the PSD by pressing on key 43. Of course, the data on the time of recording said move will also be stored automatically in said memory. After termination of one or another event it is desirable to use key 45 to switch off (action 54) all the elements servicing the internal memory 23 and the timing unit 25.

The advantage of the invention considered is that during the running of a lottery its participants are excluded from any dependence on the means of communication. Moreover, the use of the given system will bring the process of observation, for example of one or another sporting contest, to a qualitatively new level connected principally to the fact that the fan playing the totalizator becomes not simply a passive observer of the sporting competition, but in a certain sense, a co-participant in it, because he gains the possibility of guessing the action of the sportsmen on the basis of his understanding of one or another type of sport (moves in a chess game, the result of a free throw in basketball, the result of an 11-metre penalty strike in football, the result of a knockout blow in boxing up to the moment when the referee counts up to 10 etc.) directly during the sporting competition itself, as well as the judgments which the judges award them (assessments of the judges in figure skating, gymnastics, boxing etc.). There is also the possibility of play related to guessing the technical results exhibited by the sportsmen: time (race, bobsleigh), length (long jump). One further advantage of the given invention is its unlimited possibilities and

means with the aid of which many hundreds of millions of people can additionally be attracted to television screens, radio receivers and computers connected to telecommunication networks, and also to stadia and sports grounds. In addition to the advantages mentioned, the given invention has a whole range of advantages connected with the very large economies on paper and ink, and also on means necessary for preparing various coupons, cards and other similar forms used to run lotteries and totalizators. In this case, the environment is not polluted and there is a substantial reduction in expenditure on means connected, firstly, with processing said forms and, secondly, with ensuring the security measures considered on page 2 [pages 3 and 4 in the translation]. The following may be mentioned among the other advantages: the possibility for the user to exit from any event ahead of time, the possibility of organizing the totalizator between two and more users (given that at least one of them has a personal computer fulfilling the function of the CD 7), minimum expenditure on means for processing the hypothetical data, and the complete exclusion of falsification of the data recorded in the memory of the PSD. The low expenditure on means required for processing the hypothetical data is the result of its small volume, since in the case where the hypothetical and actual data do not correspond the user does not present his PSD in the data processing centre. The complete exclusion of the possibility of falsifying the hypothetical data is bound up with the fact that they are recorded not on paper but in the memory of the PSD which, firstly, is not demountable and, secondly, is equipped with sensors for various external influences, which can be used to change the hypothetical data. Moreover, it may be mentioned that even in the case of the absence of such sensors in the event of any external influence used with the aim of changing the hypothetical data, the programme controlling, in particular, the output of the hypothetical data from the PSD is also destroyed. The indirect advantages of the invention may be said to include the expected increase in the volume of sales of computer technology, and also of software for the running of chess totalizators. Thus, the invention presented opens up a new era in the relationships between the mass media and people, transforming the latter from passive observers of one or another event into active participants in it.

Industrial Applicability

The invention can be applied to events connected with running every kind of lottery and sporting totalizator. The invention can be used to popularize chess, since virtually any person who has a PSD can participate in a chess totalizator or tournament. The invention can be used by advertising agencies and companies to attract people to look at a repeated advertisement, since while it is being shown it is possible every time to

ask the simplest questions, such as those related to a manufactured product, which require operational answers. The invention can be used for organizing the mass production of PSDs in that sector of industry which manufactures integrated electronic circuits produced using KNOP technology, for example series KV1013 LSI microprocessors manufactured in Russia, or series PIC 160XX microcontrollers from MicroChip. We can give possible general (commercial) names of the PSD under which it can be produced and marketed: loter, toter, Lototer, Lottoter, toloter, totloter, chessloter, chesstoter.

Claims

1. Method for running lotteries, in which a participant (3) issues hypothetical data which is compared with actual data which can appear as a result of the termination of activities connected with the running of a lottery or some other event, for example a sporting one, the size of a win being calculated from the result of comparing said data, characterized in that each or several participants (3) use, at least, a storage device (4) having a timing unit (25), an internal memory (23) and data input/output devices (27), (29); timing data arriving from the timing unit (25) at the moment of storage (51) in said memory for hypothetical data issued by the participant (3) by using the data input device (27) are stored (52) in the internal memory (23), and for the purpose of the abovementioned comparison with actual data use is made only of that portion of the hypothetical data issued via the output device (29) from the storage device (4) which was input into its internal memory (23) up to the given moment of appearance of the actual data.
2. Method for running lotteries according to Claim 1, characterized in that the time for recording data (52) in the internal memory (23) is determined by calculating the algebraic sum of the current time for reading data from the internal memory (23), data with the sign minus the value of the time of the timing unit' (25) which it has at the moment of reading said data, and data of the timing unit (25) which were recorded in the internal memory (23) at the moment of data recording (52).
3. Method for running lotteries according to Claims 1 and 2, characterized in that when calculating the total winnings after partial or complete correspondence between the abovementioned data, the time between the appearance of the actual and hypothetical data is determined and taken into account.
4. Method for running lotteries according to Claims 1-3, characterized in that the timing unit (25) is set in such a way that its readings are always ahead of the actual time value.
5. Method for running lotteries according to Claims 1-4, characterized in that the timing unit (25) is zeroed or corrected (47) by having a signal receiver (19) receive a correcting signal transmitted before the start of running the lottery or some other event.
6. Method for running lotteries according to Claim 5, characterized in that there is recorded (47) and stored in the internal memory (23) an appropriate code which is extracted from the correcting signal received by the storage device (4).
7. Method for running lotteries according to Claims 1-6, characterized in that before the participant (3) issues the hypothetical data a code for the abovementioned event or an activity connected with said event is recorded (49), (50) in the internal memory (23) by the participant (3) using the data input device (27).
8. Method for running lotteries according to Claims 1, 2, characterized in that an audio or video signal is transmitted via communication channels (2), in the course of which signal the participant (3) can record hypothetical data in the internal memory (23).
9. Method for running lotteries according to Claims 1, 2, 3, characterized in that an original monetary amount which the participant (3) can use for playing is recorded in the internal memory (23) by using the data input device (27) to record in the internal memory (23) a requisite amount not exceeding the original monetary amount.
10. System for running lotteries, a sporting totalizator and also other events connected with conjectures about actual data on the part of participants (3) in said events, comprising a source of actual data (1), for example the lototron known per se, and, at least, one data collection centre (9) comprising means for preliminary data processing (16) which are connected to a computer (17) intended for processing the results of data conjectured by participants (3), characterized in that the participants (3) have storage devices (4) each of which comprises an internal memory (23) and also a timing unit (25) connected thereto, these being connected to a control unit (34) and to one or more data input/output devices (27), (29), the data collecting centre (9) having means for outputting data from the internal memory (23) of the storage devices (4).
11. System for running lotteries according to Claim 10, characterized in that the storage device (4) has a number of independent timing units (25).

12. System for running lotteries according to Claims 10, 11, characterized in that the data output device (29) of the storage device (4) is designed in the form of a block which permits data to be output from the internal memory (23) in a contactless fashion. 5
13. System for running lotteries according to Claims 10, 11, characterized in that the timing unit (25) is designed in such a way that, for any time interval, the difference between the time value accumulated by said unit in the course of said interval and its actual duration is positive. 10
14. System for running lotteries according to Claims 10-13, characterized in that the storage device (4) is designed in the form of an integral structure. 15
15. System for running lotteries according to Claim 10, characterized in that it comprises at least one actual data sensor (15) and one timer (13) which are connected to a central storage device (14) which is, in its turn, connected to means for preliminary data processing (16). 20

Amended claims under Art. 19.1 PCT 25

1. Method for running lotteries, in which a participant (3) issues hypothetical data which is compared with actual data which can appear at a certain moment in time as a result of the termination of activities connected with the running of a lottery or some other event, for example a sporting one, the size of a win being calculated from the result of comparing said data, characterized in that the moment in time when the actual data appears is stored, and each or several participants (3) use a storage device (4) having, at least, a timing unit (25), an internal memory (23) and data input/output devices (27), (29); data arriving from the timing unit (25) at the moment of storage (51) in said memory for hypothetical data issued by the participant (3) by using the data input device (27) are stored (52) in the internal memory (23), and for the purpose of the abovementioned comparison with actual data use is made only of that portion of the hypothetical data issued via the output device (29) from the storage device (4) which was input into its internal memory (23) up to the given moment of appearance of the actual data it being the case that the moment in time when the hypothetical data are stored in said memory is calculated after reading the current data arriving from the timing unit (25) via the output device (29) 40
2. Method for running lotteries according to Claim 1, characterized in that the time for recording data (52) in the internal memory (23) is determined by calculating the algebraic sum of the current time for 45

reading data from the internal memory (23), data with the sign minus the value of the time of the timing unit (25) which it has at the moment of reading said data, and data of the timing unit (25) which were recorded in the internal memory (23) at the moment of data recording (52).

3. Method for running lotteries according to Claims 1 and 2, characterized in that when calculating the total winnings after partial or complete correspondence between the abovementioned data, the time between the appearance of the actual and hypothetical data is determined and taken into account.
4. Method for running lotteries according to Claims 1-3, characterized in that the user (3) records (49), (50) the code of the abovementioned event, or action connected with said event in the internal memory (23) by acting on the data input device (27).
5. Method for running lotteries according to Claim 4, characterized in that the abovementioned code is stored automatically in the internal memory after it is allocated from the signal received by the storage device (4).
6. Method for running lotteries as claimed in Claims 1-5, characterized in that a monetary sum is stored in advance in the internal memory (23).
7. Method for running lotteries according to Claim 6, characterized in that a monetary sum by the magnitude of which the monetary sum stored in advance in the internal memory is reduced is stored in the internal memory (23) by the participant (3) using the data input device (27).
8. Method for running lotteries according to Claims 6-7, characterized in that the monetary sum is stored in the internal memory (23) by reading said sum, using the data input device (27), from data located on the bank credit card.
9. Method for running lotteries according to Claims 1-8, characterized in that an audio or video signal is transmitted via communication channels (2), in the course of which signal the participant (3) can record hypothetical data in the internal memory (23).
10. System for running lotteries, a sporting totalizator and also other events connected with conjectures about actual data on the part of participants (3) in said events, comprising a source of actual data (1), for example the lototron known per se, and, at least, one data collection centre (9) comprising means for preliminary data processing (16) which are connected to a computer (17) intended for processing

the results of data conjectured by participants (3), characterized in that the participants (3) have storage devices (4) each of which comprises an internal memory (23) and also a timing unit (25) connected thereto, these being connected to a control unit (34) and to one or more data input/output devices (27), (29), the data collecting centre (9) having means for outputting data from the internal memory (23) of the storage devices (4) and from the timing unit (25).

11. System for running lotteries according to Claim 10, characterized in that the storage device (4) has a number of independent timing units (25).
12. System for running lotteries according to Claims 10, 11, characterized in that the data output device (29) of the storage device (4) is designed in the form of a block which permits data to be output from the internal memory (23) in a contactless fashion.
13. System for running lotteries according to Claim 9, characterized in that it comprises at least one actual data sensor (15) and one timer (13) which are connected to a central storage device (14) which is, in its turn, connected to means for preliminary data processing (16).
14. System for running lotteries according to Claims 10-13, characterized in that the data collecting centre (9) is connected to one or several terminals (11), each of which has, at least, means for outputting data from the storage devices (4).
15. System for running lotteries according to Claims 10-14, characterized in that the storage device (4) is designed in the form of an integral structure.

40

45

50

55

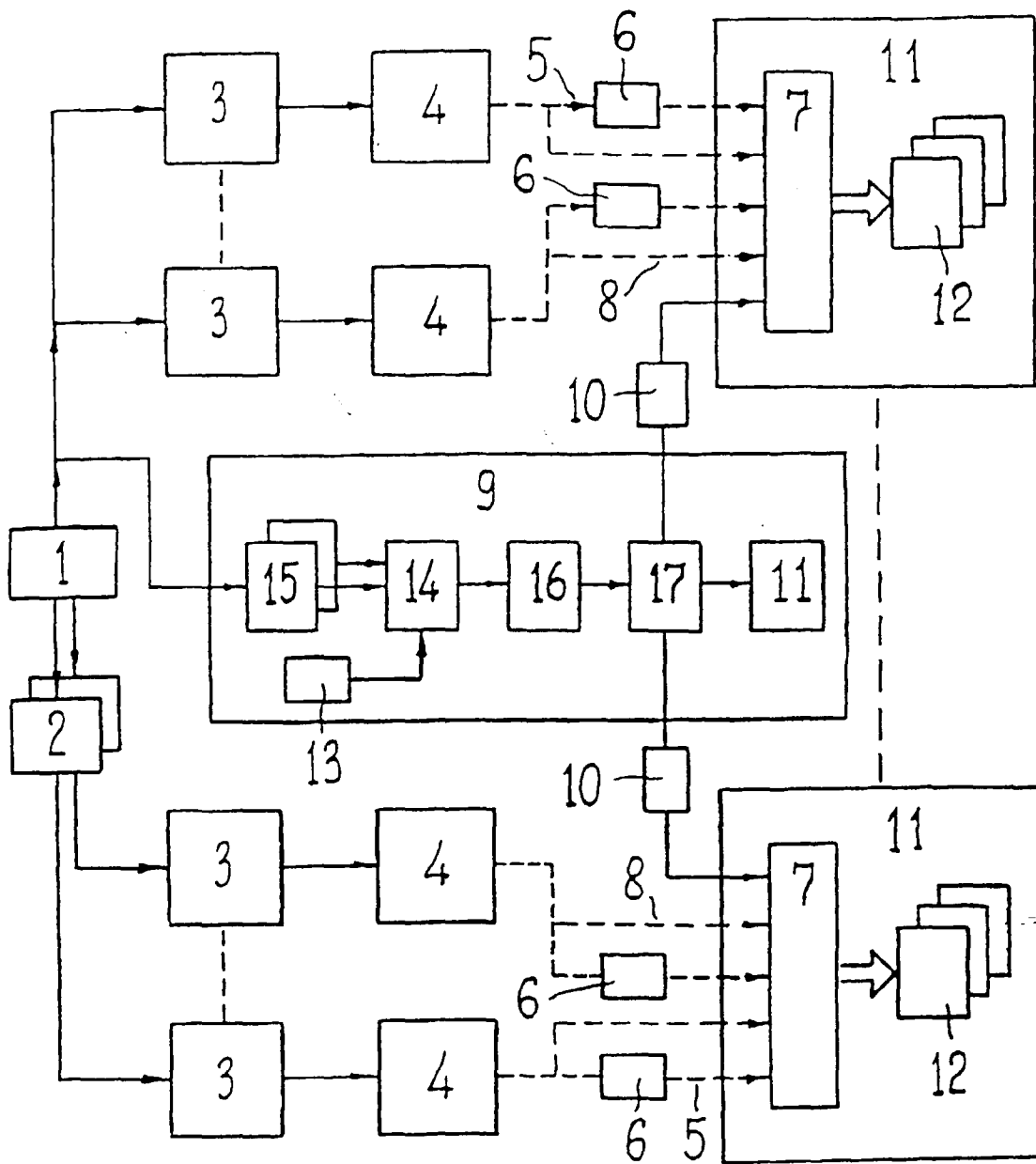


FIG. 1

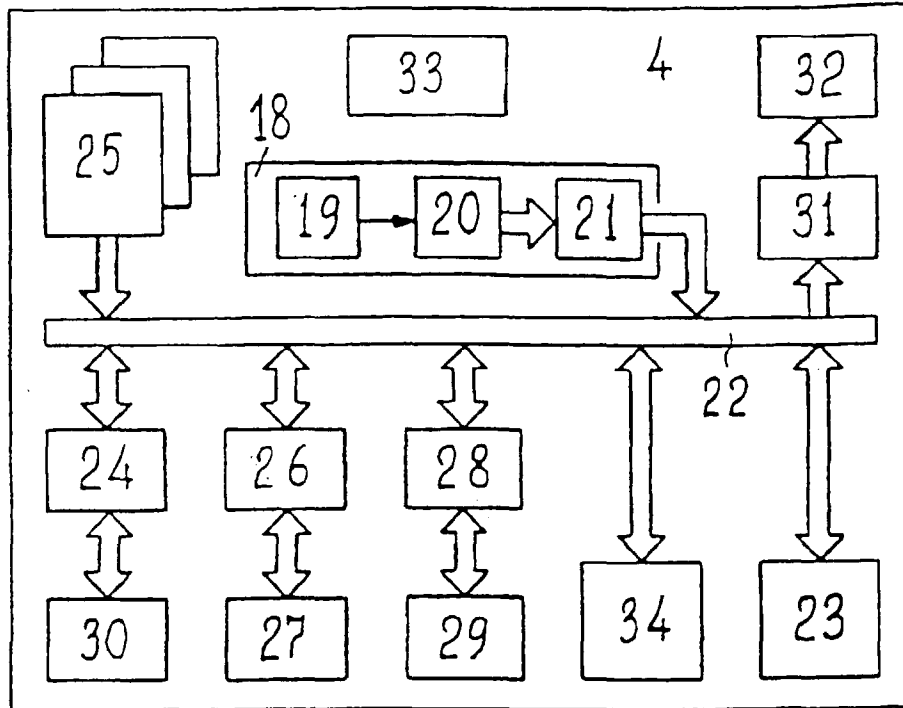


FIG. 2

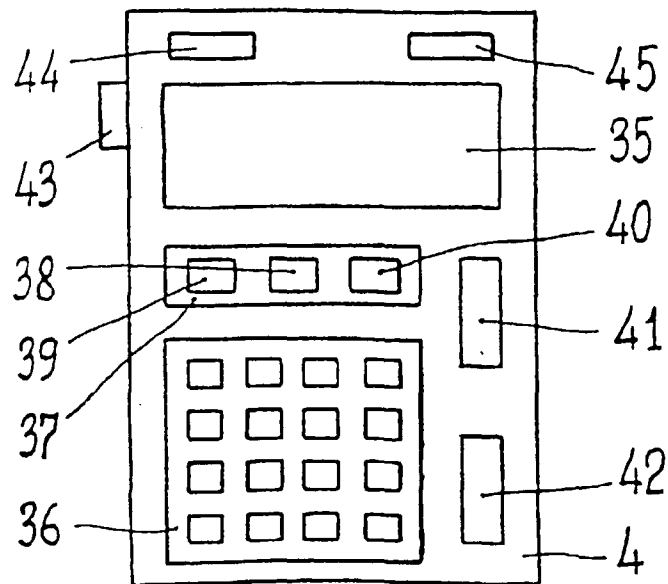


FIG. 3

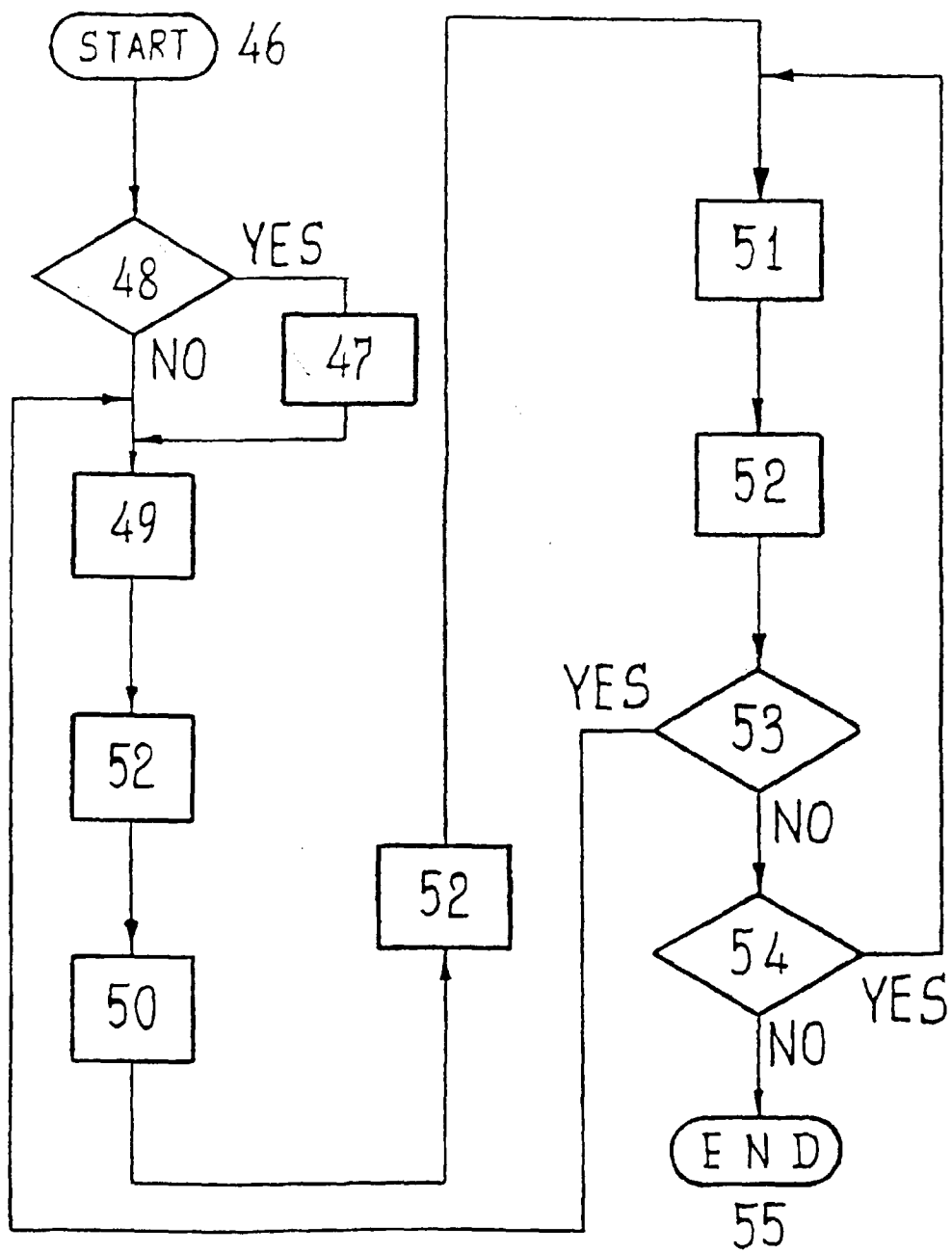


FIG. 4

INTERNATIONAL SEARCH REPORT

International application No.

PCT/RU 95/00257

A. CLASSIFICATION OF SUBJECT MATTER		
Int. Cl. ⁶ G06F 15/28		
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)		
Int. Cl. ⁶ G06F 15/28, 15/44, A63F 3/06, 9/22		
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched		
Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)		
C. DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US, A, 5257179 (WILLIAMS ELECTRONICS GAMES, INC.), 26 October 1993 (26.10.93)	1-9, 10-15
A	US, A, 5283734 (HENRY VON KOHORN), 01 February 1994 (01.02.94), figs. 4, 8	1-3, 6, 7, 10, 12, 14-15
A	US, A, 4494197 (SEYMOUR TROY et al), 15 January 1985 (15.01.85), columns 15-19, fig. 9	1, 9, 10, 14
A	US, A, 5212636 (CASIO COMPUTER Co., Ltd.), 18 May 1993 (18.05.93), fig. 17	3, 9, 10
A	US, A, 5159549 (POKER POT, Inc.), 27 October 1992 (27.10.92), fig. 2	10-15
A	US, A, 4592546 (DAVID B. LOCKTON), 3 June 1986 (03.06.86)	1-9
☐ Further documents are listed in the continuation of Box C. ☐ 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 document 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
6 June 1996 (06.06.96)		11 June 1996 (11.06.96)
Name and mailing address of the ISA/ RU		Authorized officer
Facsimile No.		Telephone No.

Form PCT/ISA/210 (second sheet) (July 1992)