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(54) **DISPENSING MACHINE**

AUSGABEAUTOMAT

MACHINE DE DISTRIBUTION

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EP 0 764 925 B1

Description

[0001] The present invention consists of a vending machine with image or symbol display means and means to dispense prizes in the form of, for example, product gift tickets or coupons, in such a way that when a product is sold, different changing symbols which after a given time remain immobilized are shown, for example on a monitor screen, and if the symbols coincide or correspond to a certain combination, a prize is dispensed. Advertising elements may appear in the symbol display means when the machine is not dispensing a sold product.

[0002] The use of vending machines, which are provided with a slot to insert coins and with a series of button or push buttons by means of which the desired product is chosen is conventionally and extensively known. The product is dispensed on a tray made for this purpose and then the change is returned in the event that the coins inserted do not correspond to the exact price.

[0003] Now then, this type of machine operates controlled by a microprocessor which generates the corresponding signals to activate the dispensing of the chosen product.

[0004] These machines operate autonomously and do not allow their connection to other elements, to carry out other functions that can be combined with the dispensing of a product, which constitutes an inconvenience.

[0005] On the other hand, vending machines have a limited capacity to stimulate the selling of the goods they contain, since they only allow for "static" advertizing.

[0006] US-A-4213524 US-A-3750829 and ES-U-1027011 disclose different vending machines according to the preamble of claim 1. GB-A-2258164 discloses a gaming machine which can be operated only after purchase of a specific product or service. GB-A-2086115 discloses a gaming machine including a video display unit.

[0007] In order to overcome the above cited inconveniences and to achieve the aims commented on in the corresponding section, the invention consists of a vending machine according to claim 1 that has some first product sale indicating means, that are related to some second display means of images or of at least one symbol, in such a way that when a sale takes place, a changing or, preferably, several changing symbols are shown, thanks to some third means to vary said symbols.

[0008] The second image display means are related to some fourth means that stop and immobilize the symbol or changing symbols that act at a specific instant.

[0009] Besides, it has some fifth means to recognize said symbol or said fixed symbols that generate a signal, in the event that they are identical or correspond to a specific symbol or a specific combination of symbols. This signal activates some sixth means to dispense a prize, that may be a product gift coupon.

[0010] Basically, the second, third, fourth, fifth and

sixth means can be made and interrelated in known ways, such as for example in "slot machines". However, while in a "slot machine" the symbol display means, the means to vary the displayed symbols, the symbol immobilization means, the fixed symbol recognition means and the prize dispensing means are activated by inserting a coin and optionally by means of a lever and/or buttons, in the machine according to the present inventions the corresponding means (that is to say, the second, third, fourth, fifth and sixth means) are activated by means of the sale and/or previous dispensing of a product, thanks to the inclusion of the first product sale indicating means. Said product sale indicating means can include means that emit a signal when said sale begins, for example, when the button or push button corresponding to the desired product is pushed. The signal that these means emit can activate the second, third, fourth, fifth and sixth means by the means known in said "slot machines".

[0011] According to a preferred embodiment of the present invention, the machine includes some seventh sold product recognition means, the seventh means being related to the second, third, fourth, fifth and sixth means in such a way that the operation of the latter depends on the article sold. The seventh means can be related to the second, third, fourth, fifth and sixth means in such a way that the prize is only dispensed if the seventh means indicate the sale of a specific product or of some specific products. Alternately, the seventh means can be related to the second, third, fourth, fifth and sixth means in such a way that the variation of the symbols displayed only starts when a specific product is sold. According to another alternate embodiment, the symbol variation - immobilization process and the subsequent dispensing of the prize, that the second, third, fourth, fifth and sixth means carry out, is modified depending on the product sold; for example, the sale of a specific product could give rise to the symbol variation-immobilization process repeating itself once or several times, which implies that certain products offer greater possibilities of winning a prize.

[0012] The second symbol display means are determined by a monitor in which the changing symbols can be framed in square divisions. The monitor may show advertizing elements when the vending machine is not dispensing any sold product.

[0013] The monitor forms part of a computer, that is connected to the microprocessor of the vending machine by means of a communication channel, preferably a serial communication channel.

[0014] The first product sale indicating means as well as the seventh product recognition means can be materialized in the microprocessor of the vending machine, which generates, with each sale, a code corresponding to the sold product, that may be received by a central processing unit of the communication channel, which in terms of the captured code, actuates the corresponding process in accordance with the described functioning.

[0015] However, in order to implement the present invention in conventional vending machines without having to modify the microprocessors thereof, the first product sale indicating means as well as, optionally, the seventh sold product recognition means according to the invention are provided in the central processing unit of the communication channel.

[0016] The second, third, fourth and fifth means are materialized in the computer that includes the monitor.

[0017] Likewise, the second display means may be defined by a series of rollers similar to those in "slot machines" that have the different symbols that are to be displayed printed on them.

[0018] Therefore, the operating sequence of the different means in view of a purchase operation by a customer could be the following:

- A customer inserts the amount in the vending machine and chooses the desired product by way of, for example, pushing a corresponding button.
- The vending machine dispenses the chosen product. In turn, the first sale indicating means detect said sale and send a signal to the third means that vary the represented symbols, whereby a display of changing symbols begins on the second symbol display means, for example, on a monitor.
- This variation of symbols is maintained for a specific amount of time until the fourth symbol immobilization means, which for example receive a signal from the third means when they start to vary the displayed symbols, stop said variation and leave the resulting combination of symbols of said temporary variation fixed on the monitor.
- The resulting fixed combination is recognized by the fifth recognition means, that receive information from, for example, the second display means or the fourth immobilization means and, based on this information, they evaluate if the fixed symbols correspond to a predetermined combination of symbols, in which case the fifth recognition means send a signal to the sixth prize dispensing means that act either directly on the vending machine giving the machine a prize, for example a gift product, or else on a prize coupon or ticket dispensing means.

[0019] Hereinafter to provide a better understanding of this specification and forming an integral part of the same, a series of figures in which the object of the invention is represented in an illustrative and non-restrictive manner, is attached hereto.

[0020] Figure 1 shows a functional block diagram of the different elements that comprise the vending machine object of the invention.

[0021] Figure 2 shows a functional block diagram of the communications card or channel that provide the connection of the vending machine to the image display means, which in a preferred embodiment, are defined by a computer.

[0022] Figure 3 shows a perspective view of the outside appearance of the vending machine in a preferred embodiment.

[0023] Figure 4 shows in a block diagram a possible interrelationship between the first, second, third, fourth, fifth and sixth means.

[0024] Figure 5 shows in a block diagram a possible interrelationship between the first, second, third, fourth, fifth, sixth and seventh means.

[0025] Hereinafter a description of the invention based on the above cited figures is made.

[0026] In a preferred embodiment of the invention, a vending machine (1) (10) is provided with a connection to a computer (3), so that a communication channel (2), preferably a serial communication channel is inserted between them.

[0027] The vending machine (1) (10) is a conventional type one and operates automatically controlled by a microprocessor that carries out the instructions stored in a memory, for example an EPROM, so that each time a sale is made, it is detected and a code corresponding to the sold product is generated.

[0028] On its part, the communication card or channel (2) has a central processing unit (9), which includes an EPROM (4) wherein the operating program is stored, and which also includes a temporary data storage memory (5).

[0029] The connection of the communication channel (2) to the microprocessor of the vending machine (1) is done by means of a connector (6).

[0030] On the other hand, the central processing unit (9) is connected to an interface (8) which through a connector (7) materializes the connection to the computer (3).

[0031] The interface converts the signals generated by the central processing unit to the RS-232 protocol.

[0032] The computer (3) has a monitor (11) on which images are shown, which in the event the vending machine (1) (10) does not make any sale, represent advertising elements.

[0033] When the purchase of a product is made, just as it has already been commented on, the code corresponding to said product is generated and is received by the central processing unit (9), which recognizes said code and in terms thereof a program stored in the EPROM (4) that sends the corresponding signals to the computer (3) is run so that a series of square divisions in which the different changing symbols are included are displayed on the screen.

[0034] Said symbols may be brands of products or any other type of element.

[0035] The symbols, after a purchase is made, change until when in a specific instant, governed by the program, they become immobilized, and the symbols obtained in each one of the square divisions are recognized; in such a way that if said symbols coincide in all the square divisions, a signal is generated by the computer (3) so that it dispenses a prize, for example a ticket

that represents a gift product coupon.

[0036] Thus for example, if the coinciding symbols correspond to a specific brand, the gift may refer to said brand.

[0037] Obviously, the computer (3) may have a ticket dispenser of the types conventionally used on the market.

[0038] The recognition of the symbols can, likewise, be done by a program as is conventionally done in other uses.

[0039] If the symbols obtained after their immobilization does not coincide in the different square divisions, or once the coupon has been dispensed; then, in a preferred embodiment of the invention, the central processing unit (9) determines if the product sold by the vending machine (1) (10) is or is not being promoted, a circumstance in which the same process of placing changing symbols on the square divisions takes place again. At a certain moment the symbols stop and if they are the same in all of the square divisions, a new ticket corresponding to a gift coupon, which may, for example, be related to the old product, is dispensed.

[0040] If the product that has been sold by the vending machine (1) (10) is not being promoted, then the selling process is considered as completed, and different advertising elements that may, likewise, change from time to time, appear again on the screen.

[0041] The computer (3) has stored the program that manages the different images to be shown on the screen, and the program operating the symbols and identifying the symbols that remain fixed in each one of the square divisions.

[0042] From what has been said, it is clearly deduced, that information can be transferred between the computer (3) and the central processing unit (9), which can manage all the data and carry out statistics or any other type of remote control through the described serial connection.

[0043] In the event that the vending machine (1) (10) does not have a ticket printer (12), it should be included to complete the described functioning.

[0044] Likewise, by means of the communication card or channel (2), remote control of the sales carried out by the vending machine (1) (10) may be done, aside from knowing the statistics and state of the computer (3), commented on above.

[0045] In figure 3, one sees a perspective view of the outside appearance of a possible preferred embodiment wherein the monitor (11) remains located in the top part of the vending machine (10), just like the ticket printer (12).

[0046] Referring to figures 4 and 5, the present invention can operate in the following manner:

[0047] A customer inserts the amount in the vending machine (1) (10) and chooses the desired product by way, for example, of pushing a corresponding button. Then, the vending machine (1) (10) dispenses the chosen product. In turn, the first sale indicating means (13)

detect said sale and activate, by means of a signal, the third means (15) to vary the displayed symbols, whereby a display of changing symbols on the second symbol display means (14) begins, for example on a monitor (11).

[0048] This variation of symbols takes place for a specific amount of time until the fourth means (16) that immobilize the symbols, that for example receive a signal from the third means (15), stop said variation and leave the combination of symbols resulting from said temporary variation fixed on the monitor (11).

[0049] The resulting fixed combination, is recognized by the fifth recognition means that receive information from, for example, the second display means (14) or the fourth immobilization means (16) and, based on this information, they evaluate if the fixed symbols correspond to a predetermined combination of symbols, in which case the fifth recognition means (17) send a signal to the sixth prize dispensing means (18) that act either directly on the vending machine (1) (10) giving it a gift product, or else on a prize ticket dispensing means.

[0050] In figure 5, one can see how the seventh sold product recognition means (19), which for example receive their information from the first sold product indicating means (13) or from another suitable source, are to act on the different means for the purpose of the process depending on the sold product.

[0051] The first sold product indicating means (13) (and, optionally, the seventh sold product recognition means) are provided in the central processing unit (9) of the communication channel (2), while the second means (14), third means (15), fourth means (16) and fifth means (17) are materialized in the computer (3), for example based on suitable programs.

Claims

1. Vending machine that has means to effect the sale of products, including:

first product sale indicating means (13);
second means (14) to display at least one symbol;
third means (15) to vary the displayed symbol;
fourth symbol immobilisation means (16);
fifth means (17) to recognise at least one fixed symbol;
and sixth prize dispensing means (18);
the first (13), second (14), third (15), fourth (16), fifth (17) and sixth (18) means being related in such a way that, upon the first means (13) indicating the sale of a product, the second (14), third (15), fourth (16) and fifth (17) means are activated in such a way that the second means (14) display at least one fixed symbol and, upon displaying a determined symbol, the fifth means (17) act on the sixth means (18) so that

a prize is dispensed;

characterised in that

the second means (14) to display at least one symbol include a monitor (11) that forms part of a computer (3) that is connected to a microprocessor of the vending machine (1)(10) by means of a communication channel, the first product sale indicating means (13) being comprised in a central processing unit (9) of the communication channel (2) that includes means to receive a code corresponding to a sold product, while the second (14), third (15), fourth (16) and fifth (17) means are comprised in the computer (3) that includes the monitor (11).

2. Vending machine according to claim 1, characterized in that the second means (14) are means to display more than one symbol and in that the first (13), second (14), third (15), fourth (16), fifth (17) and sixth (18) means are related in such a way that, upon the first means (13) indicating the sale of a product, the second (14), third (15), fourth (16) and fifth (17) means are activated in such a way that the second means (14) display a combination of fixed symbols and, upon displaying a specific combination, the fifth (17) means act on the sixth means (18) in such a way that a prize is dispensed.

3. Vending machine according to any of the above claims, characterized in that the first (13), second (14), third (15) and fourth (16) means are related in such a way that, upon the first means (13) indicating the sale of a product, the third (15) and fourth (16) means act on the second means (14) in such a way that the third means (15) start the variation of at least one symbol, the second means (14) showing said variation and, at a specific moment, the fourth means (16) immobilize said symbol so that the second means (14) display said fixed symbol.

4. Vending machine according to claim 3, characterized in that the first (13), second (14), third (15) and fourth (16) means are related in such a way that, upon the first means (13) indicating the sale of a product, the third (15) and fourth (16) means act on the second means (14) in such a way that the third means (15) start the display of a plurality of changing symbols and, at a specific moment, the fourth means (16) immobilize said plurality of changing symbols so that the second means (14) display a combination of fixed symbols.

5. Vending machine according to any of the above claims, characterized in that it includes seventh sold product recognition means (19), the seventh means (19) being related to the second (14), third (15), fourth (16), fifth (17) and sixth (18) means in such a way that the operation thereof depends on the

sold article.

6. Vending machine according to claim 5, characterized in that the seventh means (19) are related to the second (14), third (15), fourth (16), fifth (17) and sixth (18) means so that the prize is only dispensed if the seventh means (19) indicate the sale of a specific product or of one of several specific products.

7. Vending machine according to any of the above claims, characterized in that the symbols includes symbols related to the goods that are sold, the different means being related in such a way that the prize is only dispensed in the event that the fixed symbol or combination of fixed symbols corresponds to the symbols related to the sold product.

8. Vending machine according to any of the above claims, characterized in that the second display means (14) of at least one symbol include a monitor wherein the symbols remain framed in square divisions, the vending machine (1) (10) including eighth means to show advertising elements on said monitor (11) when the vending machine (1) (10) is not selling any product.

9. Vending machine according to claim 5, characterized in that the first product sale indicating means (13) and the seventh sold product recognition means (19) are comprised in a central processing unit (9) of the communication channel (2).

10. Vending machine according to any of the above claims, characterized in that the first product sale indicating means (13) include means to send a signal to the third means (14) to vary the displayed symbol.

11. Vending machine according to any of the above claims, characterized in that the sixth prize dispensing means (18) include means to dispense a product gift ticket or coupon.

12. Vending machine according to any of the above claims, characterized in that the central processing unit (9) of the communication channel (2) includes a memory (4) that stores an operating program; a temporary data storage memory (5); a connector (6) for connection thereof to the microprocessor of the vending machine (1) (10); and an interface (8) for connection thereof to the computer (3) by means of a connector (7).

13. Vending machine according to any of the claims 1, 9 and 12, characterized in that the communication channel (2) is a serial communication channel.

Patentansprüche

1. Ausgabeautomat mit Einrichtungen zum Verkauf von Erzeugnissen, die einschließen:

eine erste Einrichtung (13) zum Anzeigen des Verkaufs eines Erzeugnisses;

eine zweite Einrichtung (14) zum Anzeigen wenigstens eines Symbols;

eine dritte Einrichtung (15) zum Verändern des angezeigten Symbols;

eine vierte Einrichtung (16) zum Fixieren eines Symbols;

eine fünfte Einrichtung (17) zum Erkennen wenigstens eines fixierten Symbols;

und eine sechste Einrichtung (18) zum Ausgeben eines Preises;

wobei die erste (13), die zweite (14), die dritte (15), die vierte (16), die fünfte (17) und die sechste (18) Einrichtung so zueinander in Beziehung stehen, daß, wenn die erste Einrichtung (13) den Verkauf eines Erzeugnisses anzeigt, die zweite (14), die dritte (15), die vierte (16) und die fünfte (17) Einrichtung so aktiviert werden, daß die zweite Einrichtung (14) wenigstens ein festes Symbol anzeigt, und die fünfte Einrichtung (17) beim Anzeigen eines vorgegebenen Symbols so auf die sechste Einrichtung (18) einwirkt, daß ein Preis ausgegeben wird;

dadurch gekennzeichnet, daß:

die zweite Einrichtung (14) zum Anzeigen wenigstens eines Symbols einen Monitor (11) enthält, der einen Teil eines Computers (3) bildet, der über einen Übertragungskanal mit einem Mikroprozessor des Ausgabeautomaten (1) verbunden ist, wobei die erste Einrichtung (13) zum Anzeigen des Verkaufs eines Erzeugnisses zu einer zentralen Verarbeitungseinheit (9) des Übertragungskanals gehört, die eine Einrichtung zum Empfang eines Codes enthält, der einem verkauften Erzeugnis entspricht, während die zweite (14), die dritte (15), die vierte (16) und die fünfte (17) Einrichtung zu dem Computer (3) gehören, der den Monitor (11) enthält.

2. Ausgabeautomat nach Anspruch 1, **dadurch gekennzeichnet**, daß die zweite Einrichtung (14) eine Einrichtung zur Anzeige mehr als eines Symbols ist, und dadurch, daß die erste (13), die zweite (14), die dritte (15), die vierte (16), die fünfte (17) und die sechste (18) Einrichtung so miteinander verbunden sind, daß, wenn die erste Einrichtung (13) den Ver-

kauf eines Erzeugnisses anzeigt, die zweite (14), die dritte (15), die vierte (16) und die fünfte (17) Einrichtung so aktiviert werden, daß die zweite Einrichtung (14) eine Kombination fixierter Symbole anzeigt und beim Anzeigen einer bestimmten Kombination die fünfte (17) Einrichtung so auf die sechste Einrichtung (18) einwirkt, daß ein Preis ausgegeben wird.

3. Ausgabeautomat nach einem der obenstehenden Ansprüche, **dadurch gekennzeichnet**, daß die erste (13), die zweite (14), die dritte (15) und die vierte (16) Einrichtung so zueinander in Beziehung stehen, daß, wenn die erste Einrichtung (13) den Verkauf eines Erzeugnisses anzeigt, die dritte (15) und die vierte (16) Einrichtung so auf die zweite Einrichtung (14) einwirken, daß die dritte Einrichtung (15) die Änderung wenigstens eines Symbols auslöst, die zweite Einrichtung (14) die Änderung anzeigt und die vierte Einrichtung (16) zu einem bestimmten Zeitpunkt das Symbol fixiert, so daß die zweite Einrichtung (14) das fixierte Symbol anzeigt.

4. Ausgabeautomat nach Anspruch 3, **dadurch gekennzeichnet**, daß die erste (13), die zweite (14), die dritte (15) und die vierte (16) Einrichtung so zueinander in Beziehung stehen, daß, wenn die erste Einrichtung (13) den Verkauf eines Erzeugnisses anzeigt, die dritte (15) und die vierte (16) Einrichtung so auf die zweite Einrichtung (14) einwirken, daß die dritte Einrichtung (15) die Anzeige einer Vielzahl sich ändernder Symbole auslöst, und die vierte Einrichtung (16) zu einem bestimmten Zeitpunkt die Vielzahl sich ändernder Symbole fixiert, so daß die zweite Einrichtung (14) eine Kombination fixierter Symbole anzeigt.

5. Ausgabeautomat nach einem der obenstehenden Ansprüche, **dadurch gekennzeichnet**, daß er eine siebente Einrichtung (19) zum Erkennen eines verkauften Erzeugnisses enthält, wobei die siebente Einrichtung (19) so zu der zweiten (14), der dritten (15), der vierten (16), der fünften (17) und der sechsten (18) Einrichtung in Beziehung steht, daß die Funktion derselben von dem verkauften Artikel abhängt.

6. Ausgabeautomat nach Anspruch 5, **dadurch gekennzeichnet**, daß die siebente Einrichtung (19) so zu der zweiten (14), der dritten (15), der vierten (16), der fünften (17) und der sechsten (18) Einrichtung in Beziehung steht, daß der Preis nur ausgegeben wird, wenn die siebente Einrichtung (19) den Verkauf eines bestimmten Erzeugnisses oder eines von mehreren bestimmten Erzeugnissen anzeigt.

7. Ausgabeautomat nach einem der vorangehenden Ansprüche, **dadurch gekennzeichnet**, daß die

Symbole Symbole enthalten, die sich auf die Erzeugnisse beziehen, die verkauft werden, wobei die verschiedenen Einrichtungen so zueinander in Beziehung stehen, daß der Preis nur dann ausgegeben wird, wenn das fixierte Symbol oder die Kombination fixierter Symbole den Symbolen entspricht, die sich auf das verkaufte Erzeugnis beziehen.

8. Ausgabeautomat nach einem der vorangehenden Ansprüche, **dadurch gekennzeichnet**, daß die zweite Einrichtung (14) zum Anzeigen wenigstens eines Symbols einen Monitor enthält, wobei die Symbole in quadratischen Unterteilungen eingerahmt bleiben und der Ausgabeautomat (1) (10) acht Einrichtungen zum Zeigen von Werbeelementen auf dem Monitor (11) enthält, wenn der Ausgabeautomat (1) (10) kein Erzeugnis verkauft. 5 10
9. Ausgabeautomat nach Anspruch 5, **dadurch gekennzeichnet**, daß die erste Einrichtung (13) zum Anzeigen des Verkaufs eines Erzeugnisses und die siebente Einrichtung (19) zum Erkennen des verkauften Erzeugnisses zu einer zentralen Verarbeitungseinheit (9) des Übertragungskanals (2) gehören. 15 20 25
10. Ausgabeautomat nach einem der vorangehenden Ansprüche, **dadurch gekennzeichnet**, daß die erste Einrichtung (13) eine Einrichtung enthält, die ein Signal zum Ändern des angezeigten Symbols zu der dritten Einrichtung (14) sendet. 30
11. Ausgabeautomat nach einem der vorangehenden Ansprüche, **dadurch gekennzeichnet**, daß die sechste Einrichtung (18) zum Ausgeben eines Preises eine Einrichtung zum Ausgeben eines Erzeugnis-Geschenkcoupons bzw. eines Gutscheins enthält. 35
12. Ausgabeautomat nach einem der vorangehenden Ansprüche, **dadurch gekennzeichnet**, daß die zentrale Verarbeitungseinheit (9) des Übertragungskanals (2) einen Speicher (4) enthält, der ein Betriebsprogramm speichert; einen temporären Datenspeicher (5); einen Verbinder (6) zum Verbinden desselben mit dem Mikroprozessor des Ausgabeautomaten (1) (10); sowie eine Schnittstelle (8) zum Verbinden desselben mit dem Computer (3) über einen Verbinder (7). 40 45
13. Ausgabeautomat nach einem der Ansprüche 1, 9 und 12, **dadurch gekennzeichnet**, daß es sich bei dem Übertragungskanal (2) um einen seriellen Übertragungskanal handelt. 50

Revendications

1. Distributeur qui a des moyens pour effectuer la ven-

te de produits, comprenant :

un premier moyen d'indication de vente de produit (13) ;
 un second moyen (14) pour afficher au moins un symbole ;
 un troisième moyen (15) pour faire varier le symbole affiché ;
 un quatrième moyen d'immobilisation du symbole (16) ;
 un cinquième moyen (17) pour reconnaître au moins un symbole fixe ; et
 un sixième moyen de distribution de lot (18) ;
 les premier (13), second (14), troisième (15), quatrième (16), cinquième (17) et sixième (18) moyens étant liés de manière telle que, à l'indication par le premier moyen (13) de la vente d'un produit, les second (14), troisième (15), quatrième (16) et cinquième (17) moyens sont activés de manière telle que le second moyen (14) affiche au moins un symbole fixe et, lors de l'affichage d'un symbole déterminé le cinquième moyen (17) agit sur le sixième moyen (18) pour que le lot soit distribué ;

caractérisé en ce que ;

le second moyen (14) pour afficher au moins un symbole comprend un moniteur (11) qui fait partie d'un ordinateur (3) qui est raccordé à un microprocesseur du distributeur (1) (10) au moyen d'un canal de communication, le premier moyen d'indication de vente de produit (13) étant compris dans une unité centrale de traitement (9) du canal de communication (2) qui comprend un moyen pour recevoir un code correspondant à un produit vendu, alors que les second (14), troisième (15), quatrième (16) et cinquième (17) moyens sont compris dans l'ordinateur (3) qui comprend le moniteur (11).

2. Machine de vente selon la revendication 1, caractérisée en ce que le second moyen (14) est un moyen pour afficher plus qu'un symbole et en ce que les premier (13), second (14), troisième (15), quatrième (16), cinquième (17) et sixième (18) moyens sont liés de manière telle que lors de l'indication par le premier moyen (13) de la vente d'un produit, les second (14), troisième (15), quatrième (16) et cinquième (17) moyens sont activés de manière telle que le second moyen (14) affiche une combinaison des symboles fixés et, lors de l'affichage d'une combinaison spécifique, le cinquième (17) moyen agit sur le sixième moyen (18) de manière telle qu'un lot est distribué. 45 50
3. Distributeur selon l'une quelconque des revendications précédentes, caractérisé en ce que les premier (13), second (14), troisième (15) et quatrième (16) moyens sont liés de manière telle que, lors de

l'indication par le premier moyen (13) de la vente d'un produit, les troisième (15) et quatrième (16) moyens agissent sur le second moyen (14) de manière telle que le troisième moyen (15) commence la variation d'au moins un symbole, le second moyen (14) montrant ladite variation et, à un instant spécifique, le quatrième moyen (16) immobilise ledit symbole pour que le second moyen (14) affiche ledit symbole fixé.

4. Distributeur selon la revendication 3, caractérisé en ce que les premier (13), second (14), troisième (15) et quatrième (16) moyens sont liés de manière telle que lors de l'indication par le premier moyen (13) de la vente d'un produit, les troisième (15) et quatrième (16) moyens agissent sur le second moyen (14) de manière telle que le troisième moyen (15) commence l'affichage d'une pluralité de symboles changeants et, à un moment spécifique, le quatrième moyen (16) immobilise ladite pluralité de symboles changeants pour que le second moyen (14) affiche une combinaison des symboles fixes.

5. Distributeur selon l'une quelconque des revendications précédentes, caractérisé en ce qu'il comprend un septième moyen de reconnaissance de produit vendu (19), le septième moyen (19) étant lié au second (14), au troisième (15), au quatrième (16), au cinquième (17) et au sixième (18) moyens de manière telle que le fonctionnement de celui-ci dépende de l'article vendu.

6. Distributeur selon la revendication 5, caractérisé en ce que les septièmes moyens (19) sont liés au second (14), troisième (15), quatrième (16), cinquième (17) et sixième (18) moyens pour que le lot soit seulement distribué si le septième moyen (19) indique la vente d'un produit spécifique ou d'un de plusieurs produits spécifiques.

7. Distributeur selon l'une quelconque des revendications précédentes, caractérisé en ce que les symboles comprennent des symboles liés aux marchandises qui sont vendues, les différents moyens étant liés de manière telle que le lot est seulement distribué dans le cas où le symbole fixe ou la combinaison des symboles fixe correspond au symbole lié au produit vendu.

8. Distributeur selon l'une quelconque des revendications précédentes, caractérisé en ce que le second moyen d'affichage (14) d'au moins un symbole comprend un moniteur dans lequel les symboles restent cadrés dans des divisions carrées, le distributeur (1) (10) comprenant un huitième moyen pour montrer des éléments de publicité sur ledit moniteur (11) lorsque le distributeur (1) (10) n'est pas en train de vendre un produit quelconque.

9. Distributeur selon la revendication 5, caractérisé en ce que le premier moyen d'indication de vente de produit (13) et le septième moyen de reconnaissance de produit vendu (19) sont composés dans une unité centrale de traitement (9) du canal de communication (2).

10. Distributeur selon l'une quelconque des revendications précédentes, caractérisé en ce que le premier moyen d'indication de vente de produit (13) comprend un moyen pour envoyer un signal au troisième moyen (14) pour faire varier le symbole affiché.

11. Distributeur selon l'une quelconque des revendications précédentes, caractérisé en ce que le sixième moyen de distribution de lot (18) comprend un moyen pour distribuer un ticket ou un coupon cadeau de produit.

12. Distributeur selon l'une quelconque des revendications précédentes, caractérisé en ce que l'unité centrale de traitement (9) du canal de communication (2) comprend une mémoire (4) qui stocke un programme de fonctionnement ; une mémoire de stockage de données temporaires (5) ; un connecteur (6) pour raccorder celle-ci au microprocesseur du distributeur (1) (10) ; et une interface (8) pour connecter celle-ci à l'ordinateur (3) au moyen d'un connecteur (7).

13. Distributeur selon l'une quelconque des revendications 1, 9 et 12 caractérisé en ce que le canal de communication (2) est un canal de communication série.

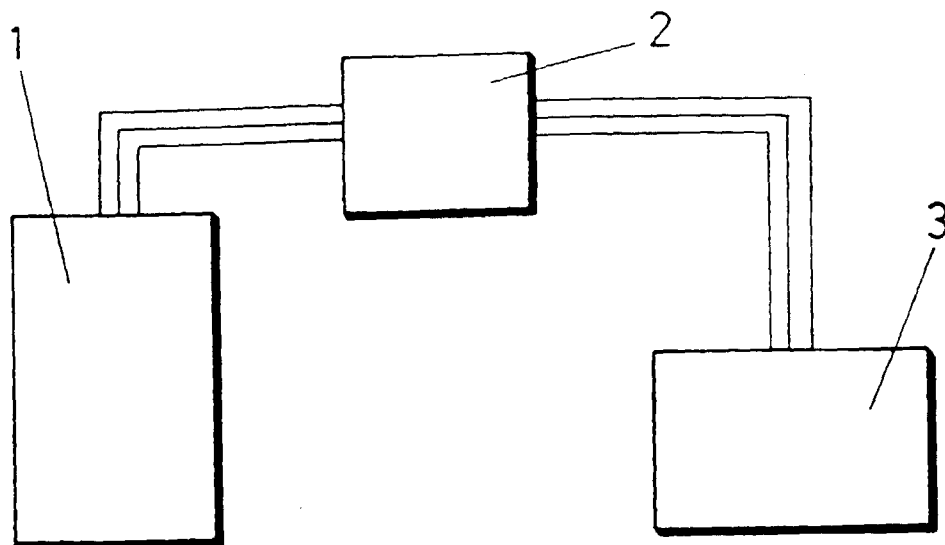


FIG. 1

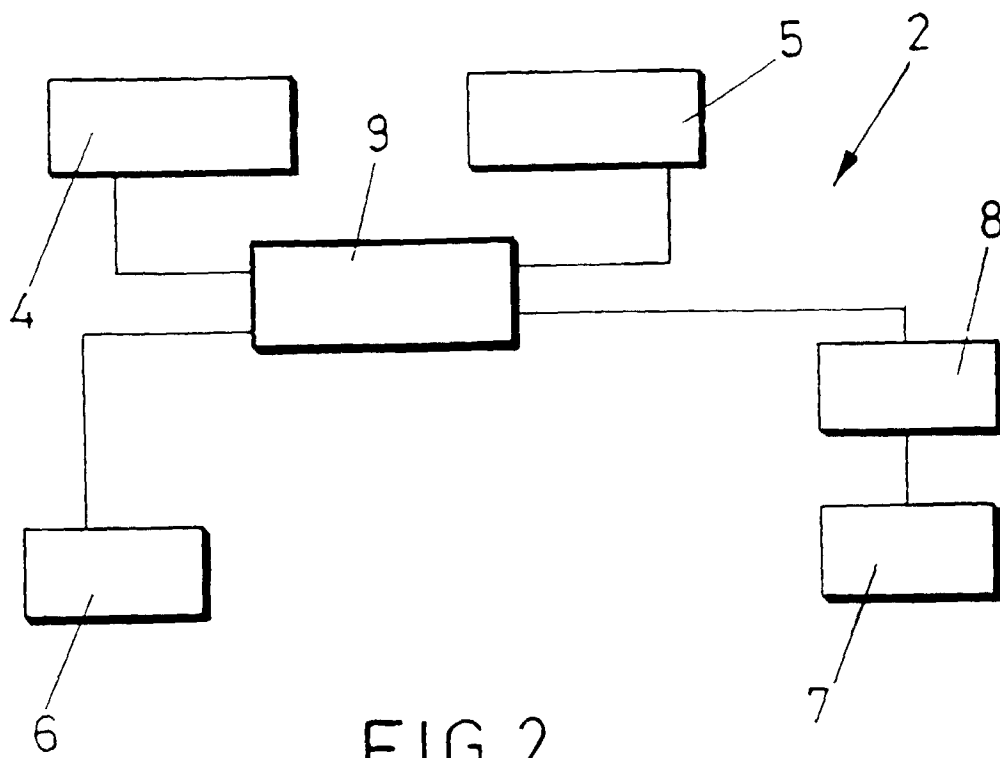


FIG. 2

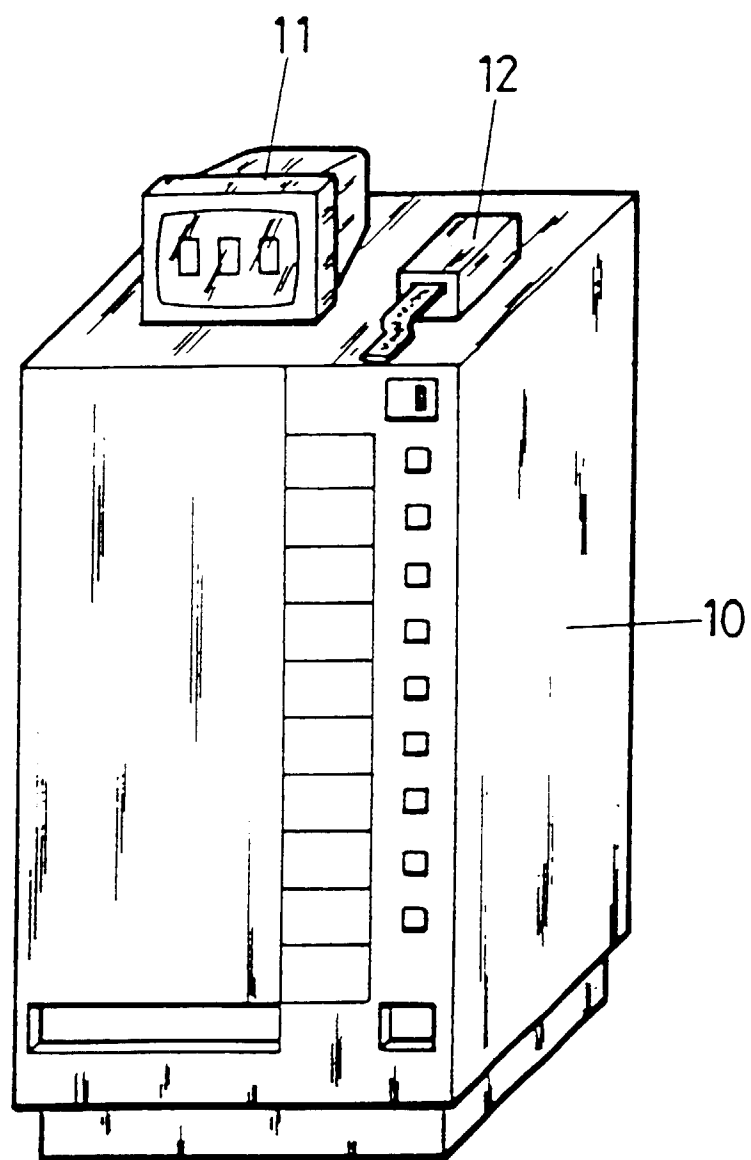


FIG. 3

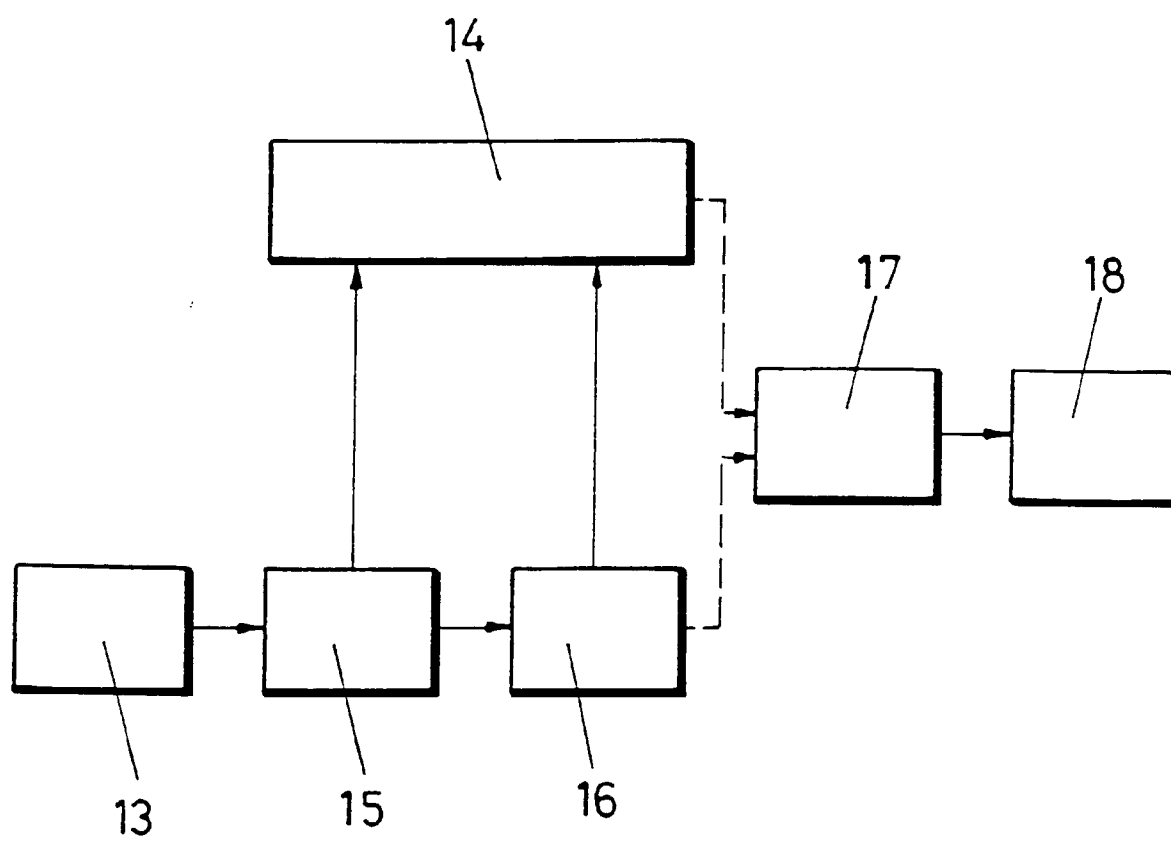


FIG. 4

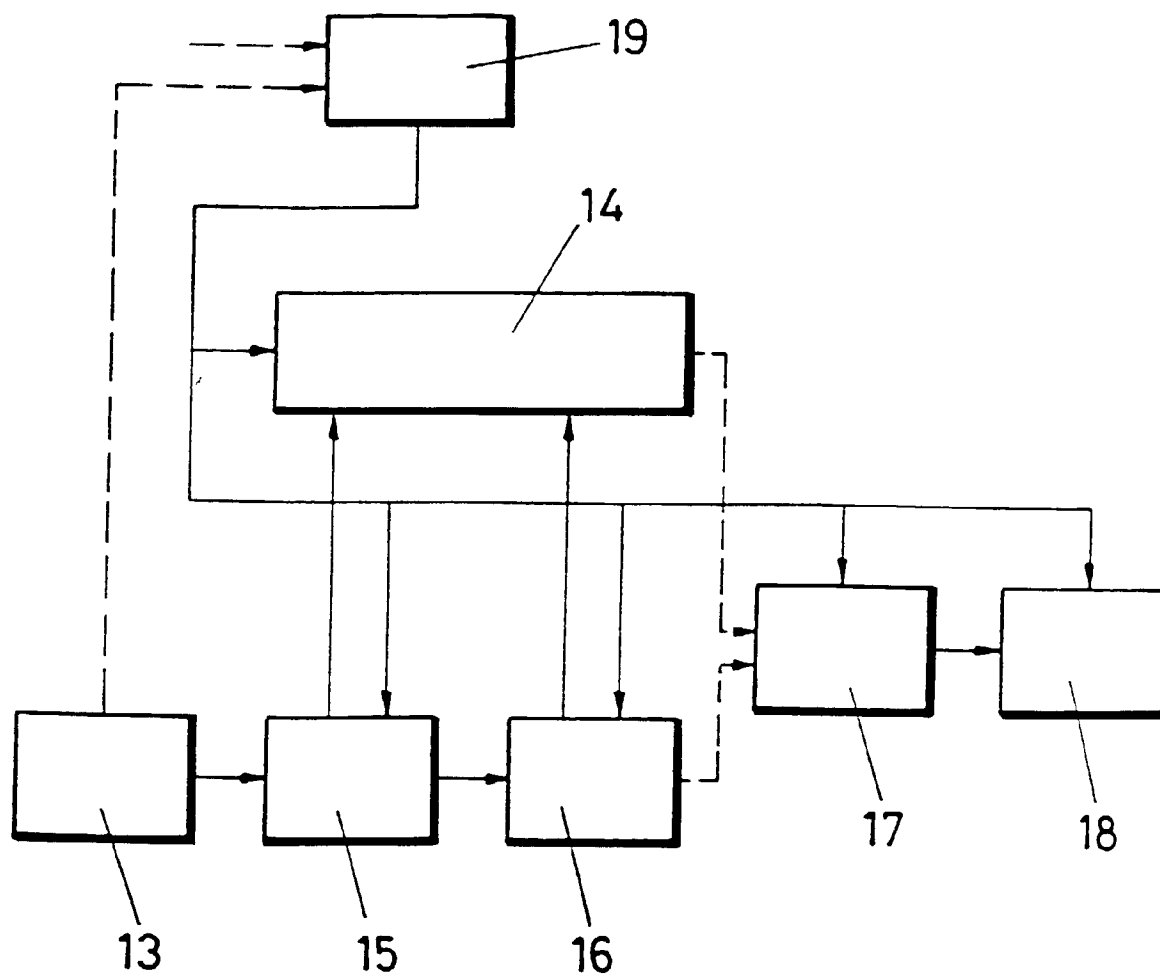


FIG. 5