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54 Keyboard, particularly for data-treating machine, such as cash-register and similar.

57 There is described a keyboard, more particularly for data-treating machine such as cash-register and similar, which has keys (1, 2) with matching windows (3), opposite which an identification label (4) may visibly be arranged, whereby underneath said windows (3) from at least two adjacent keys (1, 2), a continuous space (5) is provided wherein a common identification label (4) may be arranged, which extends at least opposite the windows (3) from both said keys (1, 2).

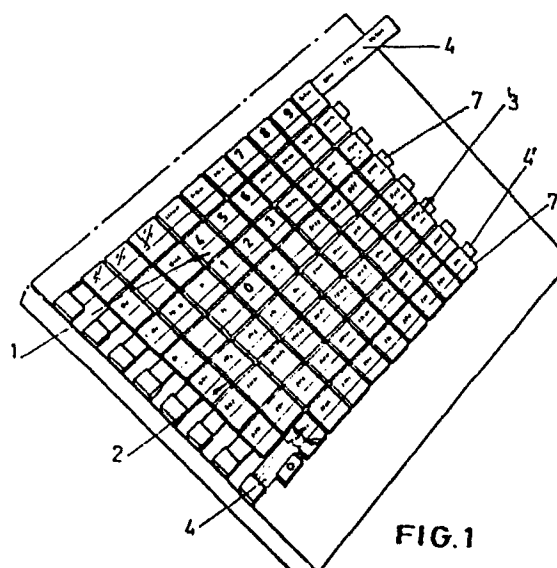


FIG. 1

Keyboard, particularly for data-treating machine, such as cash-register and similar.

5 This invention relates to a keyboard, more particularly for data-treating machine, such as cash-register and similar, which is provided with keys with corresponding windows opposite which an identification label may be visibly arranged.

10 With most presently known keyboards of this kind, small transparent caps are generally used, which are glued on each key, whereby for every key a discrete label has to be arranged between said small cap and the key.

15 As well the preparing of such small labels, the discrete placing of the required identification on each said labels, as the locating of said labels on every key underneath such a small transparent cap is very cumbersome and requires particularly much care when the function of every key is to be clearly marked and the whole unit should have a neat appearance.

20 The replacement of some identification label by another label is also very time-consuming, mostly when the small caps are firmly clamped on the keys, which is however required as the small cap should not move relative to the key when tipping same.

The invention has mainly for object to obviate said various drawbacks, and this in a very simple and effective way.

25 For this purpose, underneath said windows from at least two adjacent such keys, a continuous space is provided wherein a common identification label may be arranged, which

extends at least opposite the windows from both said keys.

In a more particular embodiment of the invention, in the bottom of said space, on that side thereof opposite said windows, a groove running underneath at least two windows is provided, wherein the identification label may be located.

In a more specific embodiment of the invention, the window is formed by a small transparent plate which extends over said space.

In a preferred embodiment of the invention, said small transparent plates are fast to the keys and may be pressed therewith in the direction of the identification label arranged inside the underlying space.

In a more particular preferred embodiment of the invention, the small transparent plate which is fast to a specific key, is provided with an overhanging portion over said space for the identification label.

The invention further pertains to a data-treating machine which is fitted with at least one such keyboard.

Other details and features of the invention will stand out from the following description, given by way of non limitative example and with reference to the accompanying drawings, in which:

Figure 1 is a top view, with part cross-section, of a keyboard according to a particular embodiment of the invention.

Figure 2 is a cross-section on a larger scale, along line II-II in figure 1.

Figure 3 is a perspective showing of part of an identification label according to another particular embodiment of the invention.

Figure 4 is a cross-section similar to figure 2, of a keyboard according to still another embodiment of the invention.

In the figures, the same reference numerals pertain to similar or identical elements.

Said particular embodiment of the keyboard according to the invention is particularly intended for a cash-register and thus has on the one hand digit keys 1 which are part of the computing portion of the cash-register, and on the other hand article keys 2, which are provided to show the kind of product being charged.

Each said keys 1 and 2 has a corresponding window 3 opposite which an identification label 4 is visibly arranged.

Underneath said windows from at least two such keys 1 and 2 lying next to one another, and preferably from each complete key row, there extends a continuous oblong space 5 wherein a likewise continuous common identification label is arranged, which lies opposite the windows from said keys.

Said identification label is thus divided into as many identification markings as there are keys in the pertaining row, in such a way that underneath the window from each said keys, the suitable identification marking is located.

It is thus no more required as with the existing keyboards, to put down the markings for each key on a discrete label, but it is possible to write all the markings one after the other for a complete key row, simply by leaving the required spacing between two succeeding markings.

In the bottom of said space 5, on the side thereof opposite said windows 3, a continuous groove 6 is provided the width of which is substantially equal to the width of an identification label, in such a way that said label is located in the suitable position inside space 5, and may possibly be slightly clamped and this in an uniform way for all the rows.

On the one end of each key row, the corresponding space has a sidewise access opening 7 wherethrough the identification label 4 may be slipped underneath windows 3 in groove

6.

Said labels 4 are somewhat longer than space 5 wherein they should be arranged, with the result that at least the one end 4' thereof will project through opening 7 whereby
5 said labels may easily be slipped in and out relative to said space.

Each window 3 is formed by a small transparent plastic plate 8 which extends over said space 5.

Said small plates 8 are fast to the keys 1 and
10 2 and may thus be pressed therewith.

In the particular embodiment of the invention which is shown in the figures, said transparent plates 8 have over that space 5 which is intended for the identification label 4, an overhanging portion 8', while that portion 8" of said trans-
15 parent plates 8, which lies over the keys, has an identification color. This thus forms an additional means to distinguish between the various key groups.

Still in said specific embodiment, the overhanging portions 8' of the transparent plates 8 from one and the same
20 key row 1 and 2 are located on the back side relative thereto, which makes pressing down same easier.

To make the identification label well readable, the space height is further limited due to the spacing between the key rest position and the key pressed-down position lying
25 between 4 and 6 mm and preferably between 1 and 3 mm.

Finally it may be noted that the spacing between said small plates is limited to the strict minimum and the top sides thereof when the keys are not pressed, lie substantially in the same plane.

30 This does not only impart an aesthetic appearance to the keyboard, but makes the maintenance thereof very much easier, while the entering of dust between the keys is nearly completely prevented.

The invention is naturally in no way limited to

the above-described embodiment and many changes may be brought thereto without departing from the scope of the invention as defined by the appended claims.

5 For instance, the identification label may be slipped inside a closed groove which is covered at the top by a lens-forming strip, whereby the label markings will be enlarged.

10 In another embodiment of the invention, the projecting ends 4' of the identification labels 4 are connected together, in such a way that said labels may be slipped as a unit in the various grooves 6 of the keyboard.

15 In still another embodiment of the invention, as shown in figure 3, the identification label 4 could be comprised of a sheet 4 which covers a plurality of key rows and even the complete keyboard. In such a case, said sheet is provided with cut-outs 9 the keys 1, 2 project through, and the small transparent plates 8 are for example removably clamped on the keys.

20 Finally according to the invention and as shown in figure 4, the windows 3, more particularly the small plate 4 from the various keys 1, 2 may be fast to the keyboard frame, that is independent from the keys, and be part for example of a fixed board 10 which lies some distance above the location 6 for the identification label 4 and through which project said keys. Said board may be removably secured, in such a way that in this case use may be made of said sheet with key cut-outs 9 as identification label.

25 Said board may cover all or part of the keyboard, or be comprised of a series strips which each extend between two succeeding key rows.

CLAIMS

1. Keyboard, more particularly for data-treating machine such as cash-register and similar, which has keys (1,2) with matching windows (3), opposite which an identification label (4) may visibly be arranged, characterized in that underneath said windows (3) from at least two adjacent keys (1,2), a continuous space (5) is provided wherein a common identification label (4) may be arranged, which extends at least opposite the windows (3) from both said keys (1,2).
2. Keyboard as defined in claim 1, characterized in that in the bottom of said space (5) on the side thereof opposite said windows (3), a groove (6) running underneath two windows (3) at least is provided, wherein said identification label (4) may be located.
3. Keyboard as defined in either one of claims 1 and 2, characterized in that said space (5) is provided with at least one sidewise access opening (7) wherethrough said identification label (4) may be slipped underneath said windows (3).
4. Keyboard as defined in any one of claims 1 to 3, characterized in that said window (3) is formed by a small transparent plate (8) which extends over said space (5).
5. Keyboard as defined in claim 4, characterized in that said small transparent plates (8) are fast to the keys (1,2) and may be pressed down therewith in the direction of the identification label (4) lying in the underlying space.
6. Keyboard as defined in claim 5, characterized in that the top sides of said plates (8) when the keys (1,2) are not pressed down, lie substantially in the same plane.
7. Keyboard as defined in either one of claims 5 and 6, characterized in that a small transparent plate (8) which is fast to some key (1,2), is provided with a portion (8') overhanging over the space (5) for the identification label (4).
8. Keyboard as defined in any one of claims 5 to 7, characterized in that that portion of the small transparent

plates (8) which extends over the keys (1,2), has an identification color.

9. Keyboard as defined in either one of claims 7 and 8, characterized in that the overhanging portions (8') of the small transparent plates (8) from the same key row (1,2) lie on the back side thereof.

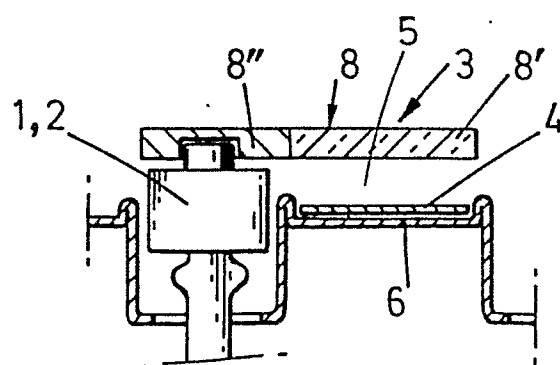
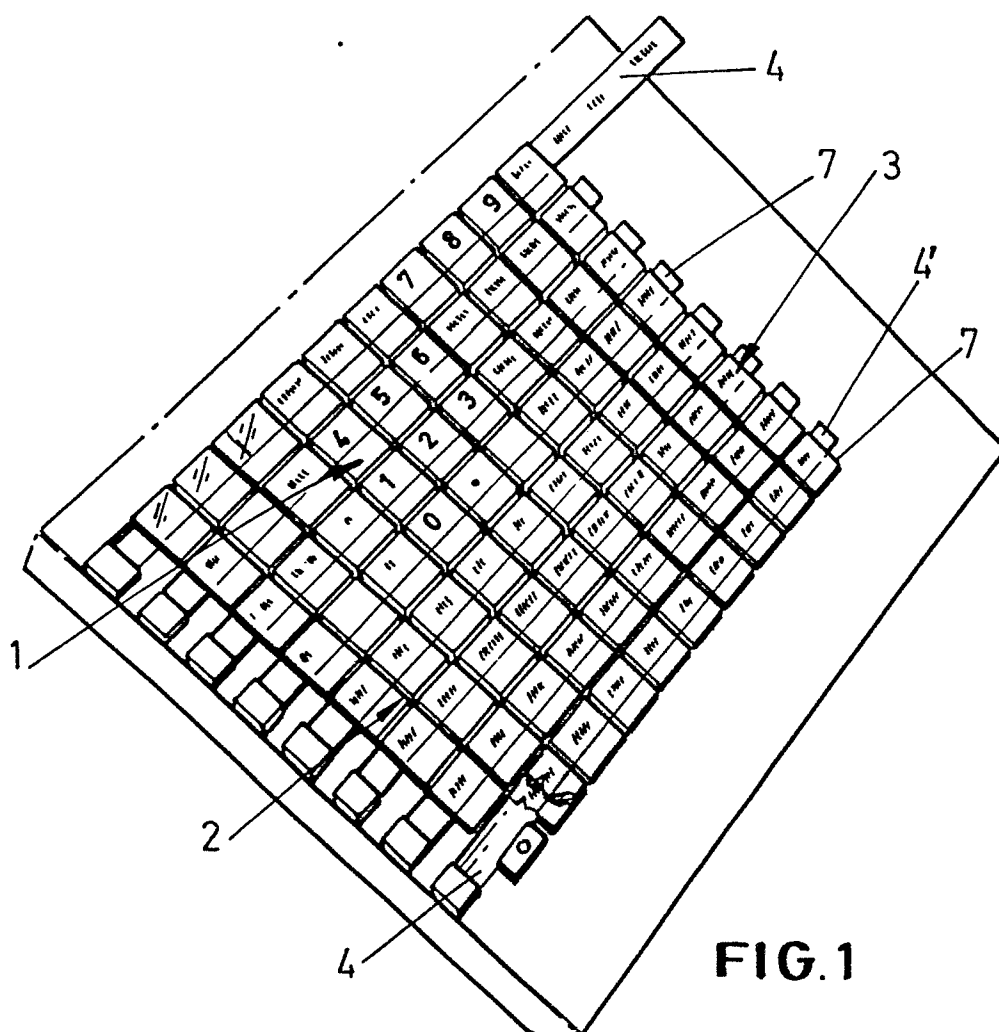
10. Keyboard as defined in any one of the preceding claims, characterized in that the spacing between the key rest position and the key pressed-down position lies between 4 and 6 mm, and preferably between 1 and 3 mm.

11. Keyboard as defined in any one of the preceding claims, characterized in that a continuous oblong space (6) extends underneath the windows from substantially every complete key row, whereby a likewise continuous identification label (4) may be provided for every key row (1,2), which label is divided into as many identification markings as there are keys in the pertaining row, in such a way that the suitable marking will lie underneath the window (3) from each said keys.

12. Keyboard as defined in claim 1, characterized in that the common identification label (4) is comprised of a sheet wherein cut-outs (9) are provided, wherethrough the keys (1,2) may project.

13. Keyboard as defined in any one of claims 1 to 11, characterized in that for the various key rows (1,2), strip-like identification labels (4) are provided which are connected together with the one end thereof and may thus be located together in said space (5).

14. Keyboard as defined in any one of claims 1 to 4 and 11 to 13, characterized in that said windows (3) are part of a fixed board (16) which lies over said space (5) wherein said identification label (4) is arranged, whereby the keys (1,2) are loose from said board (16) and project thereabove.



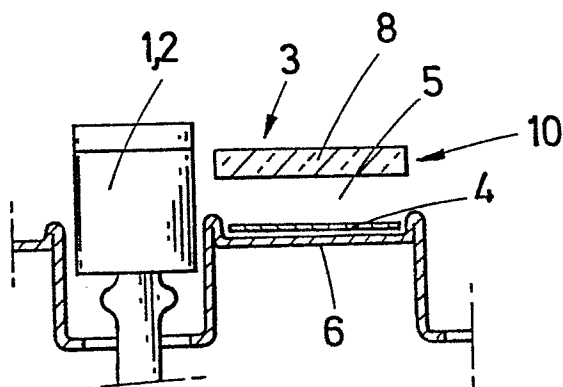
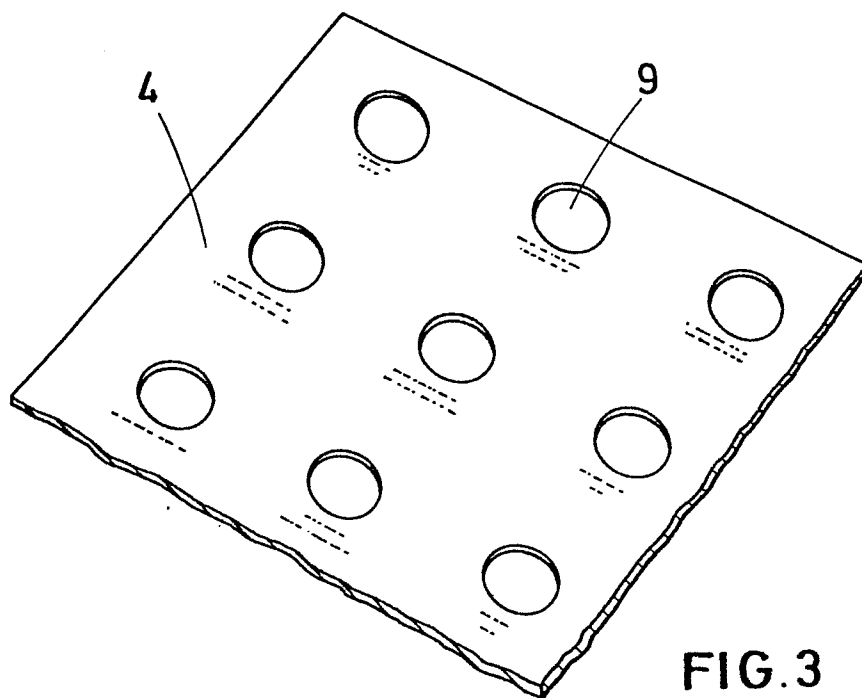


FIG.4