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(54) Improved coin selector

Verbesserter Münzprüfer

Sélecteur de pièces de monnaie perfectionné

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Description

OBJECT THE INVENTION

The present invention relates to a coin or a token selector, the kind that is used in any machine which is able to provide a product, goods or a service, after having introduced the coins needed to pay the price. The selector has been slightly improved, concretely in order to obtain a larger autonomy from the point of view of programming and other applications that can be executed.

BACKGROUND OF THE INVENTION

As we know, coin selectors are usually able to detect the legal validity of the different types of coins, that is, coins that have different values. For this purpose, selectors have different electromagnetic tools that are able to accomplish the convenient validation processes.

These coin selectors have to be conveniently programmed so as to generate the convenient signs for each type of coin. Sometimes programming must be executed on selectors that are already working, right at the moment of the incorporation of new type of coins, or the substitution of other coins, etc...

Up to the date, programming control and other operations performed by the selector, are being accomplished thanks to a control device that incorporates a LED type display and a series of accesories, among them the unavoidable keyboard which is used to introduce the commands. The common point is that this control group forms a device foreign to the so called selector that is situated in its own grid linked to the selector through the necessary buses or connecting wires and through the appropiate connectors. The coin selector and the control device will be situated in different and appropiate places of the machine's core.

It is known from GB-A-2 128 006 to incorporate, in a vending machine, controls including an alpha-numeric display, a mode switch, a setting switch and data stepping switches, in order to set up various parameters of the vending machine, e.g. prices, failure codes, etc..

DESCRIPTION OF THE INVENTION

The coin selector proposed by the invention as defined in the claim solves this problem in a highly satisfactory way. Starting at the classic structuring proper to any conventional and appropiate coin selector, it focusses its features on the fact that it integrates the control unit in the core of its own grid. The grid is also provided in one of its sides, preferably in one of its bigger sides, with four windows, one of which bears the alphanumeric display. An acceptance switch is situated in another window, and a couple of switches for forward/backward sliding.

According to this structuring, control is accomplished through a menu that offers a series of options that can be explored thanks to the forward/backward switches. The desired option is selected through the acceptance switch, acceptance that will lead us later to a sub-menu from which we can enter new options in a similar way, and so on. At the end we will obtain the specific desired function, being internal or external to the selector performance, checking control parameters such as tension, stock, etc.

For specific functions that involve the need of assuring a right operation (for example erasure), it has been established that the user had to be forced to operate the combination of, at least, two of the switches at the same time.

DESCRIPTION OF THE DRAWINGS

To complement the description and to help improving the comprehension of the features of the invention, we enclose to the descriptive recollection, as one of its elements, just one sheet of plans where, with an illustrative but not limitative intention, we have represented a view in perspective of a coin selector build according to the improvements treated in the present invention. There, we can underline the new features of the invention, in contrast with the conventional structure of that selector drawn with a discontinuous line.

PREFERRED EXECUTION OF THE INVENTION

According to the drawings we can observe that the coin selector that we propose includes a grid (1), no matter the configuration used, bearing inside the so called selecting mechanisms, no matter the type, but with the special particularity consisting in the location of the control unit in the core of that grid, without influencing its size or its shape. This unit could be conventional and would be useful to control the programming and any other type of operation usually executed with this type of machines.

As a complement, and according to the essentiality of the invention, a large window (2) will be situated in the grid (1) of the coin selector, where an alphanumeric display (3) will be placed. In our example of execution presented in the drawing, and according to the usual needs in these kinds of selectors, the display comprises eight screen modes. Another window (4) is also situated in the grid (1), where the switch is (6). This is the acceptance switch related to the control system and to another two windows (5) and (5'), where a couple of switches (7) and (7') are located. Those are forward and backward switches useful for the operator to move from one menu to another during the programming process.

According to this structure, and as we said before, the alphanumeric display (3) will offer a menu to the operator. The operator will be able to run over it thanks to the forward and backward switches (7) and (7'), until one of the options is selected. The option will be operative

thanks to the acceptance switch (6) which transforms the selected option into a sub-menu that will offer again a new series of possible options in the same way. This process can be repeated as many times as it is needed until the desired level is reached and becomes a precise and planned order (two switches have to be pressed to execute orders that bear with a risk of error).

We obtain, as we can see from the present description, a coin selector that has a size and a configuration similar to the one of any other appropriate conventional coin selector. Programming tools, up to date foreign to the selector itself, are incorporated, simplifiying, as a consequence, the machine strucutre to which the latter is related, and making easier its installation in the core of the machine.

We do not consider necessary to extend this description so as anyone experienced in this subject could understand the reach of this invention and the advantages coming from it.

The materials, shape, size and location of the elements will be susceptible of any variation, as long as this fact does not imply an alteration of the scope of the invention as defined in the claim.

Claims

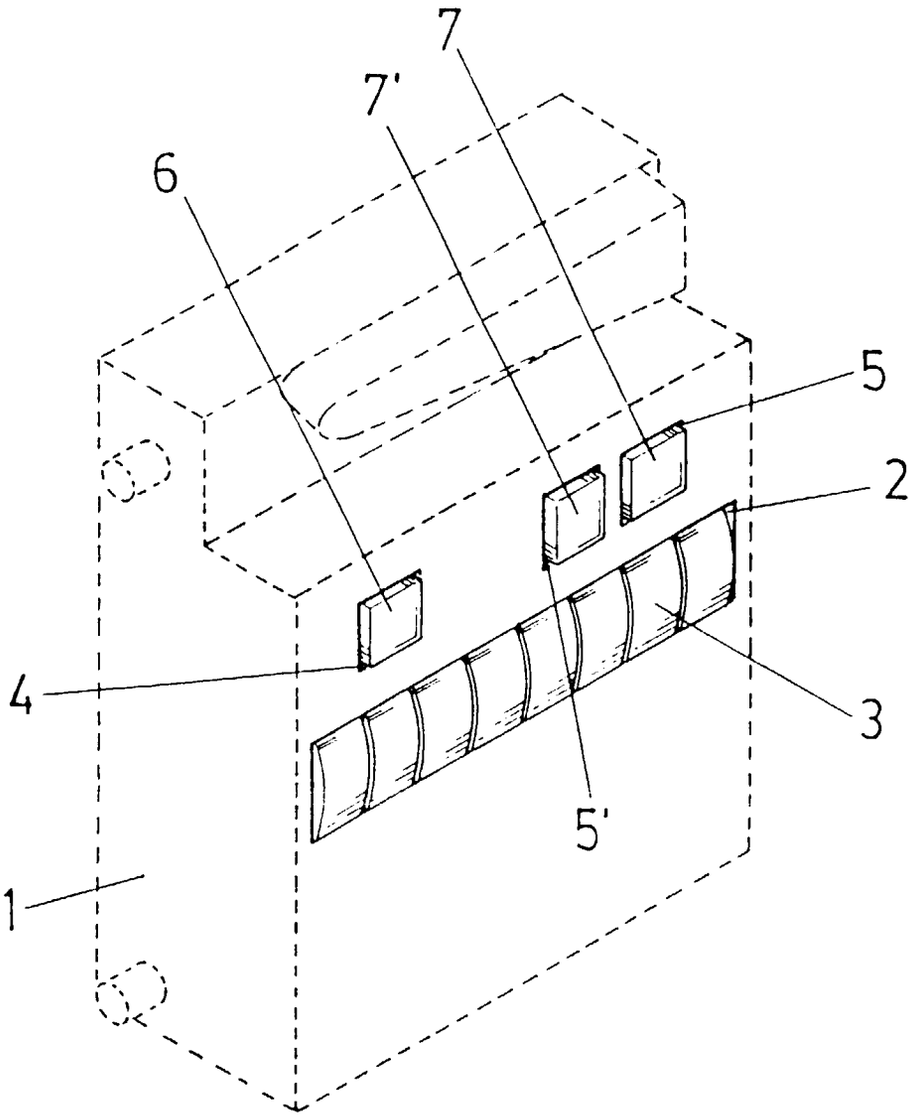
1. An improved coin selector, of the type used to detect the legal validity of the different types of coins in automatic or semiautomatic machines able to provide a product, goods or a service in exchange for the introduction of coins or tokens with a defined value, the selector comprising a range of validation tools for several kinds of coins and having in the core of its own grid (1) a selector control unit, the grid having four windows (2, 4, 5, 5') in one of its sides, one (2) where an alphanumeric display (3) is situated, another (4) where an acceptance switch (6) is placed, and the other two (5, 5') where a forward switch (7) and a backward switch (7') are situated, wherein, in use, the forward and backward switches give access to the options of menus, the acceptance switch (6) selects an option, and later gives access to several sub-menus, whereby the coin selector may be programmed so as to generate the convenient signs for each type of coin.

Patentansprüche

1. Verbesserter Münzprüfer, der Art, wie er zur Feststellung der rechtlichen Gültigkeit verschiedener Münzarten in Münzautomaten oder Münzhalbautomaten, welche ein Produkt oder eine Dienstleistung gegen den Einwurf von Münzen oder Marken eines bestimmten Wertes liefern, verwendet wird, wobei dieser Prüfer eine Anzahl von Validierungsvorrichtungen für verschiedene Arten von Münzen aufweist und im Kern des eigenen Gitters (1) über eine Kontrolleinheit des Prüfers verfügt, wobei das Gitter an einem seiner Seiten mit vier Fenstern (2, 4, 5, 5') ausgestattet ist, und wobei in einem dieser Fenster (2) eine alphanumerische Anzeigevorrichtung (3) angeordnet ist, in einem weiteren Fenster (4) ein Annahmeschalter (6) und in den anderen beiden Fenstern (5, 5') ein vorderer Schalter (7) und ein hinterer Schalter (7') angeordnet ist, wonach bei Benutzung der vordere und der hintere Schalter Zugang zu den Optionen eines Menüs verschaffen, der Annahmeschalter (6) eine Option wählt und anschliessend Zugang zu mehreren untergeordneten Menüs verschafft, wobei der Münzprüfer so programmiert werden kann, dass er für jede Art von Münzen geeignete Signale hervorbringt.

Revendications

1. Un sélecteur de monnaies perfectionné, du type employé pour détecter la validité légale des différents genres de monnaies sur machines automatiques ou demi automatiques capables de fournir un produit ou service en échange de l'introduction de monnaies ou de fiches d'une certaine valeur, le sélecteur comprenant une gamme d'outils de validation pour plusieurs classes de monnaies et le noyau de sa propre grille (1) disposant d'une unité de contrôle de sélecteur, la grille étant pourvue de quatre fenêtres (2,4,5,5') sur l'une de ses cotés, un afficheur alphanumérique (3) se trouvant dans l'une d'elle (2), un commutateur d'acceptation dans l'autre (4), et un commutateur avant (7) et un commutateur arrière (7') dans les deux autres (5,5'), de manière que les commutateurs avant et arrière donnent, à l'usage, l'accès aux options de menu, le commutateur d'acceptation (6) sélectionne une option puis donne l'accès à plusieurs sous-menus, le sélectionneur de monnaies pouvant être programmé de manière qu'il génère des signes appropriés à chaque type de monnaie.


7
7'
6
5
2
4
3
5'
1