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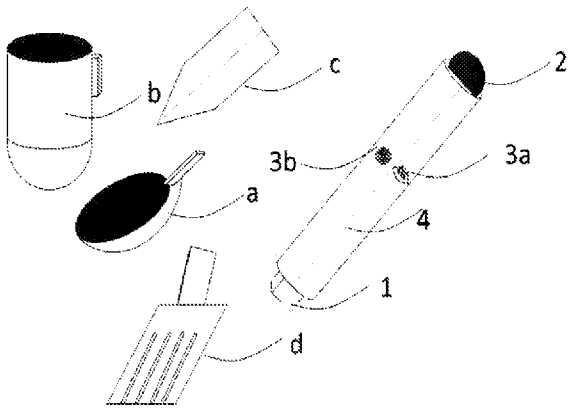

FIG. 1

(57) Abstract: The present invention relates to a utensil that not only enables food to be heated, but also likewise cooled and/or regulated. Kitchen accessories can be coupled to said utensil, such as cutlery and it comprises a main body divided into two compartments that are hermetically insulated from each other by means of a coating, wherein one of the compartments comprises an electrical resistor and the other comprises cartridges of cooling gel, such that the activation of the cooling gel or the electrical resistor can be selected in order to generate, respectively, the cooling or the heating of the food.

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HEATING AND COOLING UTENSIL FOR PREPARED FOOD AND DRINKS

OBJECT OF THE INVENTION

The present invention relates to a device for controlling the temperature of food, which can be coupled to kitchen utensils, such that said device generates heat if the food is very cold or, if it is hot, it releases a safe cooling gel to cool it or regulate it.

BACKGROUND OF THE INVENTION

Current apparatuses that heat food such as, for example, microwave ovens, need to have a dish inserted in order to heat it. (Patent US 7,969,257 B2).

The devices that cool food need a dish or a food to be introduced in them and, in this manner, the cold effect is able to be provided (Patent US 20030010056A1).

There are devices that were patented previously that cooled through a fan that blew cool air and, thus, regulated the temperature of the food (Patent US5115566A).

Unlike the devices known in the state of the art, the device or utensil of the present invention for controlling the temperature of food is easy to handle, convenient when cooling or regulating the temperature within arm's reach and does not require fans.

DESCRIPTION OF THE INVENTION

The present invention is a utensil that enables not only heating the food but also likewise cooling it and/or regulating the temperature.

Therefore, an aspect of the invention relates to a heating and cooling utensil for prepared food and drinks comprising a main body divided into two compartments that are hermetically insulated from each other by means of a coating, wherein:

one of the compartments comprises an electrical resistor,

the other compartment comprises cartridges of cooling gel,

wherein the main body further comprises:

- on one of the ends thereof, a metal connection configured to be coupled to a metal kitchen accessory,
- on the surface thereof, two buttons, one for selecting the activation of the cooling gel or of the heat-generating resistor and
- on the other end thereof, a button to activate the outlet of the cooling gel,

and wherein the utensil is configured so that the activation of the cooling gel or the surface electrical resistor generates, respectively, the cooling or the heating of the metal connection at the end of the main body, said cooling or heating being transmitted

to the metal kitchen accessory by conduction.

The cooling gel is non-toxic.

The kitchen utensils or accessories that can be coupled to the utensil of the invention can be spoons, knives, forks, wine coolers and other kitchen utensils that are made of metal. Preferably, the kitchen accessories that are coupled to the utensil are made of aluminum.

The kitchen accessories will not be instruments for eating or drinking, since they will simply generate the sensation of heat or cold that someone may need depending on the desired temperature for the food or drink.

In order to insert the metal kitchen accessory into the main body (handle) of the device it will be necessary to exert pressure, and thus they will stay joined for the transfer of the heat and cold.

The two buttons that the utensil of the invention has will enable the user to choose the type of regulation that is desired, whether it is cooling their food, heating it or regulating it to the desired temperature.

In a preferred embodiment of the invention, the metal connection comprises an opening through which the cooling gel will be introduced from the corresponding compartment, walls that will be heated by the resistor and a retractable section that has openings for coupling the kitchen accessories.

In a preferred embodiment of the invention, the metal connection is made of aluminum.

In a preferred embodiment of the invention, the utensil comprises a battery for charging the resistor and it is located in the same compartment as said battery.

DESCRIPTION OF THE DRAWINGS

The figures represent the following by way of illustration and not limitation:

FIG. 1.- Shows a panoramic view of the utensil of the invention and kitchen accessories that can be coupled to it.

FIG. 2.- Shows an internal view of the components of the utensil of the invention.

FIG. 3.- Shows an internal view of the metal connection where the kitchen accessories will be coupled.

FIG. 4.- Shows an internal view of the metal connection and a retractable section for introducing the cooling gel.

FIG. 5.- Shows a front internal view of the metal connection where the cooling gel and the surface heat resistor will be introduced.

PREFERRED EMBODIMENT OF THE INVENTION

What is offered below, with the help of the aforementioned figures 1-5, is a detailed description of a preferred exemplary embodiment of the present invention.

The following figures are not to scale. The dimension and/or real shape of each of the components of the device of the invention may vary. Only the important details of the device are shown with inlets for cooling gel and heat resistors in the metal walls; however, a person skilled in the art can see how the overall structure can be constructed, without undue experimentation. As the main function of the kitchen accessory is to generate a degree of heating, cooling or regulation of the prepared foods or drinks thereof, a reduction in the time that is spent performing these functions in any other invention that carries out these processes is sought.

FIG. 1 shows the utensil of the present invention wherein the metal connection (1) can be seen configured to be coupled to a kitchen accessory such as a spoon (a), a spatula (d), a knife (c) or a ladle (b). The metal surface (1), preferably made of aluminum, is actuated by the button (2) such that the utensil will turn on and dispense the cooling gel in order to control the passage thereof and prevent exaggerated outlet, but the heat and cold functions will be selected by the buttons (3b and 3a) to inject the (non-toxic) cooling gel or to activate the heat resistor, respectively. It is worth noting that these two sections are independent and will have a coating (4) to prevent contact between these two functions. Thus, the metal connection (1) can be heated, cooled or regulated, which will heat, cool or regulate the kitchen accessories.

The mentioned accessories can vary depending on what the user wants to attach, as long as this accessory has a surface made of metal.

FIG. 2 is an internal view of the components of the utensil of the invention. This image shows the button (2) that actuates the utensil and dispenses the compressed cooling gel in small portions and enables the outlet of the dose that the user requires to cool the cutlery. The section (e) can also be seen with the resistor (6) that will be charged by means of a battery (5) included in the same compartment as the resistor (6) and the section (f) that will contain the (non-toxic) cooling gel in the capsule (13).

FIG. 3 is an internal view of the metal connection (1) where the cutlery or the kitchen utensils will be connected. The (aluminum) metal connection will have walls (8) where the resistor will only heat the same and, in the middle, a circular opening (7) can be seen through which the cooling gel will be introduced. In this figure, the lower portion (9) of the main body of the utensil of the invention can also be seen, which will have a coating that will protect the person when gripping it.

FIG. 4 is an internal view of the upper (aluminum) metal connection (aluminum) and the retractable section for introducing the cooling gel.

This view shows the lower portion (9) of the main body of the utensil of the invention, the opening (7) through which the cooling gel will be introduced and the walls (8). The retractable section has openings (10) for inserting the kitchen accessories.

FIG. 5 is a front internal view of the upper metal connection where the cooling gel and the surface heat resistor will be introduced. This view shows the hole (7) for recharging the cooling gel, it likewise has contacts (11) for the outlet of the electrical heat and thus preventing any electrical shorts. In order to expand the heat there will be paths (12a) and (12b) so a better heat flow can be generated.

CLAIMS

1. A heating and cooling utensil for prepared food and drinks comprising a main body divided into two compartments that are hermetically insulated from each other by means of a coating, wherein:
one of the compartments comprises an electrical resistor,
the other compartment comprises cartridges of cooling gel, and
the main body further comprises:
on one of the ends thereof, a metal connection configured to be coupled to a metal kitchen accessory,
on the surface thereof, two buttons, one for selecting the activation of the cooling gel or of the heat-generating resistor and
on the other end, a button to activate the outlet of the cooling gel,
and wherein the utensil is configured so that the activation of the cooling gel or the surface electrical resistor generates, respectively, the cooling or the heating of the metal connection on the end of the main body, said cooling or heating being transmitted to the metal kitchen accessory by conduction.

2. The utensil, according to claim 1, wherein the metal connection comprises an opening through which the cooling gel will be introduced, walls that will be heated by the resistor and a retractable section that has openings for coupling the kitchen accessories.

3. The utensil, according to claim 1, wherein the metal connection is made of aluminum.

4. The utensil, according to claim 1, that comprises a battery for charging the resistor and is located in the same compartment as said battery.

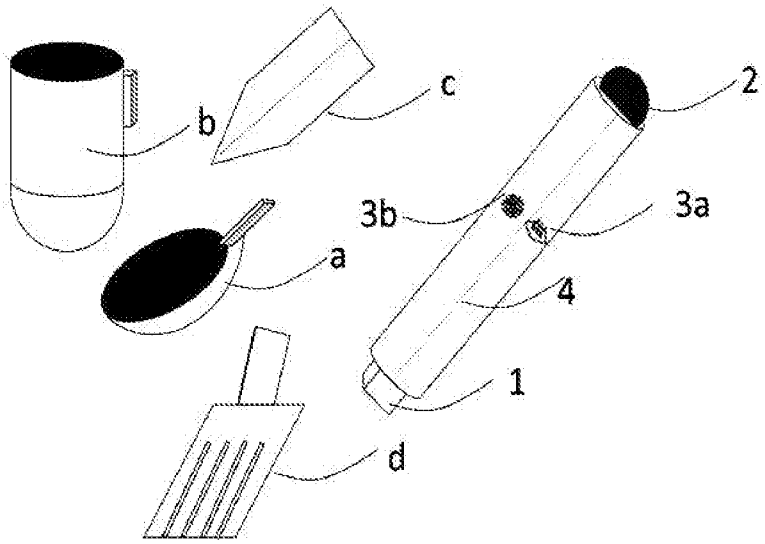

FIG. 1

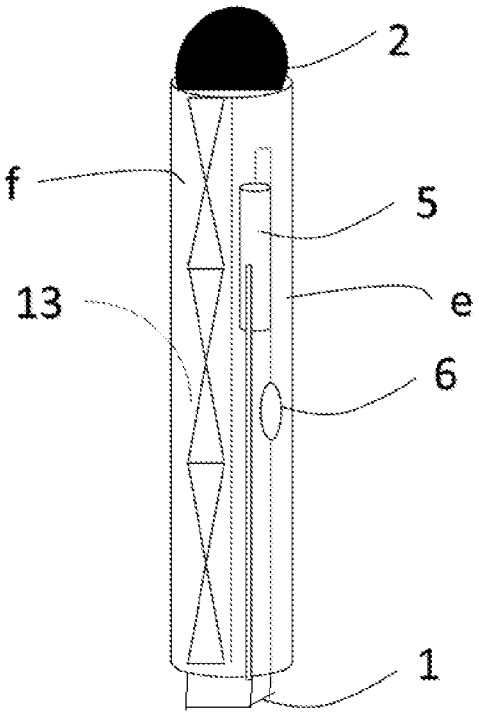

FIG. 2

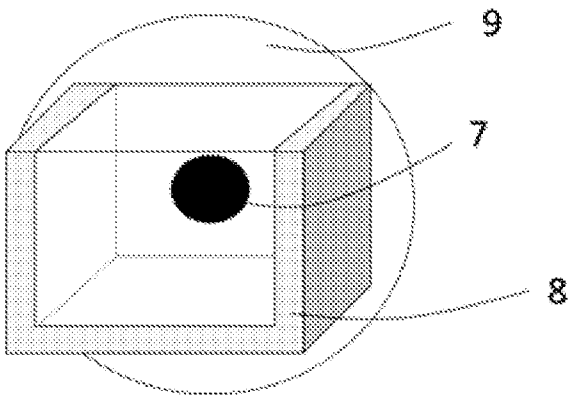

FIG. 3

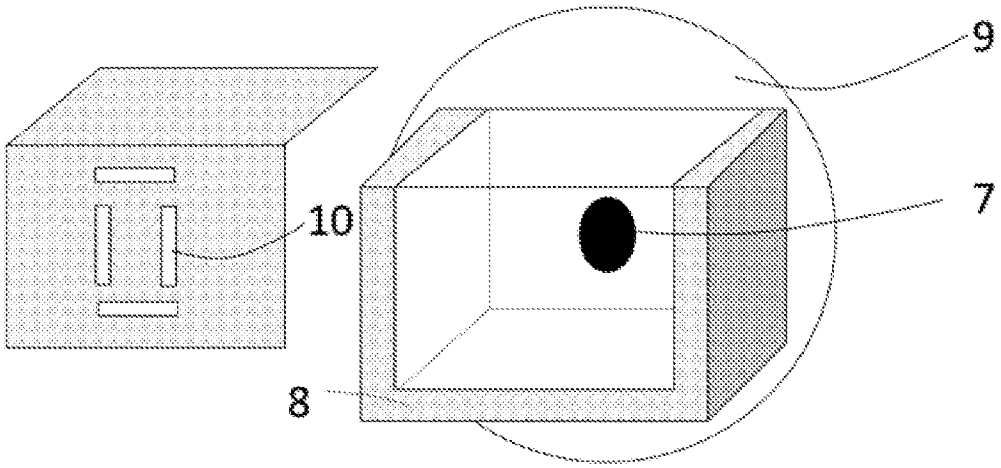

FIG. 4

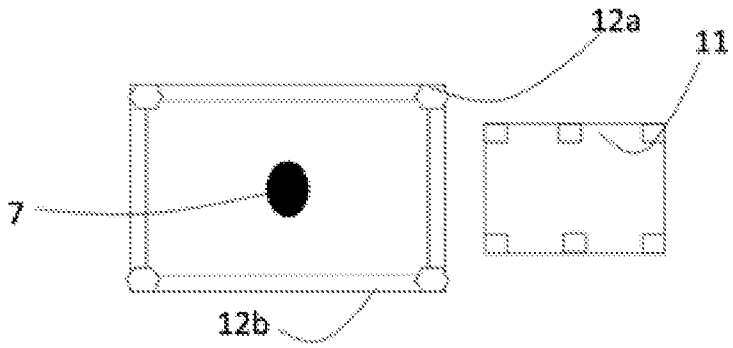

FIG. 5