



(12)

EUROPEAN PATENT APPLICATION

(21) Application number : **93500083.6**

(51) Int. Cl.⁵ : **F24C 7/08**

(22) Date of filing : **15.06.93**

(30) Priority : **03.07.92 ES 9201384**

(43) Date of publication of application :
12.01.94 Bulletin 94/02

(84) Designated Contracting States :
DE FR GB NL

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(54) **Household appliances remote control system.**

(57) System for the remote control of household appliances, to control basically induction-heated or vitroceramic devices, supplied with a transmitter and an infrared ray sensor-receiver (5) or radio, located above or under the ceramic glass so that the controls (1) of the heaters are placed on the front of an apparatus such as the cooker hood (4), or in an area included in the scope of the infra-red rays or radio waves, using a remote control.

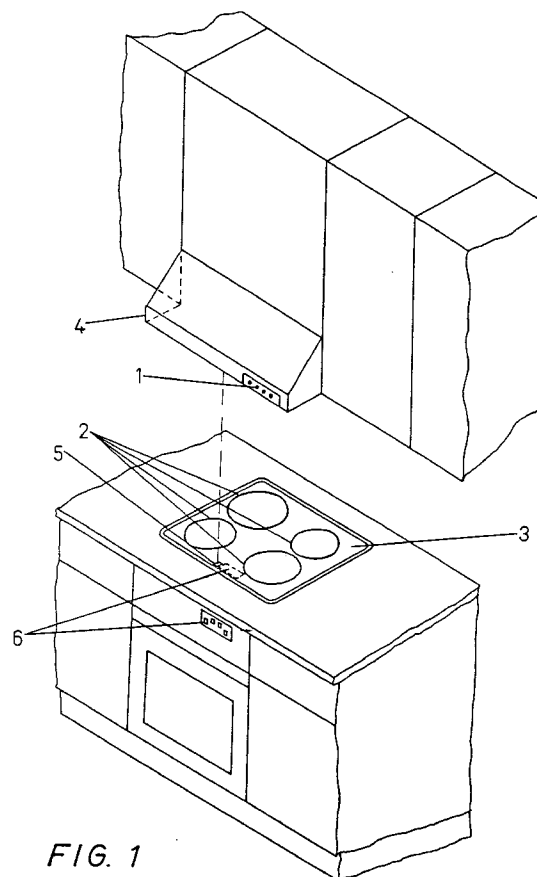


FIG. 1

OBJECT OF THE INVENTION

The following invention, according to the heading of this descriptive memory, is a system for the remote control of household appliances, especially made to control induction-heated or vitroc ceramic devices.

The system is supplied basically with a transmitter and an infrared ray sensor-receiver or radio, the controls being located on the front of the cooker hood, which is over the heaters of the cooking plate and with the corresponding infrared ray sensor or aerial, either above or under the ceramic glass.

The control of the heaters can be performed through a remote control with ON/OFF buttons, as well as the buttons to control the power of each resistor. That control can be placed in a support located on the front of the cooker hood to be handled.

On the front of the ceramic hob, there will be some power display corresponding to the plate heaters, formed by seven segment displays.

BACKGROUND OF THE INVENTION

The cooking plates are conventionally designed to be placed in an opening made in the working table, supplied with or without controls preferably with four heaters.

If the cooking plate has already its own controls, these can be located laterally, on a base inclined towards outside and forming a projection internally, in order to protect them from the heaters.

When the cooking plate has no controls, these are located on the front of the cabinet to adjust the power of the different heaters.

In both cases, and with varied shapes, those user-handled controls have some marks which, together with the perimeter references, define the position and power of the corresponding resistor.

DESCRIPTION OF THE INVENTION

In this memory, we describe a system for the remote control of the functions of household appliances, preferably designed for cooking devices, being the controls in a place far from the induction or vitroc ceramic cooking plate, for example, in the structure of the cooker hood, or using a remote control.

The system has a transmitter and an infrared ray receiver or radio, with the infrared sensor-receiver or aerial under the ceramic glass, so that the infrared rays or radio waves can go through that ceramic glass.

The location of controls on the front of the cooker hood makes it easier their handling, as well as an infrared ray sensor or radio, either above or under the ceramic glass to execute all the commands.

Besides, on the front of the cooker hood or any other area next to the working table, there can be a

support to place the remote control from where you can give the right commands to the household appliance.

The remote control has an ON/OFF button and as many control buttons as heaters in the cooking plate, which adjust the power of each resistor.

There will be as many power displays as heaters in the cooking plate, on the front of the cooker or under the ceramic glass, with a seven segment display to allow an easy display of the power of each resistor in operation.

To complete the following description and help to a better understanding of its features, this memory has a set of charts which show graphically and limitless the most important details of the invention.

BRIEF DESCRIPTION OF THE DRAWINGS

Figure 1. Shows a perspective of a cooking plate, with the cooker hood above and the controls of the heaters on its front.

Figure 2. Shows a perspective of the remote control with the ON/OFF buttons, as well as the buttons to adjust the power of the heaters.

DESCRIPTION OF A PREFERRED EMBODIMENT

After seeing the above figures and according to the numbering adopted, we can notice how the controls (1) for the heaters (2) of the cooking plate (3), either induction or vitroc ceramic, are located on the front of the cooker hood (4) in such a way that the sensor-receiver (5) is activated by infrared rays or radio, above or under the ceramic glass, since the infrared rays or radio waves go through it.

The system can incorporate a remote control (7) by infrared rays or radio, which can be located on the same cooker hood (4) to handle it from its support, or from any other place within its scope.

So, the controls are easily handled by the user and, at the same time, they are far from the heaters (2), avoiding an accumulation of dirtiness.

Besides, if there is a support for the remote control (7) on the front of the cooker hood or any other area next to the working table, it will always be in its correct location to control the heaters (2). If the operation is to be performed with the remote control (7) from a further position, it will be taken from its support to execute the requested commands, as long as you are within its scope.

The buttons (10) and (11) are handled in such a way that by pressing them in one side or another, the power of the resistor increases or decreases.

The remote control (7) has an ON button (8), an OFF button (9) and the corresponding buttons (10) and (11) to adjust the power of the heaters (2). Seven segment displays show the power status of the heaters (2), being located under the ceramic glass or on

its front (4), and they will allow a perfect display of those heaters.

Claims

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1. HOUSEHOLD APPLIANCES REMOTE CONTROL SYSTEM, system to control especially induction-heated or vitroceramic devices, incorporating a transmitter and an infrared ray sensor-receiver or radio (5), located above or under the ceramic glass, with the controls (1) of the heaters (2), either on the front of an apparatus, such as a cooker hood (4), or in an area within the scope of the infrared rays or radio waves, the control being performed by an infrared ray remote control or radio (7), having an ON button (8), an OFF button (9) and the corresponding controls (10 and 11) to adjust the power of the heaters, with the feature that there are seven segment displays (6) under the cooking plate (3), indicating the power of each resistor (2).

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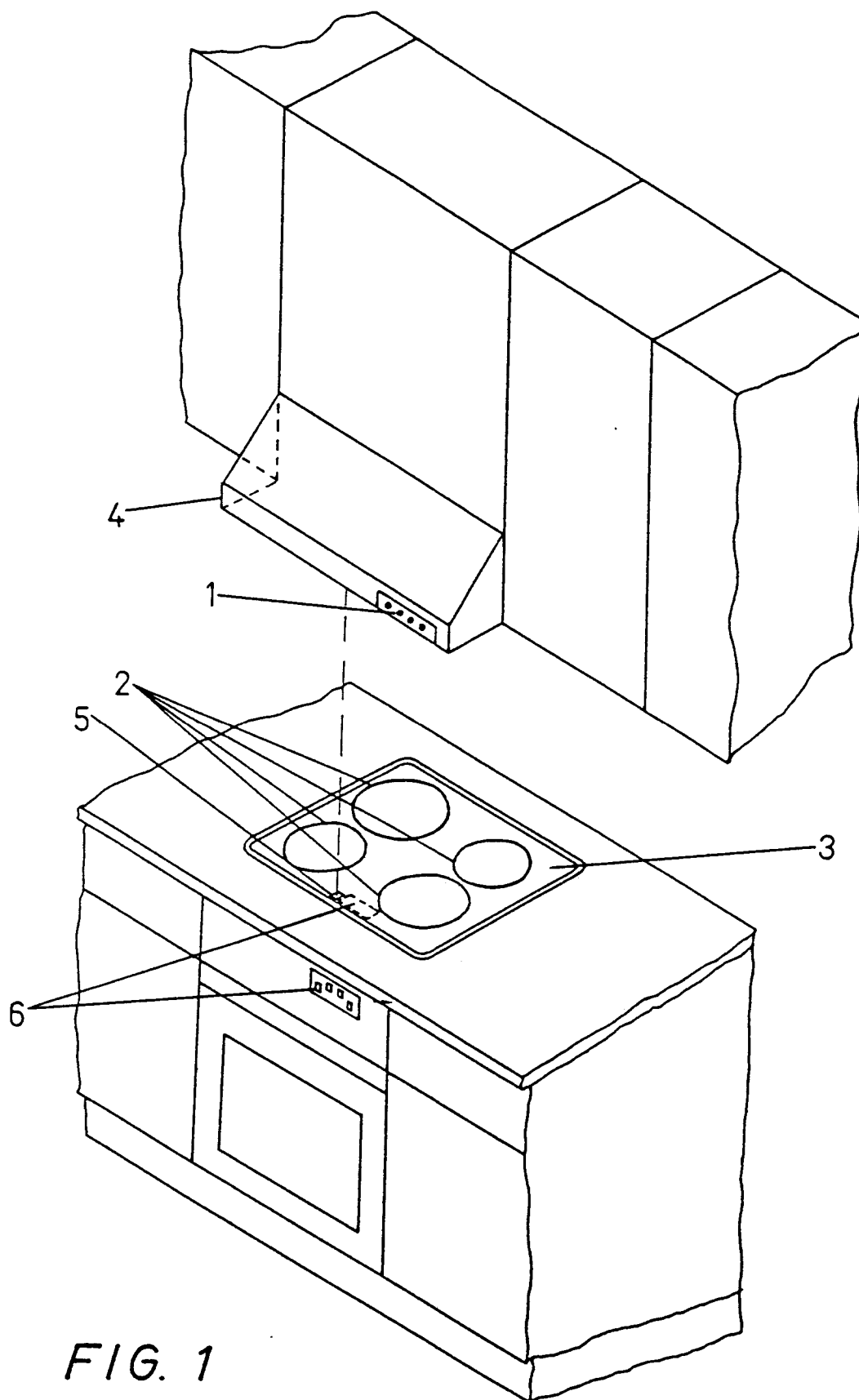
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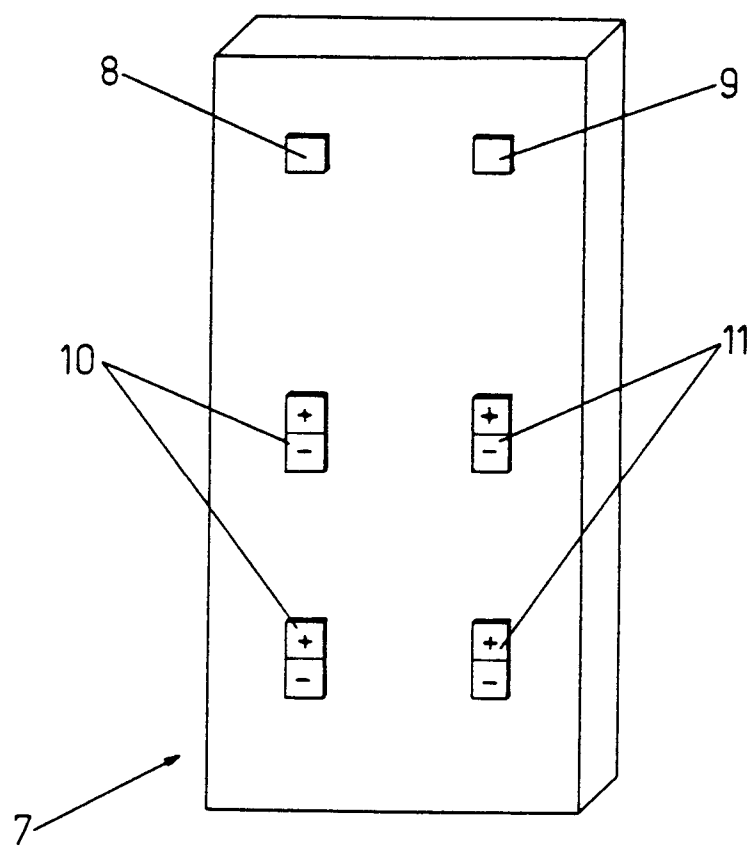


FIG. 2