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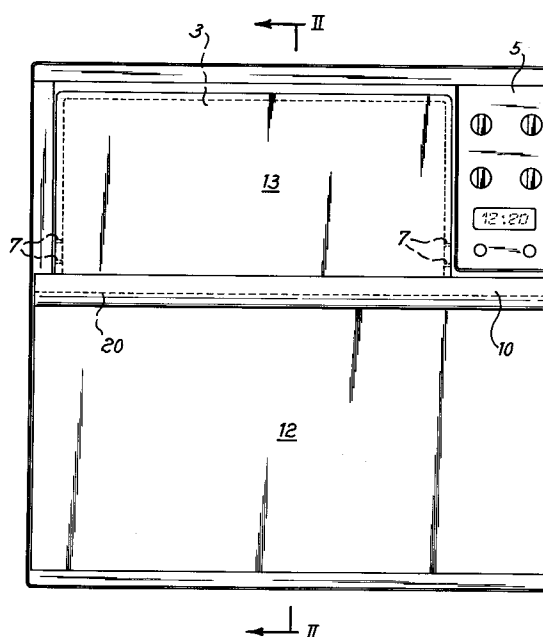
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I-20123 Milano (IT)(54) **Built-in oven with two baking rooms.**

(57) A built-in oven especially of the electric type, with the standard height of 60 cm, has two distinct baking rooms, specifically a larger one in the usual position of the oven and a smaller one in the upper position, where the control devices, which are now moved to the side of the smaller oven, are usually located. The control devices can all be located on only one side of the smaller oven, or can be distributed on both sides. Owing to its small dimensions, the door of the upper oven can be of the slidable type, with a glass panel mounted thereon and laterally projecting therefrom to the whole width of the front wall of the oven, thereby covering said control devices. The glass panel is preferably hinged to the lower part of the door and comprises a lever in the upper part for engaging therewith, said lever being part of a handle that opens and closes the assembly when the lever is engaged, or only the glass panel when the lever is not engaged.

Fig.1

The present invention relates to a built-in oven for household use, preferably of the electric type, with two distinct baking rooms.

It is known that when cooking it is sometimes necessary to turn on the oven to cook or warm-up small portions, which causes a useless energy consumption, as the whole air volume inside the oven space, which is almost always greater than 40 liters, is to be brought to the desired temperature. Actually, in such cases small portable ovens can be used, which however are not always favoured by the user who may not be willing to tackle the cost for their purchase, also considering the inconvenience of managing a separate appliance for which it is often difficult to find a room when not in use.

Ovens with two distinct baking rooms are already known, but they are real double ovens, higher than the usual 60 cm, for inserting in so-called "columns", not under "top".

The object of the present invention is therefore to provide, in a single built-in oven for household use with standard 60 x 60 size, besides a usual baking room having an only little reduced size, a second, smaller room, said second room being housed in an upper muffle and usable only for warming-up or cooking limited food portions, thereby achieving time and energy savings.

The upper room, though being of reduced size, takes the height usually taken by the control devices, which will be displaced laterally, while remaining on the front panel of the oven, to either one side, or symmetrically distributed on both sides, of said upper oven, which is provided with a small access door the width of which is smaller than the front width of the whole oven. In this way, as a secondary advantage provided by the solution of the main problem, the control devices can be hidden, which is an aesthetic feature the manufacturers of kitchen furniture highly appreciate, but not easily achieved with the traditional ovens.

This is achieved by providing, on the door of the upper, smaller oven, a front panel made of glass or a similar material, said front panel forming a relief over the door and having the same width as the whole oven, thereby covering also the control devices. It is preferably hinged to the lower part of the door and engageable therewith by means of a small lever, a handle being provided for the opening and closing actuation of the front panel-door assembly as a whole, when the lever is engaged, or for raising and lowering the front panel relative to the door when the lever is not engaged.

Further objects and advantages of the oven according to the present invention will be more clearly understood from the following detailed description of a preferred embodiment thereof, which is to be taken as a non-limiting example, and with

reference to the attached drawing. In the drawing:

Figure 1 shows a diagrammatic front view of the oven with double baking room according to the invention, with the doors of both rooms closed and the front panel lowered; and

Figure 2 shows a partial sectional view taken along line II-II in fig. 1, with the access doors of the two baking rooms opened, the phantom lines representing the closed position, as well as with the front panel, the phantom lines showing it in a lowered position.

With reference to the drawing, a baking oven for household use, especially an electrically powered one, is shown, said oven having a standard height of 60 cm and being designed to be inserted under "top", and having on its front part 1 cavities or rooms 2 and 3, said cavities or rooms being enclosed in respective insulating muffles and provided with doors 12 and 13, respectively, for being accessed from outside. The main baking room 2, which is located in the lower part of the oven, would only exhibit a little lower capacity than the usual one, its capacity being for example reduced to about 40 liters from a value, for a conventional oven, of about 46 liters. Such a limitation of the size and the reduction of the whole thickness of the main muffle, mainly achieved through the use of highly insulating materials, possibly with the assistance of a fan outside of the muffle but inside the assembly, together with the reduction of the space taken by the control devices, have permitted a second baking room 3 with a capacity of about 18 liters to be obtained, while maintaining the outer size of the oven within the standard values. The width of room 3, and of its access door 13 as well, is lower than the total width of the front part 1 of the oven, thereby allowing a free space 5 for the control devices to be obtained. In figure 1, the control devices are grouped on the right side of the drawing, but they might be oppositely located to the left side as well, with the upper baking room 3 to the right, or symmetrically distributed on both sides of a centrally located upper room 3.

Referring now in particular to figure 2, the upper door 13 in this representation is of the drawer type and is slidably supported on side rails which are located externally of room 3. A tray 15 for supporting the baking containers is cantilevered, for example in a known way, as the bottom of said drawer on suitable supports 14 which are solidly connected to door 13.

Still referring to fig. 2, on the lower part of door 13, as shown by 9, a front panel 11 made of glass or of a similar material is hinged, its width being larger than that of said door and essentially covering the whole width of the front wall 1 of the oven. Thus the front panel 11 is in a measure of covering, when the door 13 is closed, the whole area of

control devices 5, wherever they are placed on the front wall 1. It is noted that door 13, which has only the function of closing the upper room 3 of oven, is provided on the inside, like the lower door 13 and as is generally known, with insulating material and with a sight glass to possibly observe the food during baking.

The glass panel 11 can therefore be rotated by 90° C around hinges 9 to an almost horizontal stop position, as shown in phantom lines in figure 2 and as can be frontally seen in figure 1. The front panel 11 will obviously be preferably lowered when door 13 is closed, when the oven is operating, especially to access to the control devices 5. An upper handle 10, solidly connected to panel 11, allows the latter to be lowered and raised. Said handle 10 will be preferably similar to handle 20 of the lower door 12.

The front panel 11 is usually solidly engaged to door 13 by engaging a built-in lever 18 of handle 10 in a recess 16 of door 13. Said recess, if provided with larger cross size, can also be used as a handle for opening only door 13 when panel 11 is already lowered, and handle 13 can consequently not be used to this purpose.

Based on the above, it is evident that the user, according to the amount of product to be baked or warmed-up, can choose the better suited oven, thereby achieving remarkable energy and time savings if the upper baking room with smaller size can be used.

Additions and/or changes can possibly be brought-out by the skilled artisan to the above described and illustrated embodiment of the improved oven, while remaining within the scope of the invention which is to be considered as comprising all the mechanically equivalent forms achieving the same utility. For example, the upper door 13 might also be hinged on the lower part, like door 12 of the lower room, in which case rails will be provided on the inner walls of room 3 for the rotation of the tray.

Claims

1. A built-in oven for household use comprising a main baking room (2) with related access door (12) and a front wall (1), characterized in that it comprises, above said room (2), a second baking room with an access door (13) of its own, said second baking room (3) having reduced sizes relative to the main one and being separately operatable, the control devices (5) of both baking units (2, 3) being located laterally relative to said upper room (3), said upper room (3) being of lower width relative to the whole front wall (1).
2. An oven as claimed in claim 1 characterized in that on said upper door (13) a panel (11) of a transparent, resistant material is hinged with its lower part to the lower part of said door, the width of panel (11) being the same as that of the whole front part (1), thereby covering also said control devices (5).
3. An oven as claimed in claim 2 characterized in that said panel (11) has an upper handle (12) which is provided with means (18) for releasably engaging to said door (13).
4. An oven as claimed in claim 3 characterized in that said means (18) consists of a lever that can be engaged in a corresponding recess (16) in door (13).
5. An oven as claimed in one or more of the preceding claims, characterized in that said control devices (5) are all located on one side, right or left of said upper baking room (3).
6. An oven as claimed in one or more of the preceding claims 1-4, characterized in that said control devices (5) are partly located on one side and partly on the other side of said baking room (3), said baking room (3) being centrally located on said front wall (1).

Fig. 1

