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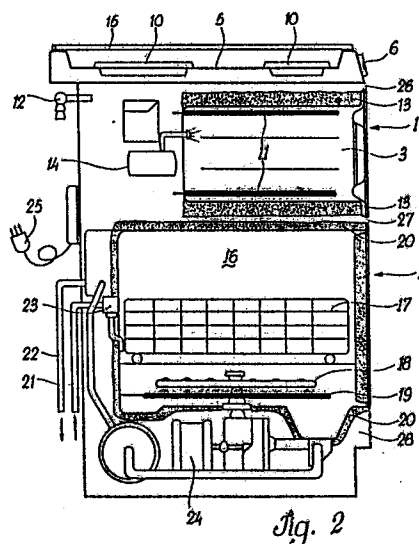
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54 **A combined cooking and dishwashing machine.**

57 A combined cooking and dishwashing machine comprising, in its upper part, a cooking surface (5), an oven element (3), provided under said cooking surface (5), and a dishwashing machine (2), under said oven element (3), the dimensions of the cooking surface (5), of the oven element (3) and of the dishwashing machine (2) being such as to be contained within just one machine whose height can vary between 800 and 950 mm, and width between 450 and 650 mm.



## Description

## A COMBINED COOKING AND DISHWASHING MACHINE

The present invention relates to a combined cooking and dishwashing machine. More particularly the invention relates to a machine in which there are provided, by a single embodiment, compacted within the dimensions of a presently marketed type of machine, the functions of cooking (oven plus cooking surface) with those dishwashing.

Presently both mentioned functions are only available on two different machines, each one having dimensions varying between 450-600 mm in width and about 800-900 mm in height.

Besides, the realization of mini flats becomes more and more popular, meant for housing unmarried persons or even couples, in which the space, particularly in the kitchen, is very much reduced.

Finally the trend is that of sacrificing the space reserved for the kitchen, even in larger flats, to the advantage of other rooms, or of quite doing away with it, by providing the so called cooking corner in the living-room.

In this situation, quite often, there is not absolutely any useful space available, sufficient for housing at the same time both range and dishwashing machine, thus endly sacrificing the letter.

It should also be remarked how in the families formed by two or three persons the dishes soiled in a meal is not in a number sufficient for filling the dishwashing machines presently available on the market and therefore, in order to obtain a full load and an optimum use of the machine from the economic viewpoint, just one washing cycle is performed every two meals.

This is one of the aspects to be considered as being responsible for the low popularity up to now enjoyed by dishwashing machines.

As far as conventional ranges are concerned, it should be remarked that they are provided with an oven being usually considered as over-dimensioned in height, with consequent power waste and extension of cooking times. Besides, the lower space of the range itself, or dish-warmer, remains mostly unused.

In view of the above, it appears quite clear the requirement of having available a machine as that proposed according to this invention, in which, through the rationalization of the dimensions for both machines, there are combined the functions of cooking and of dishwashing, so obtaining some remarkable advantages from the viewpoint of dimensions, as well as a strong cost economy.

It is therefore the main object of the present invention to provide a compact machine, having cooking and dishwashing functions, whose dimensions are contained within the standard ones of an usual machine.

It is another object of the present invention to provide a machine in which the dimensions of each component are extremely rationalized, so as to obtain global production costs being extremely competitive with those of both individual products and, besides, quite reduced running costs.

In order to obtain the above objects, it is proposed by the Applicant a technical basic teaching for implementing the machine with the above referred two functions, provided with the cooking surface, on the top, then an oven of reduced dimensions, and, at the bottom, where a part of the oven and the dishwarmer are normally provided, a dishwashing machine for six places.

It is therefore a specific object of the present invention a combined cooking and dishwashing machine, comprising, in the upper part, a cooking surface, an oven element, provided under said cooking surface, and a dishwashing machine, placed under the oven element, the dimensions of the cooking surface, of the oven element and of the dishwashing machine being such as to be contained within just a machine whose height can vary between 800 and 950 mm, and width between 450 and 650 mm.

Preferably the dimensions of the machine can vary between 850 and 900 mm in height, and between 500 and 600 mm in width.

The cooking surface can be of the type with electric plates, with gas burners or other solutions of flat heating, while the oven can be of the electric, gas, steam or microwave type and, of course, in the case of gas burners and/or gas oven, provision should be made for a connection to gas feed.

Around the oven element, a thermic insulation shall be provided.

The dishwashing machine of the machine according to the invention, may be formed by a tank with a dishes holding basket for six places, and water distributing rotor, plus heating resistor for same placed under the basket itself, by a pump assembly placed externally and under the said tank, acoustic insulation being provided all around the tank itself.

On the front face of the machine according to the invention, there can be provided air intakes for cooling, particularly between the cooking surface and the oven element, between the latter and the dishwashing machine, as well as under this last.

The present invention shall be now described with particular reference to the figures of enclosed drawings in which:

figure 1 is a front view of one machine according to the invention; and

figure 2 is a side view, in vertical section, of the machine as per figure 1.

The machine according to the invention, shown in figure 1, is formed by one range 1, provided in its upper part, and by one dishwashing machine 2.

Still in figure 1, it can be remarked how said range include the oven 3 and the cooking surface 5 with the appropriate control knobs 4 and 6.

By the reference numeral 7 are shown the controls of dishwashing machine 2, while by reference numerals 8 and 9 are shown, respectively, the handles for opening the oven 3 and the dishwashing machine 2.

Now, by observing in particular figure 2, it can be

remarked how there may be obtained the coexistence of range 1 and dishwashing machine 2 in just one module of standard dimensions.

The upper part of the machine according to the invention is formed, as already said, by range 1 which provides, above, the cooking surface 5, and, below, the oven 3.

The cooking elements provided on surface 5, and indicated by reference 10, can be indifferently formed by electric plates, gas burners or other similar systems, just as the oven 3 can belong to the electric type, in which case the resistors 11 are provided, or to the gas type.

In the case of gas feed, on the back side there will be provided the inlet 12 for said gas.

A thermic insulation 13 is arranged between oven 3 and cooking surface 5. The oven 3 can be also provided with the device 14 for steam delivery.

Above the cooking surface 5, the normal cover 15 is shown.

Under the oven 3, by taking advantage of the space normally reserved for the dishwarmer, as well as of a part of that for the oven 3 itself, usually overdimensioned, there is placed the dishwashing machine 2, whose dimensions allow the washing of dishes corresponding to about six places.

Dishwashing machine 2 will be provided with all mechanical components normally employed, since the dimensions only are to be rationalized. In particular, in the tank 16 there is placed the dishes holding basket 17, under which is provided the water distributing rotor 18. By 19 is indicated the water heating resistor.

Outside tank 16 there is provided an acoustic insulation 20. Tubings 21 and 22, in the after part of the machine according to the invention, are respectively used for water delivery and exhaust.

Magnetic valve 23 is provided on the back of tank 16, while the pump assembly 24 is placed externally and under the tank itself. On the back wall of the machine a plug 15 is provided.

Three air intakes 26, 27 and 28, for cooling the machine, are placed, respectively, on the front face of same, between the cooking surface 5 and the thermic insulation 13, between the insulation 13 and the acoustic insulation 20 and under the tank 16.

This invention has been disclosed with reference to its preferred embodiments, but it is understood that changes and modifications could be made by those who are skilled in the art without departing from the general scope of this invention.

## Claims

1. A combined cooking and dishwashing machine, characterized in that it comprises, in combination, in the upper part, a cooking surface, an oven element, provided under said cooking surface, and a dishwashing machine, under said oven element; the dimensions of the cooking surface, of the oven element and of the dishwashing machine being such as to be contained within just one machine whose

height can vary between 800 and 950 mm, and width between 450 and 650 mm.

2. Machine according to claim 1 characterized in that its dimensions vary between 850 and 900 mm in height and between 500 and 600 mm in width.

3. Machine according to claim 1 characterized in that the cooking surface includes burners and/or electric plates.

4. Machine according to claim 1 characterized in that said oven is of the electric, gas, steam, microwave, etc. type.

5. Machine according to claim 1 or 4 characterized in that around said oven a thermic insulation is provided.

6. Machine according to claim 1 characterized in that said dishwashing machine is formed by a tank with dishes holding basket for six places, having water distributing rotor and water heating resistor placed under the basket itself, by a pump assembly placed externally and under said tank, and by acoustic insulation provided all around the tank itself.

7. Machine according to claim 1 characterized in that air intakes for cooling are provided on its front face.

8. Machine according to claim 7 characterized in that said air intakes are provided between the cooking surface and the oven element, between oven element and the dishwashing machine and under the dish washing machine.

9. A combined cooking and dishwashing machine according to each one of the previous claims, substantially as shown and described.

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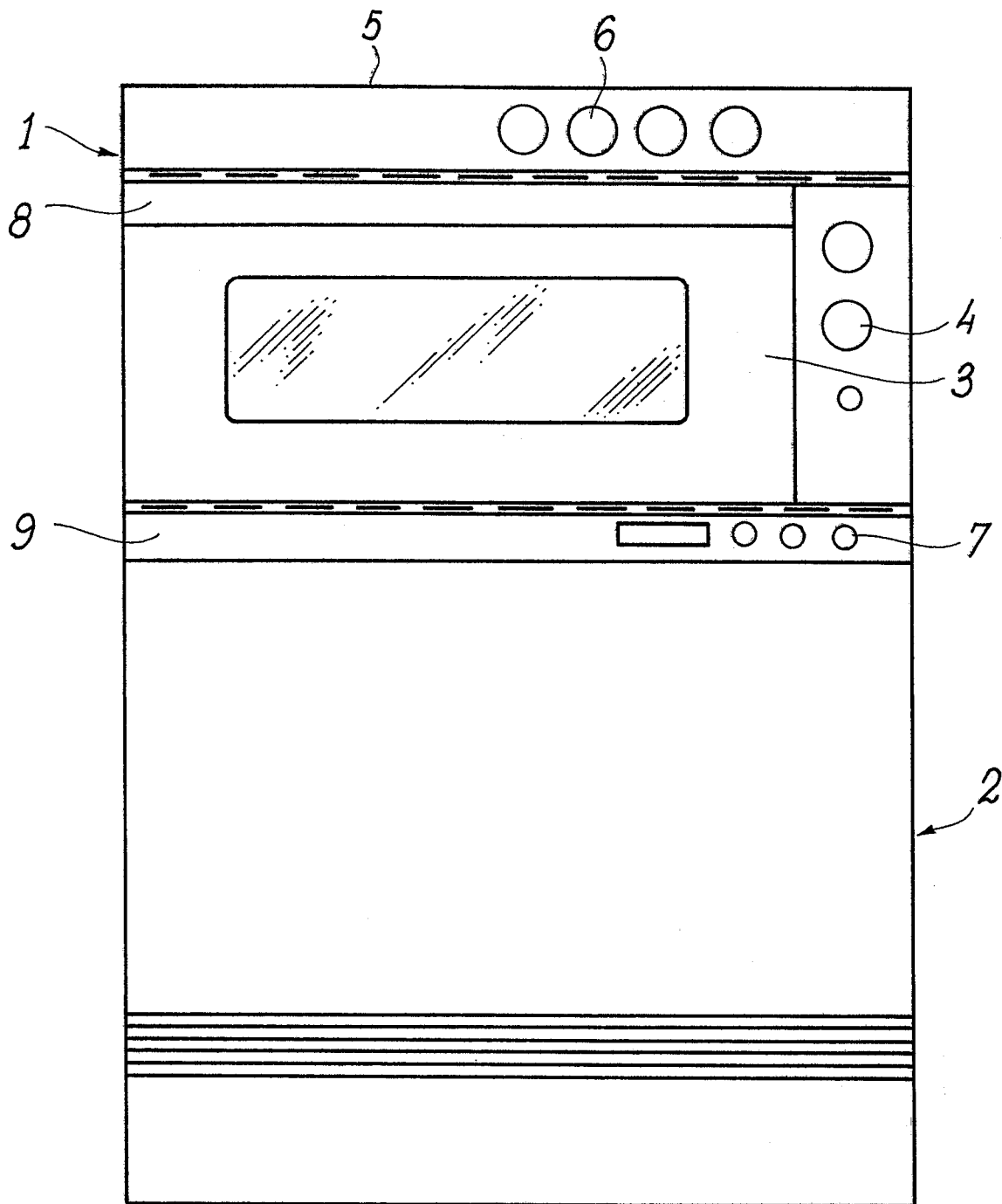
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*Fig. 1*

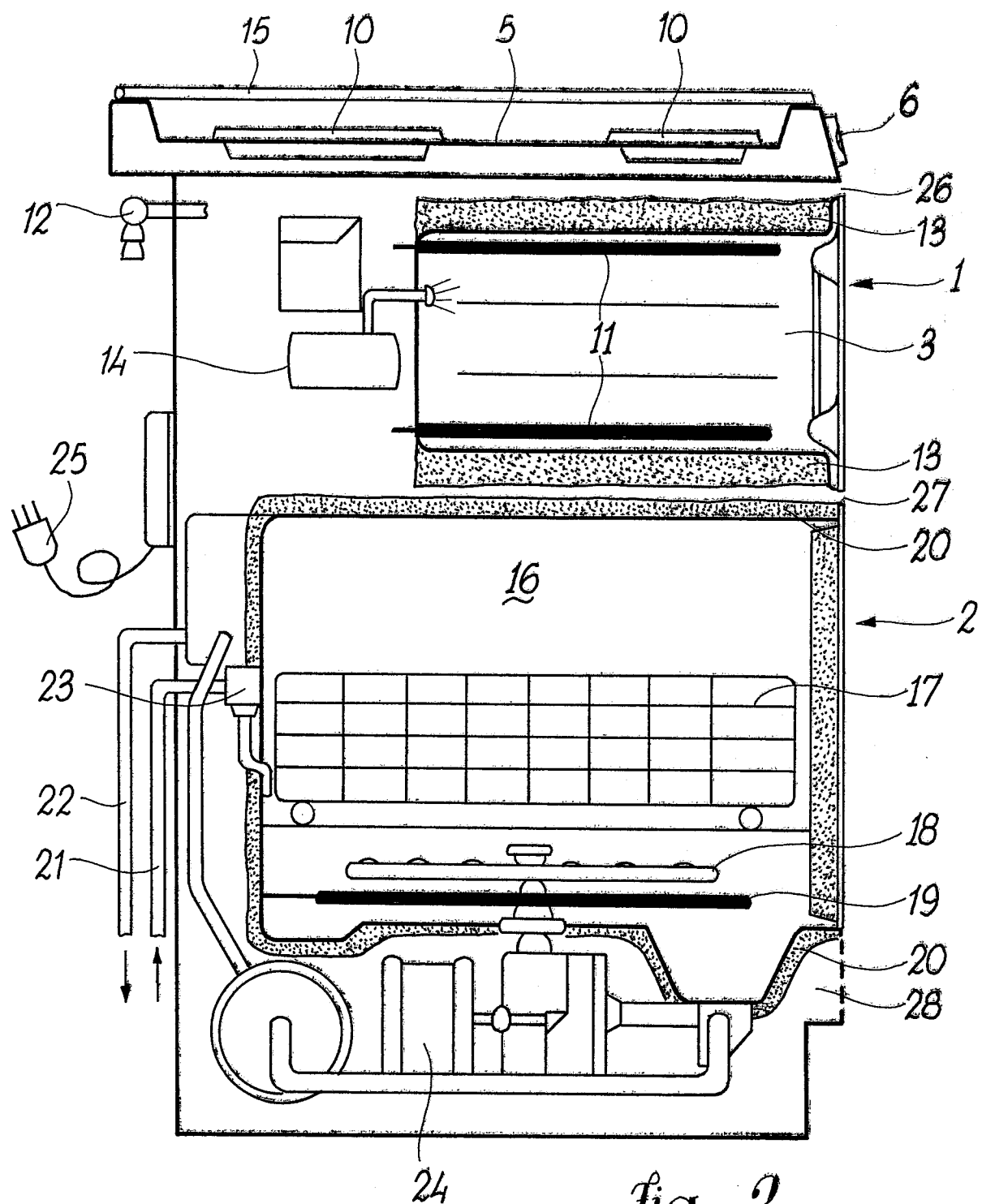


Fig. 2