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(54) **Modular component for kitchens**

(57) A modular component (10) of the wall-mount or free-standing type for kitchens. The modular component (10) that has a main compartment (15,16), or a structure that can be integrated therewith, is provided with a closure door (21,22) made of transparent and reflecting material of any color and with any degree of reflection. The main compartment (15,16) furthermore comprises, in at least one side panel (11) or in a part thereof, one ventilation grille (12,13,14) and a region (18) adapted for the passage of cables.

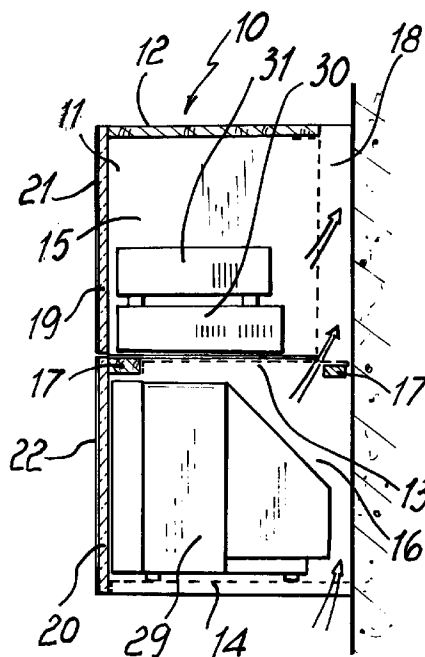


Fig. 3

Description

The present invention relates to a modular component for kitchens of the wall-mount or free-standing type.

It is known nowadays that the kitchen has become not just the section of the house which is used for cooking and generally preparing food but also a meeting place for the family, with functions that are partially redundant with respect to those more conventionally assigned to the living-room.

The development of modular kitchens has led to the introduction of a very large number of accessories therein, so that modular kitchens have become, rather than kitchens in a strict sense, multifunctional aggregations composed into organized and spatially functionalized structures.

An electrical appliance now commonly present in modern kitchens, in addition to conventional electrical appliances such as dishwasher, washing machine, refrigerator, oven, cooking range, etc., is the television set.

The television that is kept in the kitchen is generally the second or third set and is used mainly when the family or individuals are eating or preparing food.

In current kitchens, the television set is often placed on a surface not specifically intended therefor, such as the flat surface formed by the furniture.

In any case, known solutions for placing the television set, as well as other devices related thereto, such as video recorders, video players, or hi-fi equipment, have some drawbacks.

In particular, if there are no compartments provided specifically for accommodating these electrical appliances, on one hand there are evident hygiene drawbacks, since regions for the possible preparation of food and electrical appliances that often cause dust accumulation are close to each other without separating barriers, and on the other hand there is a danger, both for the electrical appliances and for their users, due to the fact that sprays of water or in any case of liquids in precarious containment conditions are generally frequent in a kitchen.

Furthermore, if there are open compartments for accommodating these electrical appliances, since the latter are still exposed to the air, they must be dusted continuously and repeatedly and optionally cleaned with damp cloths.

Furthermore, the introduction of these electrical appliances in the structure of a modular kitchen often produces aesthetic effects that are unpleasant or at least unharmonious.

A principal aim of the present invention is to provide a modular component for kitchens that solves the drawbacks existing in conventional models.

In relation to this aim, an object of the present invention is to provide a modular component that fits in harmoniously both from a spatial and from the aesthetic points of view in the kitchen as a whole.

Another object of the present invention is to provide a modular component that can be optionally included in modular kitchens that are already present in the homes of users or on production lines.

Another object of the present invention is to provide a modular component that can be manufactured with conventional technologies and without substantial variations in the production lines already existing in a modular kitchen factory.

Another object of the present invention is to provide a modular component having not extremely high costs and which can therefore be included even in more economical models.

Another object of the present invention is to provide a modular component having, inside it, an environment that is ideal for the operation of electrical appliances such as television sets, video recorders, or hi-fi equipment.

With these and other objects in view, the invention provides a modular component of the wall-mount or free-standing type for kitchens, characterized in that it comprises at least one main compartment or a structure integratable therewith, with or without a closing door made of transparent and reflecting material of any color and with any degree of reflection, said compartment comprising at least one grille that replaces at least one panel or part thereof, and at least one region preset for the passage of cables.

Further characteristics and advantages of the invention will become apparent from the following detailed description of three embodiments thereof, illustrated only by way of non-limitative example in the accompanying drawings, wherein:

figure 1 is a perspective view of a modular kitchen in which a modular component for kitchens according to the invention, in a first embodiment thereof, is inserted;

figure 2 is a front view of the modular component related to figure 1;

figure 3 is a lateral sectional view of the modular component related to figure 1;

figure 4 is a perspective view of a detail of the modular component related to figure 1;

figure 5 is a perspective view of a second embodiment of a modular component according to the invention in a different type of kitchen;

figure 6 is a lateral transverse sectional view of the modular component related to figure 5;

figure 7 is a perspective view of a third embodiment of a modular component according to the invention, particularly adapted for insertion in kitchens already existing in the user's home or on production lines.

With reference to figures 1 to 4, a modular component for kitchens of the wall-mount type, according to the invention, is generally designated by the reference numeral 10.

The modular component 10 has a partially box-like structure comprising two side panels 11 that are substantially rectangular and parallel.

Three mutually parallel grilles 12, 13, and 14 are supported by and between the side panels 11.

The grille 12 is arranged so as to constitute the top of the modular component 10, whereas the grille 14 is arranged so as to constitute the bottom of the modular component 10.

The grille 13 is arranged in a position that is substantially equidistant from the grille 12 and from the grille 14.

The grilles 12, 13, and 14 form two main compartments 15 and 16, which are therefore located substantially one above the other; specifically, the compartment 15, whose bottom is the grille 13, is located above the compartment 16, whose top is again the grille 13.

It should be specified that the grille 13 is also supported in its position by two cross-members 17 that are in turn supported by the side panels 11.

In the rear region of the modular component 10, which abuts against the wall when installed, it is noted that while the side panels 11 actually abut against the wall, the grilles 12, 13, and 14, by being shorter than the side panels 11 in their transverse dimension, remain spaced from the wall so as to form a secondary compartment 18 for the passage of electrical cables and air.

As regards the front region of the modular component 10, the two compartments 15 and 16 are closed by virtue of two respective perimetric frames 19 and 20, on which respective doors 21 and 22 are fixed; said doors are constituted by sheets of transparent and reflecting material of any color and with any degree of reflection.

Said doors 21 and 22 can be opened by virtue of hinges which are not shown in the figures.

Respective handles 23 are furthermore fixed in a lower region of both doors 21 and 22.

An insert 24 having a marked longitudinal extension and made of Plexiglas or optical fiber is furthermore located on the door 22 and affects the entire transverse region of said door that is not affected by the frame 20, in order to transfer the signals emitted by the remote controls for electrical appliances that are commonly commercially available.

The closure of both doors 21 and 22 is ensured by magnetic closure devices.

Finally, since the dimensions of an average television set 29 (17-21 inches) make that the modular component 10 is to be deeper than the other components of the kitchen 25, the harmonious insertion of said modular component is achieved by means of two identical depth-compensating elements 26 that are substantially tubular and have a transverse cross-section that is shaped like a right-angled trapezoid.

More specifically, in both of said elements 26 the surface related to the longer side rests on the respective panel 11, whereas the surface related to the shorter side rests against the adjacent modular component 27.

The blending surface of the element 26 is specifically the one related to the diagonal side; the surface at the

right-angled side is furthermore formed by a lamina 28 bent in a C-like shape and acting as a reinforcement.

In figure 3, a video recorder and a hi-fi audio system are designated by the reference numerals 30 and 31 respectively.

With reference to figures 5 and 6, a modular component for kitchens in a second embodiment, according to the invention, is of the free-standing type and is generally designated by the reference numeral 100.

Said modular component 100 is composed of two side panels 101 that are substantially rectangular and parallel.

Said side panels 101 support, in the interspace between them, three shelves 103, 104, and 105, a top 102, and a bottom 106 that are mutually parallel and spaced so as to divide the internal volume into three main compartments 107, 108, and 109.

Four feet 110 are connected below the bottom 106 to support the modular component 100 on the ground; only two of said feet are shown in the figures.

The space 111 formed by the feet 110 between the bottom 106 and the ground is covered at the front by a skirting 112 that is optionally perforated.

As regards the compartments 107 and 108 formed by the side panels 101, by the shelves 103 and 104, and by the top 102, their respective backs are constituted by a single grille 113 that is fixed to said shelves.

Said compartments are furthermore frontally closed by a perimetric frame 114 on which a sheet 115, made of transparent and reflecting material of any color and with any degree of reflection, is mounted; said sheet can swing about hinges not shown in the figures.

Said sheet 115 has, in addition to a handle 116, a transverse elongated insert 117 made of Plexiglas or optical fiber, of the same type as the previous one 24, for transferring the signals emitted by remote controls for commonly commercially available electrical appliances.

Each one of the two inserts 117 is furthermore arranged on the sheet 115 so as to substantially match the arrangement of the electrical appliance.

A television set 124 and a video recorder 125 have been shown schematically in figure 6.

As regards the compartment 109, it has a complete box-like structure, since it is closed by a back 119 and, at the front, by a door 120 also swinging about hinges that are not shown in the figure.

It should be noted that the top 102, the shelves 103 to 105, and the bottom 106 all have smaller transverse dimensions than the side panels 101, thus forming a secondary rear compartment 121 that runs along the entire vertical extension of the modular component 100 and is connected to the space 111.

For the reasons set in relation to the wall-mount model, in order to harmoniously introduce the modular component 100 among the other components of the kitchen it is possible to interpose a conventional depth-compensating wall-mount unit 123.

In both of the described embodiments, it is noted that paths are provided for circulating air and consequently

ventilating the electrical appliances inserted in the modular component.

It should also be noted that the depth-compensating elements can be used, also by virtue of appropriate holes connecting them to the compartments, as ducts for the passage of electrical cables or for fixing loudspeakers (not shown in the figures).

With reference to figure 7, a modular component for kitchens, in a third embodiment, is generally designated by the reference numeral 200.

The modular component 200 is an accessory structure that allows to adapt a normal compartment, for example in the modular kitchen already existing in the home of the user, to accommodate a television set or similar appliances.

The modular component 200 comprises two mutually parallel posts 201 between which a grilled bottom 202 and a cross-member 203 are supported in a downward region and in an upward region respectively.

In this case, the cross-member 203 and the posts 201 are not as deep as the bottom 202.

An upper grille 204 and a lower grille 205 are fixed at the front of the modular component 200, at the bottom 202 and at the cross-member 203, both grilles being provided for the passage of the air for cooling the appliances and for the optional fixing of loudspeakers (not shown in the figure).

A swinging opening and closing door 207 is fixed to a post 201, about hinges 206, in front of the modular component 200 between the upper and lower grilles 204 and 205; said door is constituted, in this case, by a perimetric frame 208 that supports a sheet 209 made of transparent and reflecting material of any color and with any degree of reflection.

Since the above described embodiment must adapt in each case to existing structures and shapes, it is susceptible of even large variations in the shape and dimensions of its components; accordingly, the posts 201, which are not as deep as the bottom 202 in the described case, can be as deep as the bottom 202 in other cases.

Furthermore, as regards the bottom 202, which in this case is entirely grilled since the modular component 200 described herein is meant for a wall-mount unit, in other cases, when it is meant for example for free-standing furniture, it can conveniently be provided with a double bottom with an interspace constituted by a grilled or solid surface that is in contact with the appliances and by a solid surface for separation from the underlying compartment of the piece of furniture; the interspace between said two surfaces must form a ventilation and heat dissipation duct.

In practice, it has been observed that the intended aim and objects have been achieved; in particular, it should be noted that the television set or other similar or complementary electrical appliances, such as video recorders or hi-fi sets, have been included with maximum constructive simplicity and without in any way affecting the spatial and aesthetic harmony of the modular kitchen; said appliances can be used without opening

doors in the modular components or in any case without giving indication as to their presence except for the display of pictures during operation.

It should also be stressed that the structure of the modular components according to the invention allows perfect ventilation of the electrical appliances located therein; this ventilation is fundamental for ensuring their durability.

It should also be noted that the problem of the passage of the cables related to the electrical appliances has been solved simply and effectively.

The present invention is susceptible of numerous modifications and variations, all of which are within the scope of the inventive concept; thus, for example, it is possible to provide elements that filter fumes, dust, etc. in combination with the ventilation grilles and it is also possible to install devices for forced ventilation.

All the details may be replaced with other technically equivalent elements.

In practice, the materials employed, so long as they are compatible with the contingent use, as well as the dimensions, may be any according to the requirements.

Where technical features mentioned in any claim are followed by reference signs, those reference signs have been included for the sole purpose of increasing the intelligibility of the claims and accordingly such reference signs do not have any limiting effect on the interpretation of each element identified by way of example by such reference signs.

Claims

1. Modular component of the wall-mount or free-standing type for kitchens, characterized in that it comprises at least one main compartment or a structure that can be integrated therewith, with or without a closing door made of transparent and reflecting material of any color and with any degree of reflection, said compartment comprising at least one grille that replaces at least one panel or part thereof, and at least one region preset for the passage of cables.
2. Modular component for kitchens according to claim 1, characterized in that said region adapted for the passage of the cables is constituted by a secondary compartment formed to the rear of said wall-mount or free-standing unit.
3. Modular component for kitchens according to claim 1, characterized in that it comprises, if it is of the wall-mount type, at least two grilles, one of which at least partially replaces the upper panel or top of said compartment and another one of which at least partially replaces the lower panel or bottom of said main compartment.
4. Modular component for kitchens according to claim 1, characterized in that it comprises, if it is of the free-standing type, at least one grille so as to replace at

least partially a back panel, said grille connecting said main compartment to said secondary compartment, said secondary compartment affecting the entire rear portion of said modular component.

5. Modular component for kitchens according to one or more of the preceding claims, characterized in that it has, if it is of the free-standing type, a lower passage for air that is connected to said secondary compartment, said lower passage being formed by a space produced by ground supporting feet for said modular component. 5 10
6. Modular component for kitchens according to one or more of the preceding claims, characterized in that it comprises, if it is of the accessory-structure type, two mutually parallel posts between which a grilled bottom and a cross-member are supported in a downward region and in an upward region respectively, one or more front grilles being included for the passage and dissipation of heat. 15 20
7. Modular component for kitchens according to claim 6, characterized in that it comprises, if it is meant to complement a piece of furniture of the free-standing type, a double bottom with an interspace for the passage and dissipation of heat that comprises a grilled or solid surface that is in contact with the appliances and a solid surface for separation from the underlying compartment. 25 30
8. Modular component for kitchens according to one or more of the preceding claims, characterized in that it comprises a Plexiglas or optical-fiber insert for transferring the signals emitted by remote controls for commonly commercially available electrical appliances, said insert being inserted in a closure door. 35
9. Modular component for kitchens according to one or more of the preceding claims, characterized in that it comprises at least one depth-compensating element. 40
10. Modular component for kitchens according to claim 8, characterized in that said depth-compensating element is tubular and has a trapezoidal cross-section. 45
11. Modular component for kitchens according to claims 7 and 8, characterized in that said depth-compensating element comprises openings that are connected to said main compartment for the passage of electrical cables and for fixing loudspeakers. 50 55
12. Modular component for kitchens according to one or more of the preceding claims, characterized in that it comprises forced-ventilation devices.

13. Modular component for kitchens according to one or more of the preceding claims, characterized in that said at least one grille is combined with filtration elements.

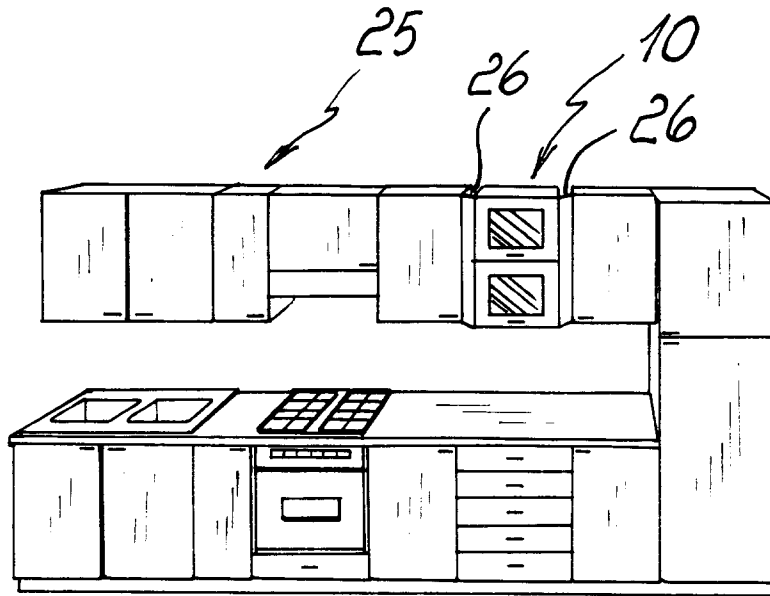


Fig. 1

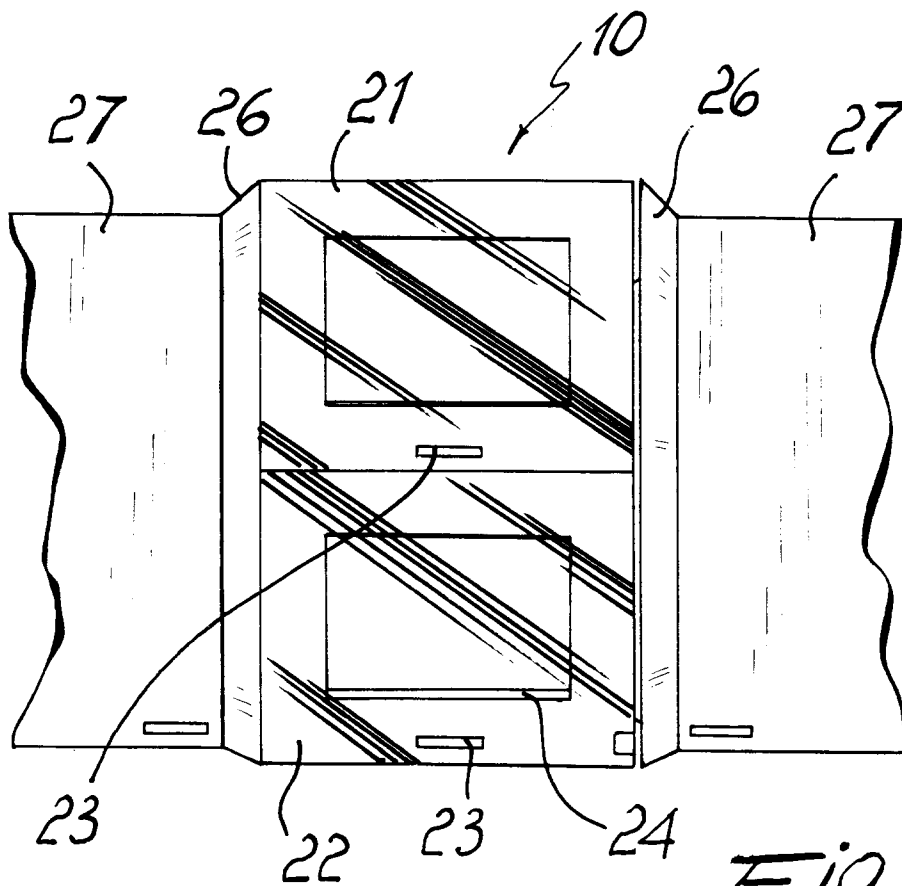


Fig. 2

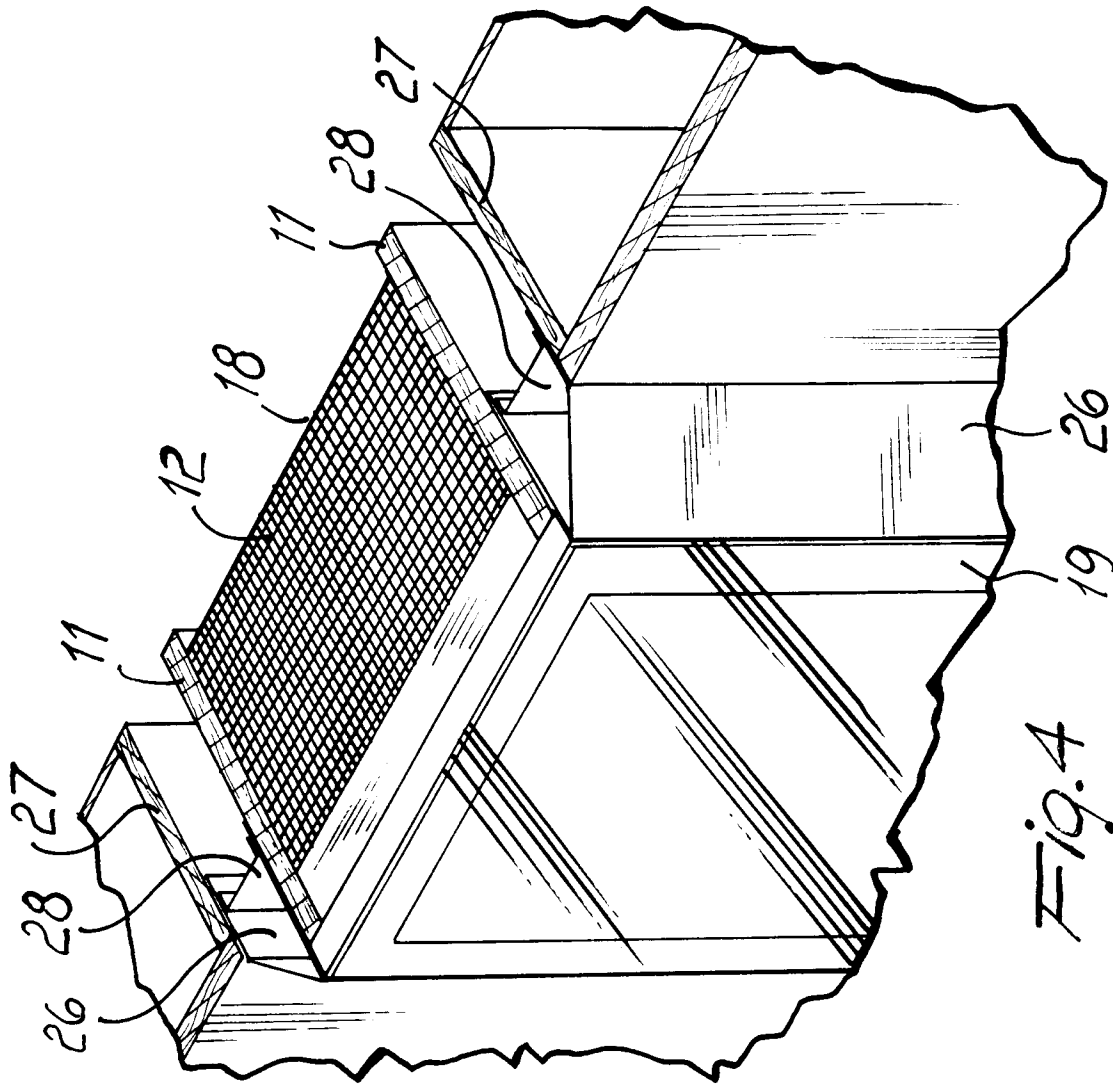


Fig. 4

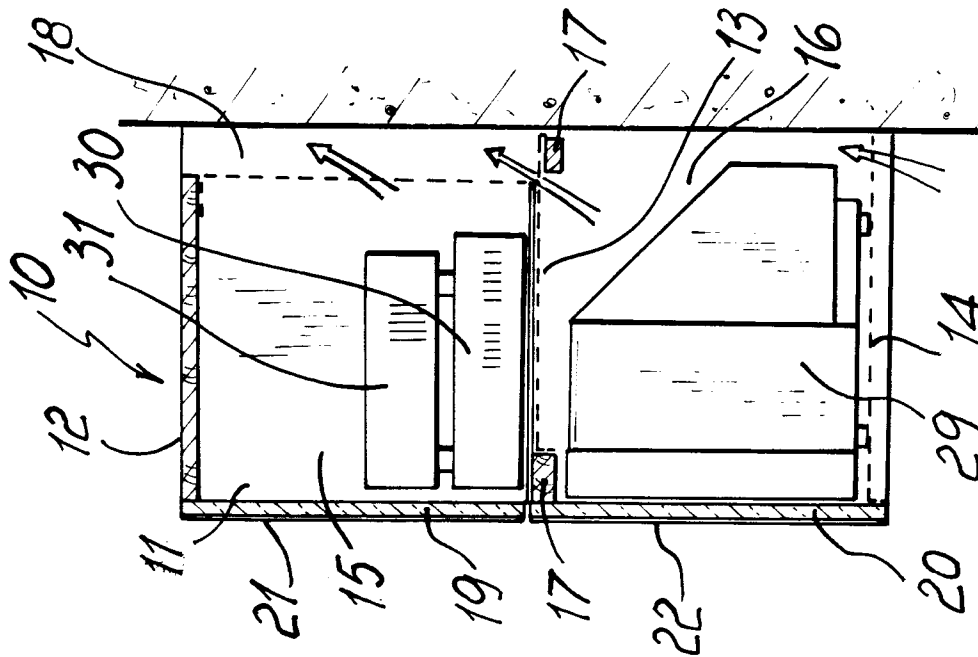
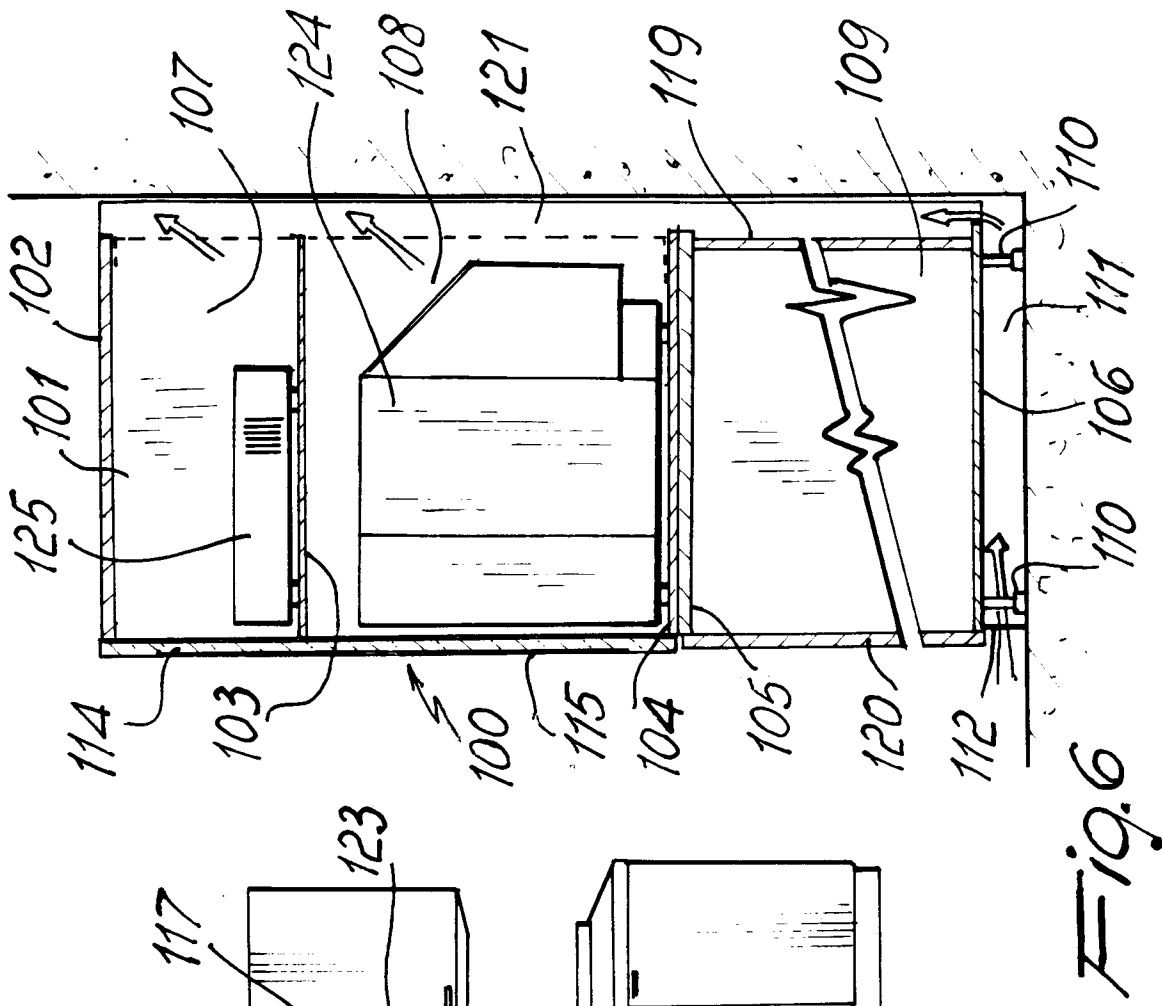
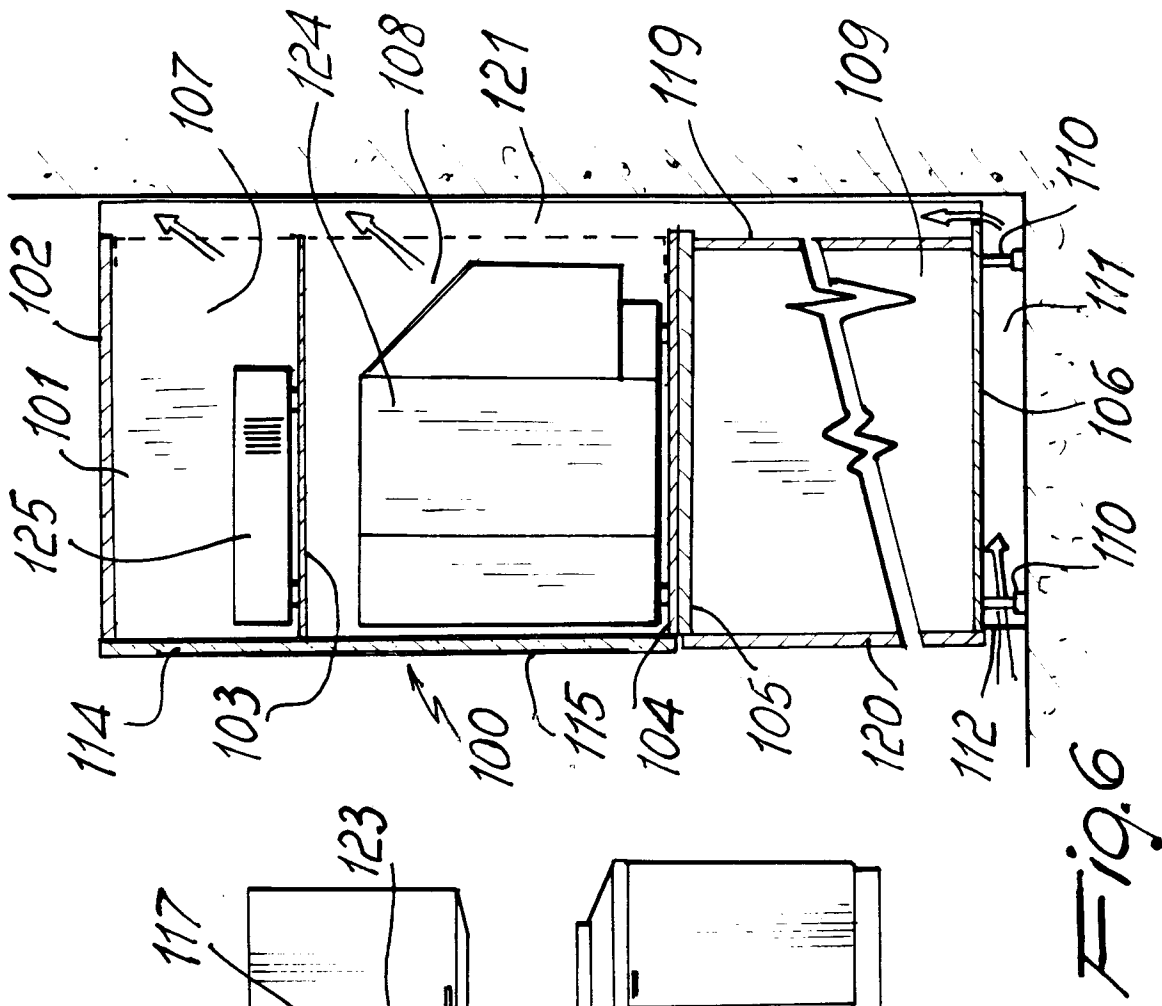


Fig. 3



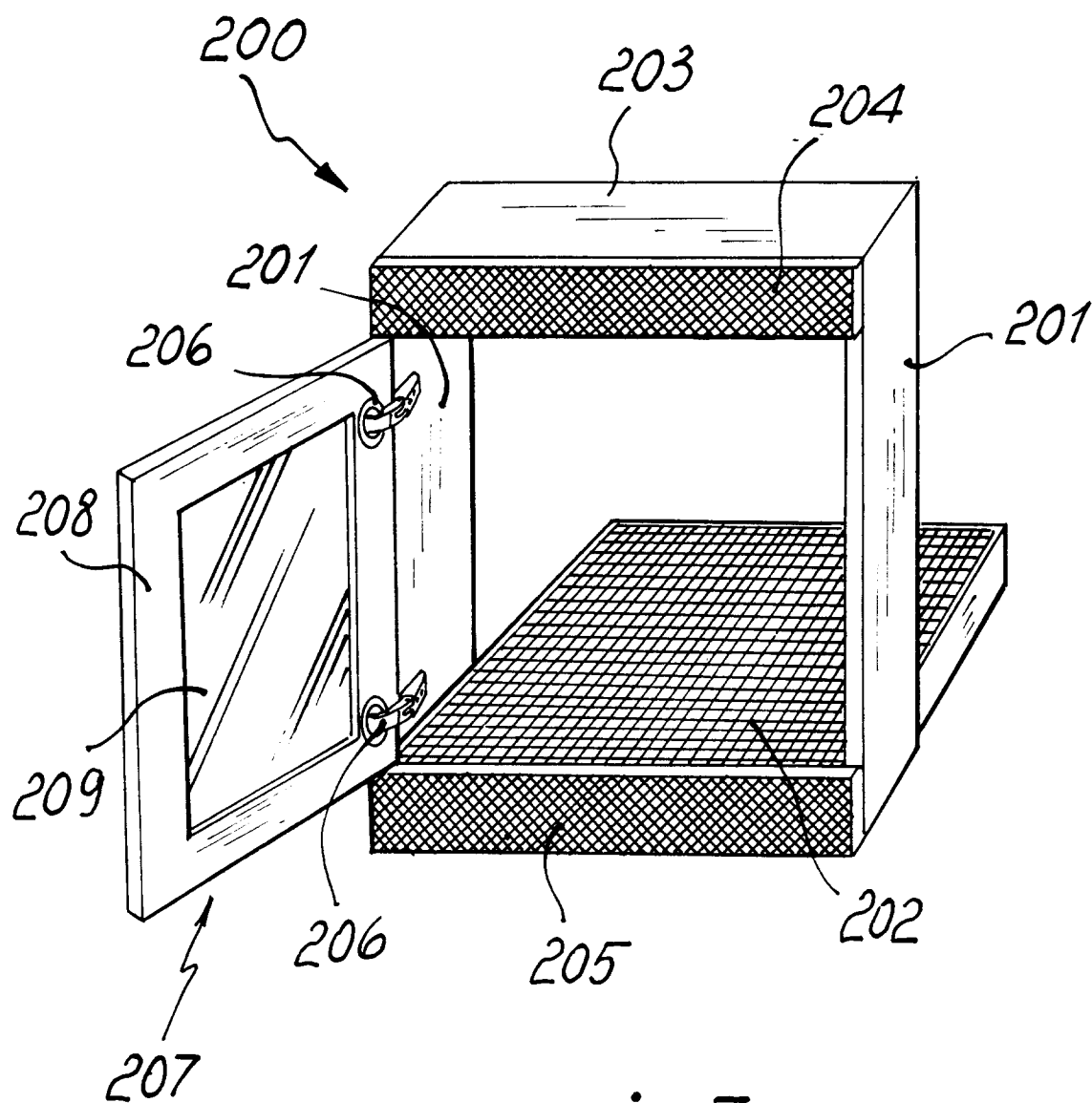


Fig. 7