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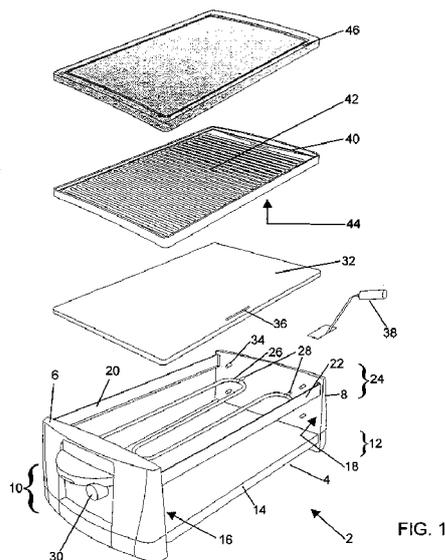
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(57) Abstract: Disclosed is a cooking appliance (2) of a compact size suitable to rest on a kitchen countertop or a table. The appliance (2) has a body (4) including a first upstanding member (6) and a second upstanding member (8) arranged on opposite sides thereof, a heating element (26) arranged at an upper end of the body (4), a heatable plate (40, 46) providing a cooking surface on which food is cooked, a means (32) for reflecting heat emitted from the heating element (26), and a floor member (14). The cooking appliance (2) is provided with openings arranged on opposite sides of the body via which food to be cooked in the body passes. The cooking appliance (2) is adapted to assume a first configuration in which the heatable plate (40, 46) and/or the heat reflecting means (32) is situated above the heating element (26), or a second configuration in which the heatable plate (40, 46) or the heat reflecting means (32) is situated generally midway between the heating element (26) and the floor member (14).

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## COOKING APPLIANCE

### FIELD OF THE INVENTION

The present invention is concerned with a cooking appliance, or a  
5 multi-purpose cooking appliance that can provide the functions of grilling,  
broiling, frying, griddling, toasting, baking and/or food warming, or can serve as  
a table top oven.

### BACKGROUND OF THE INVENTION

10 There are a variety of cooking appliances to suit different cooking needs in  
a kitchen. For example, compact electric food grillers are fairly common in  
recent years because they are easy to use and are handy when for example  
used in a party for grilling steaks in a family gathering. After food has been  
cooked the cooked food is best placed in another food warmer before they are  
15 served. However, with different cooking needs a number of different cooking  
appliances would be needed. To acquire multiple appliances is neither  
cost/space efficient nor environmental friendly.

The present invention seeks to provide a more versatile cooking appliance  
20 or at least to provide a useful alternative to the general public. For instance,  
the present invention seeks to provide a multi-function cooking appliance  
which may be found particularly useful by singles or small families for  
preparing breakfast and/or a full meal using one single cooking appliance.

### 25 SUMMARY OF THE INVENTION

According to a first aspect of the present invention, there is provided a

cooking appliance configured to rest on a kitchen countertop or a table,  
comprising:-

- (a) a body including a first upstanding member and a second upstanding member arranged on opposite sides thereof;
- 5 (b) a heating element arranged at an upper end of the body;
- (c) a heatable plate providing a cooking surface on which food is cooked;
- (d) means for reflecting heat emitted from the heating element; and
- (e) a floor member;

wherein the cooking appliance is provided with openings arranged on  
10 opposite sides of the body via which food to be cooked in the body passes;  
and

wherein the cooking appliance is adapted to assume:-

- (i) a first configuration in which the heatable plate and/or the heat reflecting means is situated above the heating element; or
- 15 (ii) a second configuration in which the heatable plate or the heat reflecting means is situated generally midway between the heating element and the floor member.

Depending on how the cooking appliance is configured to suit a particular cooking exercise, the cooking appliance can be multi-functional in that it can  
20 serve as a broiling grill, a broiler, a grill, a griddle, an oven and/or a raclette grill.

Preferably, the heatable plate may be reversibly situated at the body. For example, the heatable plate may be detachably situated at the body. One of  
25 the cooking surfaces of the heatable plate may be a grilling surface while the other cooking surface may be a griddling surface.

Suitably, lower ends of the upstanding members may be widened and serve as feet such that the cooking appliance can securely rest on a kitchen countertop or a table.

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In an embodiment, the cooking appliance may comprise a first means for supporting the heatable plate and/or the heat reflecting means in the first configuration. The cooking appliance may comprise a second means for supporting the heatable plate or the heat reflecting means in the second  
10 configuration. The second support means may be arranged between the first support means and the floor member.

In one embodiment, the cooking appliance may comprise means for draining oil released from food during cooking. The cooking appliance may  
15 comprise means for storing drained oil.

In a preferred embodiment, in the first configuration the body may be provided with a first cooking chamber defined by and between the heating element and the floor member. The cooking appliance may comprise a  
20 container sized and shaped to slidably fit in the first chamber. Other than the container the cooking appliance may be free of any barrier or door for closing the openings.

In the second configuration the body may be provided with a second  
25 cooking chamber defined by and between the heating element and the heatable plate or the heat reflecting means, and a third cooking chamber

defined by and between the heatable plate or the heat reflecting means and the floor member. The cooking appliance may be configured such that in use temperature in the second cooking chamber is higher than that in the third cooking chamber.

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Preferably, the heatable plate may principally be made of cast aluminum or sheet metal. In an alternative embodiment, the heatable plate may be made of stone.

10 The cooking appliance may comprise a detachable handle configured to assist handling or maneuvering of the heatable plate and/or the heat reflecting means.

According to a second aspect of the present invention, there is provided a  
15 combination electric grill and oven configured to rest on a kitchen countertop or a table, comprising a body, a heating element arranged at an upper end of the body, a removable and reversible heatable plate providing an outwardly facing grilling or griddling surface, a floor member, and a container in which food to be  
20 oven cooked is contained, wherein the body is provided with openings arranged on opposite sides of the body via which food to be cooked in the body passes, and wherein body is provided with a cooking chamber or an oven chamber defined by the heat element and the container fitted in the chamber. The combination electric grill and oven may be free of any barrier or door for closing the openings.

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According to a third aspect of the present invention, there is provided a

cooking appliance comprising a heatable plate providing a cooking surface for grilling or griddling food and reversibly positioned for providing the grilling or griddling cooking surface, a heating element fixedly arranged at an upper end of the cooking appliance, means for reflecting heat, and a floor member fixedly  
5 arranged at an lower end of the cooking appliance, wherein the cooking appliance is configured to allow the heatable plate and/or the heat reflecting means to position at an upper level above the heating element, a lower level in contact with the floor member, or a mid-level between the heating element and the floor member.

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According to a fourth aspect of the present invention, there is provided a cooking appliance configured to rest on a kitchen countertop or a table, comprising:-

- 15 (a) a body including a heating element arranged at an upper end of the body;
- (b) a removable and a reversible heatable plate providing a cooking surface on which food is cooked;
- (c) removable means for reflecting heat emitted from the heating element;
- and
- 20 (d) a floor member;

wherein the cooking appliance is provided with at least a first opening arranged, in use, at a front side the body via which food to be cooked in the body passes; and

wherein the cooking appliance further comprises a first door for closing the  
25 first opening for preserving heat within the body during cooking.

Preferably, the cooking appliance may be provided with a second opening arranged on a rear side of the body, and wherein the cooking appliance comprises a second door for closing the second opening.

5 BRIEF DESCRIPTION OF THE DRAWINGS

The present invention is now described by way of example, with reference to the drawings in which:-

Fig. 1 is an exploded view showing some of the parts of an embodiment of a cooking appliance in accordance with the present invention;

10 Fig. 2 is a perspective view showing another embodiment of a cooking appliance similar to the one in Fig. 1;

Fig. 3 is a perspective view showing another embodiment of a cooking appliance similar to the one in Fig. 1;

15 Fig. 4 is a perspective view showing another embodiment of a cooking appliance similar to the one in Fig. 1;

Fig. 5 is a perspective view showing another embodiment of a cooking appliance similar to the one in Fig. 2;

Fig. 6 is a perspective view showing another embodiment of a cooking appliance similar to the one in Fig. 5;

20 Fig. 7 is a perspective view showing another embodiment of a cooking appliance similar to the one in Fig. 2;

Fig. 8 is a perspective view showing another embodiment of a cooking appliance similar to the one in Fig. 7;

25 Fig. 9 is a perspective view showing another embodiment of a cooking appliance similar to the one in Fig. 8;

Fig. 10 is a front perspective exploded view showing another embodiment of a

cooking appliance similar to the one in Fig. 5;  
Fig. 11 is a rear view of the cooking appliance of Fig. 10;  
Fig. 12 is a partial bottom view of the cooking appliance of Fig. 10; and  
Fig. 13 is a front perspective exploded view showing another embodiment of a  
5 cooking appliance similar to the one in Fig. 10.

## DETAILED DESCRIPTION OF PREFERRED EMBODIMENTS OF THE INVENTION

Fig. 1 shows a first embodiment of a cooking appliance, generally  
10 designated 2, in accordance with the present invention.

The cooking appliance 2 comprises a body 4 with a generally elongate  
and rectangular profile. The body 4 has opposite upstanding members 6, 8.  
Each of the members 6, 8 has a slightly widened lower end 10, 12 such that in  
15 use the body 4 with the members 6, 8 can rest securely on a kitchen  
countertop or a table.

Means are provided to connect the opposite upstanding members 6, 8  
together. The connection means includes a planar rectangular member or  
20 floor member 14 situated at a lower end of the body. The planar member 14  
is connected to inwardly facing surfaces 16, 18 of lower regions of the  
upstanding members. The planar member 14 serves as a floor on which food,  
food container or a food handling utensil may be placed. In this embodiment,  
the planar or the floor member 14 is made of a metallic material. The means  
25 also includes a pair of elongate brackets 20, 22 arranged on an upper end 24  
of the body 4. Each of the brackets 20, 22 is generally in the shape of an "L"

having a vertical portion and a horizontal portion. The pair of brackets 20, 22 is specifically arranged on opposite side of the upper end of the body 4. Opposite distal ends of each bracket (20 or 22) is connected to the upstanding members 6, 8. Once the brackets 20, 22 and the planar member 14 are secured to the upstanding members 6, 8, the body 4 has generally taken shape, as shown in Fig. 1.

The cooking appliance 2 is provided with a heating element 26 arranged at an upper region of the body 4. Specifically, in this embodiment the heating element 26 is arranged at a level below the brackets. The heating element 26 is of a looped configuration and generally defines an upwardly facing heating direction and a downwardly facing heating direction. Opposite ends of the heating element 26 are secured to the inwardly facing surfaces of the upstanding members by attachment means 28.

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One of the upstanding members (6 or 8) is provided with a control knob 30 which is electrically connected to the heating element 26. Operation of the heating element 26 is controlled by the control knob 30.

The cooking appliance 2 is provided with a heat reflecting member 32. The heat reflecting member 32 is relatively thin and is generally of rectangular shape. The heat reflecting member 32 is sized and shaped to sit on and fit within the brackets 20, 22. Protrusions in the form of lugs 34 are provided at the inwardly facing surfaces of the upstanding members 6, 8 in order to provide further support to the heat reflecting member 32. The heat reflecting member 32 is provided with a thin elongate slit 36 at one side thereof. A tool 38 in the

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form of a small spatula with a handle at one end and a thin metal plate on the other end is provided. The thin metal plate is sized and shaped to be able to insert into the elongate slit of the heat reflecting member 32. Once inserted in the elongate slit, the tool 38 can remove or otherwise maneuver the heat reflecting member 32 in use. This is advantageous because the heat reflecting member 32 can become very hot in use and the tool will become very handy.

The cooking appliance 2 is provided with a cooking plate 40. The cooking plate 40 is configured such that one side thereof serves as a grilling surface 42 with ribs thereon. The opposite side 44 of the cooking plate 40 is configured for griddling food. The cooking plate 40 is also sized and shaped to rest on the brackets 20, 22 and the lugs 34. When the heat reflecting means 32 is rested on the brackets 20, 22 and the lugs 34, the cooking plate 40 may be placed on in the heat reflecting means 32. When the heat reflecting means 32 is not rested on the brackets 20, 22 and the lugs 34, the cooking plate 40 may be placed directly on the brackets 20, 22 and the lugs 34. In this embodiment, the primary cooking plate 40 is made of essentially cast aluminum. The use of cast aluminum is advantageous because cast aluminum is heatable and can retain heat for a long period of time. However, the use of other suitable materials may be possible.

In this embodiment, once the heat reflecting member 32 and the cooking plate 40 are fitted on the brackets, two cooking environments are provided. Specifically, one cooking environment is provided by the cooking plate 40 for grilling or griddling food. It is to be noted that the cooking plate 40 is

reversible so a user can turn the cooking plate 40 to a desired position in use. Another cooking environment is between the heating element 26 and the floor member 14. The heating element 26 and the floor member 14 define a cooking chamber therebetween. The cooking chamber serves as an oven for cooking food. It can be envisaged that a user can grill food with the cooking plate 40 while heating up or baking food in the cooking chamber.

The provision of the heat reflecting member 32 reflects a good portion of heat emitted from the heating element back to the cooking chamber. However, if a greater proportion of heat is to be supplied to the cooking plate 40 then the heat reflecting member 32 does not need to be installed beneath the cooking plate 40. The cooking appliance 2 thus provides versatility to a user, depending on the needs of a cooking exercise.

Instead of using the primary cooking plate 40, an auxiliary cooking plate 46 may be used instead. Whichever plate (40 or 46) is used, the plate (40 or 46) serves as a heatable or heating plate on which food is cooked. The auxiliary cooking plate 46 is made of stone. The auxiliary cooking plate 46 provides an option of generating cooked food with a stone flavor. It is generally believed that food grilled by a stone plate is healthier.

Fig. 2 shows an embodiment of a cooking appliance 50 similar to the cooking appliance 2 but configured differently. Accordingly, the same numerals of like parts are used. In this embodiment, the heat reflecting member 32 of the cooking appliance is positioned at a level between the heating element 26 and the floor member 14. With this configuration, the

heat reflecting member 32 is supported by the lugs 34 protruded from the inwardly facing surfaces 16, 18 of the upstanding members 6, 8. As shown in Fig. 2, three cooking environments are provided by the cooking appliance 50 with this configuration. The first cooking environment is the upwardly facing grilling surface of the cooking plate. With this cooking environment, food may be put on the grilling or griddling surface (42 or 44). Alternatively, the grilling surface 42 may be used as a heat source for fondue cooking in which a pot of fondue is placed on the grilling surface 42. The second cooking environment is a second cooking chamber defined by and between the heating element and the heat reflecting member. The third cooking environment is a third cooking chamber defined by and between the heat reflecting member 32 and the floor member 14. It can be understood that in use the cooking temperature of the second cooking chamber is higher than that in the third cooking chamber because the second cooking chamber is adjacent to the heating element. The provision of three different cooking environments allows three ways of food treatment. For example, the upwardly facing surface of the cooking plate (42 or 44) can provide a food grilling surface; the second cooking chamber can provide a food baking chamber, e.g. for baking potatoes; and the third cooking chamber can provide a food warming chamber.

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In this embodiment, the cooking appliance 50 includes a number of spatula-like racklettes 52, 54. Each racklette (52 or 54) acts as a spoon for containing food to be cooked. For example, food to be cooked is placed on one of the racklettes and then inserted in the second chamber. After the food is cooked the racklette may then be inserted in the third chamber such that food therein can be kept warm before the food is served. Regardless which

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of the second and third chamber is in use, other food may be put on the grilling plate 40 for grilling.

Fig. 3 shows an embodiment of a cooking appliance 60 similar to the cooking appliance 2 but yet configured differently. Again, the same numerals of like parts are used. In this embodiment, the heat reflecting member 32 is situated at an upper region above the heating element 26. However, the heating or heatable plate 40 is placed mid-way in the body of the cooking appliance 2. By mid-way, it means the location of the plate may be anywhere between the heating element 26 and the floor member 14. Three food processing zones are also provided by this embodiment. A first zone is the upwardly facing surface of the heat reflecting means 32. This zone may be used to keep food warm. For example, a cooked toast may be put on the upwardly facing surface of the heat reflecting means 32 to keep it warm. A second zone is the chamber between the heating element 26 and the heating plate 40. With this zone, food may be placed on the heating plate 40 for cooking. The food is actually cooked by way of two heatings, namely heating emitted from the heating element 26 and heating reflected by the heat reflecting means 32. A third zone is the chamber between the heating plate 40 and the floor member 14. In use, the temperature of the third zone is lower than that of the second zone in that the third zone may also be used to keep food warm.

Fig. 4 shows an embodiment of a cooking appliance 70 similar to the cooking appliance 2. Again, the same numerals of like parts are used. In this embodiment, means for drawing oil released from food during cooking

(food grilling) is provided. Grilling surface of the cooking plate is provided with a number of grooves or channels which channel the oil to an oil drain arranged at one end of the cooking plate. The drained oil is then further channeled to an oil storage box 72 via a passageway arranged a lower end of the body of the cooking appliance 70. The passageway is provided with a removable stainless steel insert to cover the passageway such that oil is actually drained through the insert. The removability of the insert allows easy cleaning of the passageway.

10 In this embodiment, a container 74 is provided. The container 74 is sized and shaped to tightly and slidably fit in a cooking chamber defined between the heating element 26 and the floor member 14. Once fitted in the cooking chamber, the heating element 26 and the container 74 act as an oven which may be used for toasting bread or baking potatoes. While toasting or baking, 15 the upwardly facing surface of the cooking plate 40 may be used to, for example, fry an egg. The advantage of the heating element-and-container arrangement is that the cooking appliance 70 is free of any barrier or door for closing opposite openings of the appliance such that use thereof is very convenient. Yet, the use of the container 74 can provide sufficient barrier to 20 the cooking chamber – inserting or removing food into the chamber becomes very easy and efficient.

Fig. 5 shows an embodiment of a cooking appliance 80 similar to the cooking appliance 50 in Fig. 2. Again, the same numerals of like parts are used. The cooking appliance 80 is however different in that the heat reflecting member 32 is situated above the heating element while the heatable 25

plate 40 is situated mid-way between the heating element and the floor member. In particular, the heatable plate 40 is adapted to take the form for supporting a pizza. It is envisaged that the cooking appliance 80 is configured to heat up or cook a pizza.

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Fig. 6 shows an embodiment of a cooking appliance 90 similar to the cooking appliance 80 in Fig. 5. Again, the same numerals of like parts are used. The cooking appliance 90 is however different in that it is equipped with a timer 92 such that a user can set the timer to cook for a predetermined period of time and walk away. On completion of the cooking cycle the cooking appliance 90 will turn off automatically.

Fig. 7 shows an embodiment of a cooking appliance 100 similar to the cooking appliance 50 in Fig. 2. Again, the same numerals of like parts are used. The cooking appliance 100 is however different in that the heat reflecting member 32 is situated below the heating element and at a level about 75mm above the floor member 14. A relatively thin cooking chamber is defined between the heating element and the heat reflecting member 32. Due to the relatively thin cavity of the cooking chamber and the proximity to the heating chamber, a higher degree of heat intensity is sustained by food cooked in the cooking chamber. This arrangement of the cooking appliance 100 is particularly suitable for preparing thin and crispy pizza which requires intense heating in its preparation. A cooking chamber is defined between the heat reflecting member 32 and the floor member 14. Relatively less intense heat is sustained by food in the chamber. This chamber may be used for preparing

thin and chewy pizzas. The heatable plate 40 may be used for health grill other food simultaneously.

Fig. 8 shows an embodiment of a cooking appliance 110 similar to the cooking appliance 100 in Fig. 7. Again, the same numerals of like parts are used. The cooking appliance 110 is different in that the heatable plate 46 is a stone grill plate.

Fig. 9 shows an embodiment of a cooking appliance 120 similar to the cooking appliance 110 in Fig. 8. The cooking appliance 120 is configured to function as a griddle in that the heatable plate may be used for frying pancakes.

Figs. 10 and 11 show an embodiment of a cooking appliance 130 similar to the cooking appliance 80. Again, the same numerals of like parts are used. The cooking appliance 130 is different in that the body is provided with a door 132 at a front end and a back wall 134 on the opposite end. The door 132 is pivotably attached to a lower front end of the body, and in use to open the door 132 is to be pulled forward and lowered. The door 132 and the back wall 134 together serve to preserve heat with the body better while cooking is in progress.

Fig. 12 illustrates construction of connection of the door 132 to the lower end of the body. The lower end of the body is provided with a pair of tracks 138 on opposite side thereof (only one of the tracks on one side is shown in the figure). The connection includes a pair of lugs 136 extending from opposite

sides of the lower end of the door 132 (only one of the lugs in one side is shown in the figure) and the lugs 136 are received at a front region of the tracks. To open the door 132, the door 132 is pulled forward and lowered, causing the lugs 136 to slide backward such that the door 132 is slide beneath  
5 the body.

Fig. 13 shows an embodiment of a cooking appliance 140 similar to the cooking appliance 130. Again, the same numerals of like parts are used. The cooking appliance 140 is different in that the body is provided with a door  
10 142 at a front end and a door 144 at a rear end. When the doors are fully open, they can be stowed beneath the body.

A skilled person in the art on reading the description will understand that the various embodiments and the present invention is versatile in that one  
15 single appliance can be adapted to different cooking exercise either simultaneously or when configured differently. Among other advantages which have been addressed to some extent, cleaning of only one single appliance is needed after cooking.

20 It should be understood that certain features of the invention, which are, for clarity, described in the content of separate embodiments, may be provided in combination in a single embodiment. Conversely, various features of the invention which are, for brevity, described in the content of a single embodiment, may be provided separately or in any appropriate  
25 sub-combinations. It is to be noted that certain features of the embodiments are illustrated by way of non-limiting examples.

## Claims:

1. A cooking appliance configured to rest on a kitchen countertop or a table, comprising:-
- (a) a body including a first upstanding member and a second upstanding member arranged on opposite sides thereof;
  - (b) a heating element arranged at an upper end of the body;
  - (c) a heatable plate providing a cooking surface on which food is cooked;
  - (d) means for reflecting heat emitted from the heating element; and
  - (e) a floor member;
- wherein the cooking appliance is provided with openings arranged on opposite sides of the body via which food to be cooked in the body passes; and
- wherein the cooking appliance is adapted to assume:-
- (i) a first configuration in which the heatable plate and/or the heat reflecting means is situated above the heating element; or
  - (ii) a second configuration in which the heatable plate or the heat reflecting means is situated generally midway between the heating element and the floor member.
2. A cooking appliance as claimed in Claim 1, wherein the heatable plate is reversibly situated at the body.
3. A cooking appliance as claimed in Claim 1, wherein lower ends of the upstanding members serve as feet and are configured to rest on a kitchen countertop or a table.

4. A cooking appliance as claimed in Claim 1, wherein the heatable plate is provided with a food grilling surface on one side of the plate and a food griddling surface arranged on opposite side of the plate.
- 5 5. A cooking appliance as claimed in Claim 1, comprising a first means for supporting the heatable plate and/or the heat reflecting means in the first configuration.
6. A cooking appliance as claimed in Claim 5, comprising a second means for  
10 supporting the heatable plate or the heat reflecting means in the second configuration.
7. A cooking appliance as claimed in Claim 6, wherein the second support means is arranged between the first support means and the floor member.  
15
8. A cooking appliance as claimed Claim 1, wherein in the first configuration the body is provided with a first cooking chamber defined by and between the heating element and the floor member.
- 20 9. A cooking appliance as claimed in Claim 8, comprising a container sized and shaped to slidably fit in the first chamber.
- 10.A cooking appliance as claimed in Claim 9, wherein other than the container the cooking appliance is free of any barrier or door for closing the  
25 openings.

11. A cooking appliance as claimed in Claim 1, wherein in the second configuration the body is provided with a second cooking chamber defined by and between the heating element and the heatable plate or the heat reflecting means, and a third cooking chamber defined by and between the heatable plate or the heat reflecting means and the floor member.

12. A cooking appliance as claimed in Claim 11, configured such that in use temperature in the second cooking chamber is higher than that in the third cooking chamber.

13. A cooking appliance as claimed in Claim 1, wherein the heatable plate is principally made of cast aluminum or sheet metal.

14. A cooking appliance as claimed in Claim 1, wherein the heatable plate is made of stone.

15. A cooking appliance as claimed in Claim 1, comprising a detachable handle configured to assist handling or maneuvering of the heatable plate or the heat reflecting means.

16. A combination electric grill and oven configured to rest on a kitchen countertop or a table, comprising:-

- (a) a body;
- (b) a heating element arranged at an upper end of the body;
- (c) a removable and reversible heatable plate providing an outwardly facing grilling or griddling surface;

(d) a floor member; and

(e) a container in which food to be oven cooked is contained;

wherein the body is provided with openings arranged on opposite sides of the body via which food to be cooked in the body passes; and

5 wherein the body is provided with a cooking chamber or an oven chamber defined by and between the heating element and the container fitted in the chamber.

17. A combination electric grill and oven as claimed in Claim 16, wherein other  
10 than the container the body is free of any barrier or door for closing the openings.

18. A cooking appliance comprising:-

(a) a heatable plate providing a cooking surface for grilling or griddling food  
15 and reversibly positioned for providing the grilling or griddling cooking surface;

(b) a heating element fixedly arranged at an upper end of the cooking appliance;

(c) means for reflecting heat; and

20 (d) a floor member fixedly arranged at an lower end of the cooking appliance;

wherein the cooking appliance is configured to allow the heatable plate and/or the heat reflecting means to position at an upper level above the heating element, a lower level in contact with the floor member or a mid  
25 level between the heating element and the floor member.

19. A cooking appliance configured to rest on a kitchen countertop or a table, comprising:-

(a) a body including a heating element arranged at an upper end of the body;

5 (b) a removable and a reversible heatable plate providing a cooking surface on which food is cooked;

(c) removable means for reflecting heat emitted from the heating element; and

(d) a floor member;

10 wherein the cooking appliance is provided with at least a first opening arranged, in use, at a front side the body via which food to be cooked in the body passes; and

wherein the cooking appliance further comprises a first door for closing the first opening for preserving heat within the body during cooking.

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20. A cooking appliance as claimed in Claim 19, wherein the cooking appliance is provided with a second opening arranged on a rear side of the body, and wherein the cooking appliance comprises a second door for closing the second opening.

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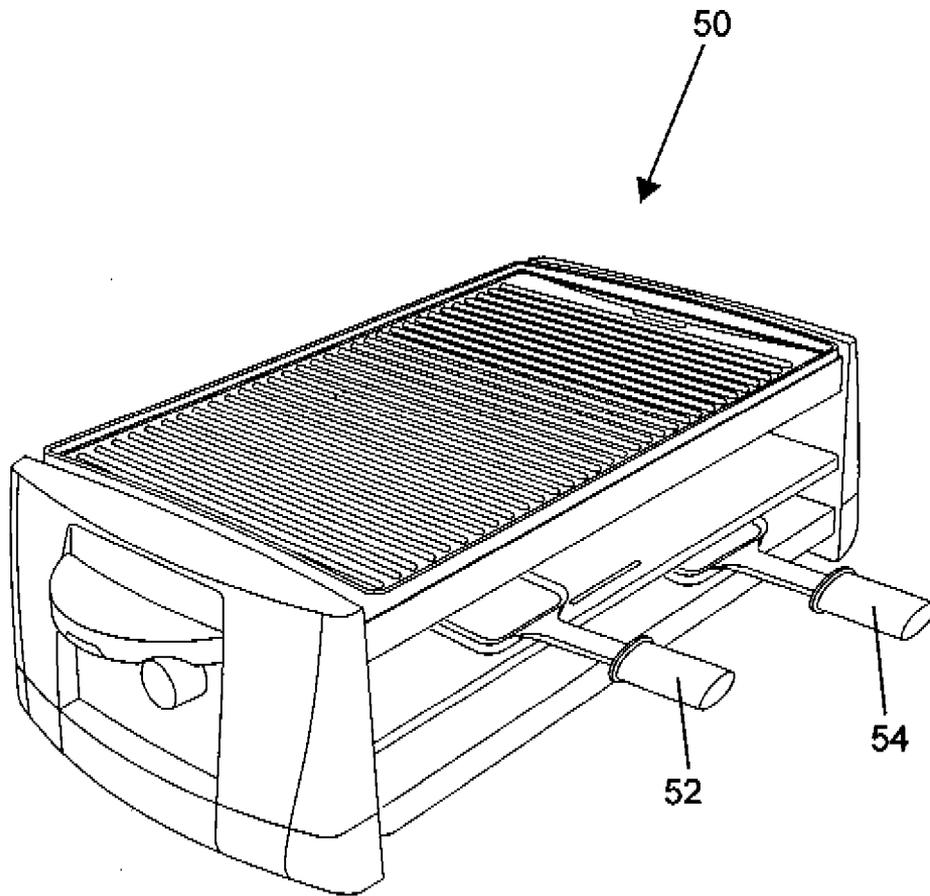


FIG. 2

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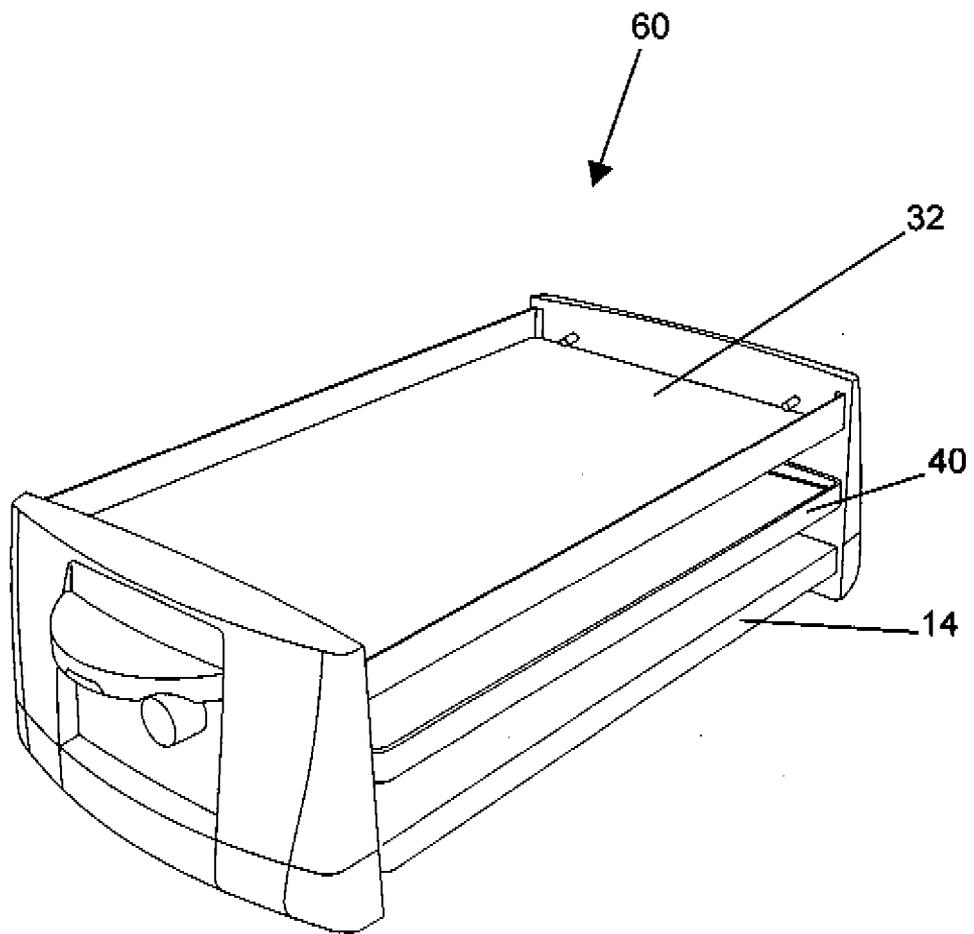


FIG. 3

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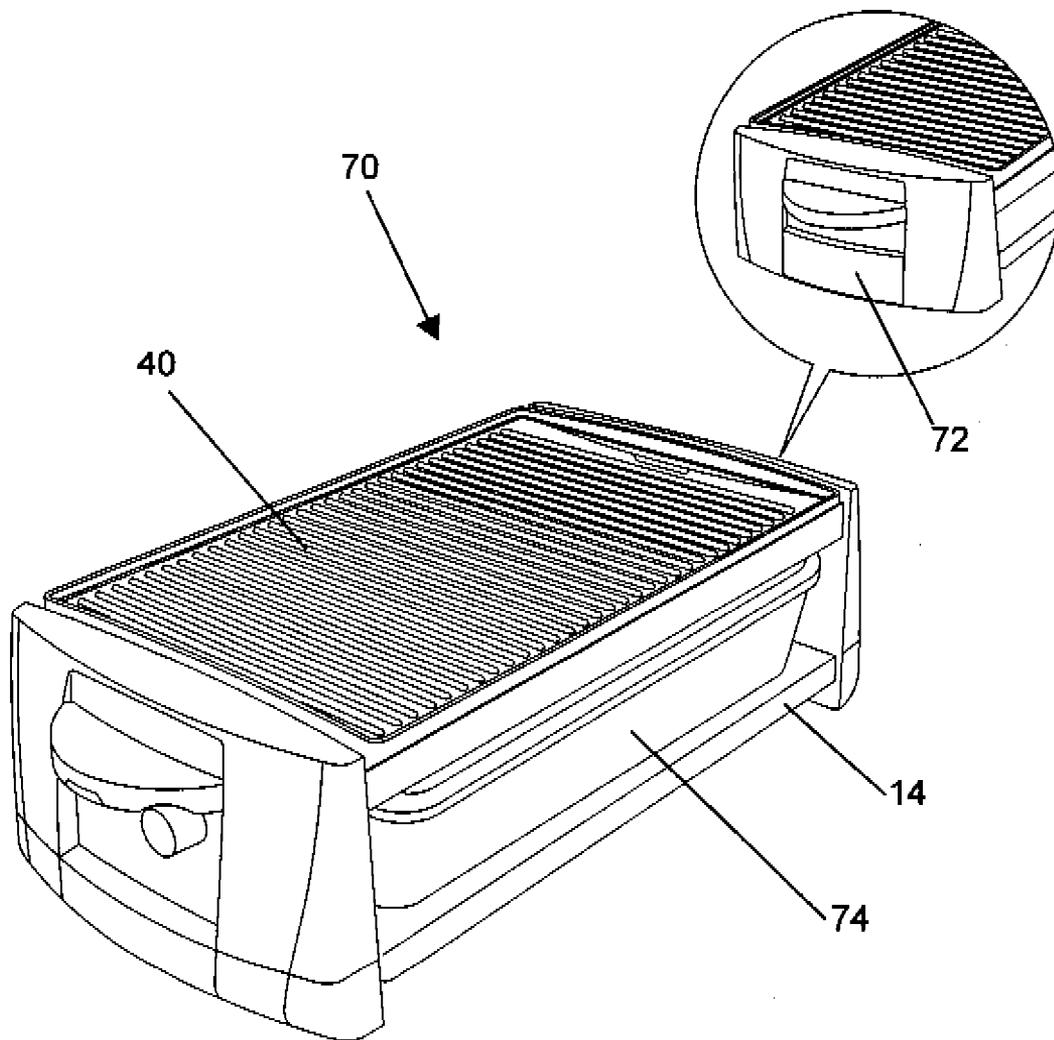


FIG. 4

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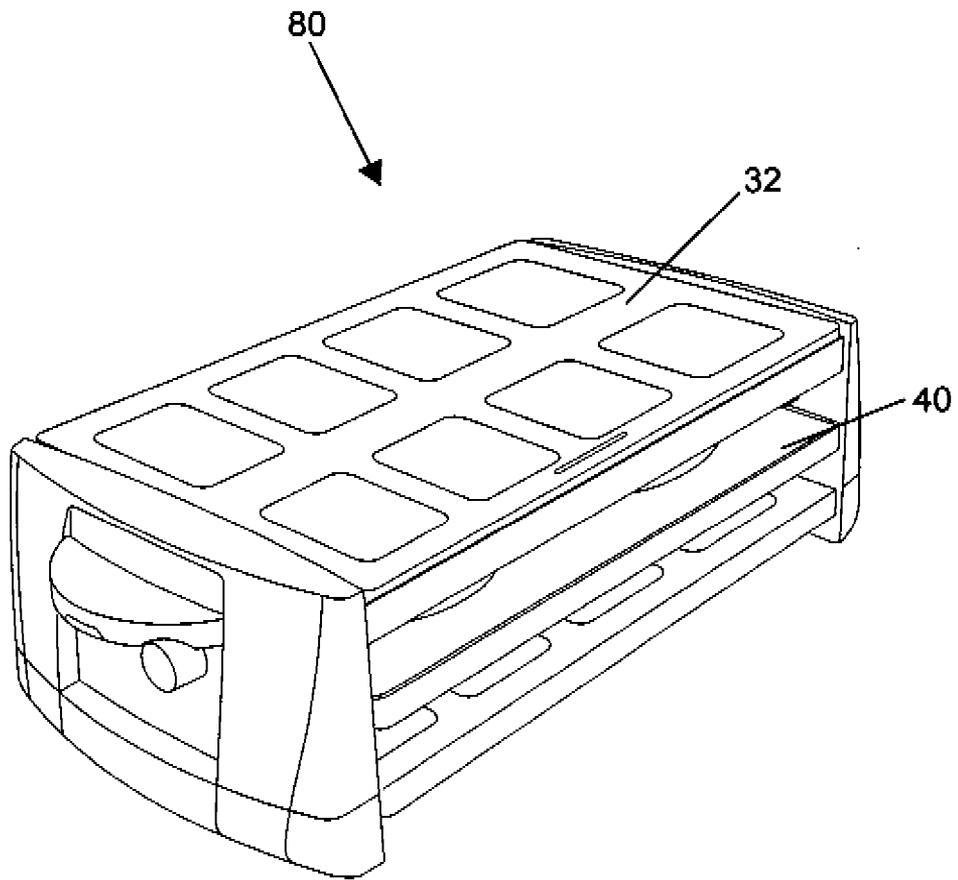


FIG. 5

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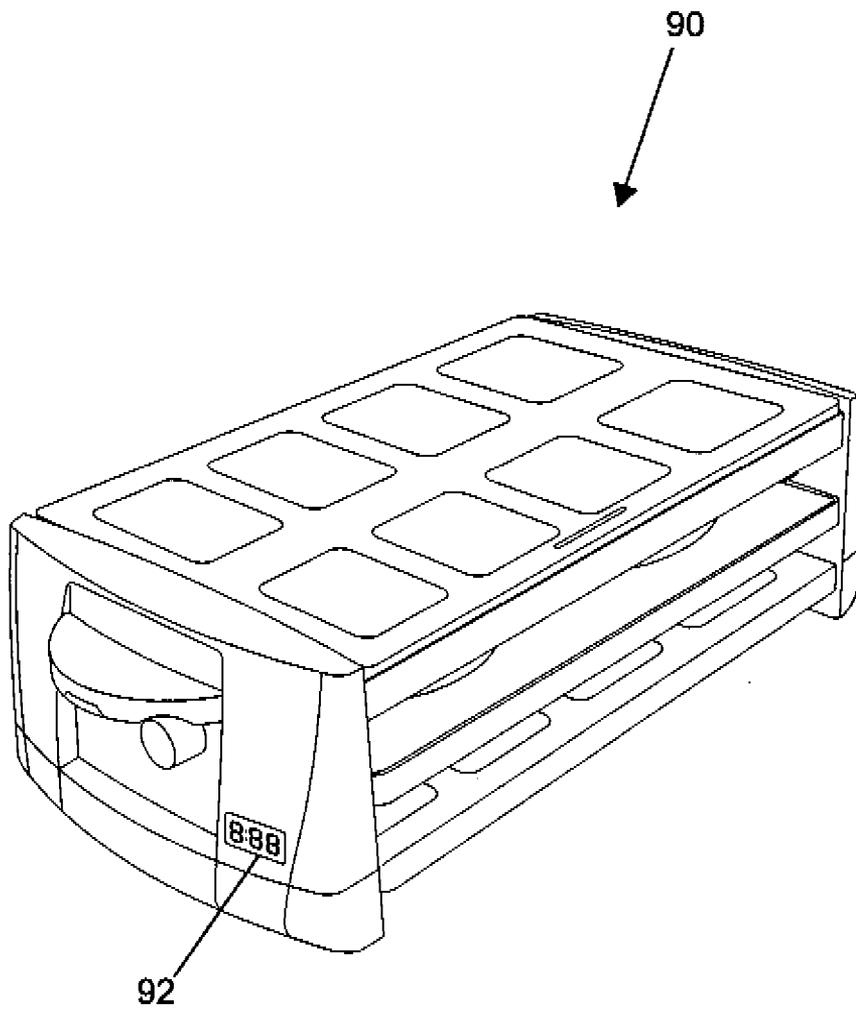


FIG. 6

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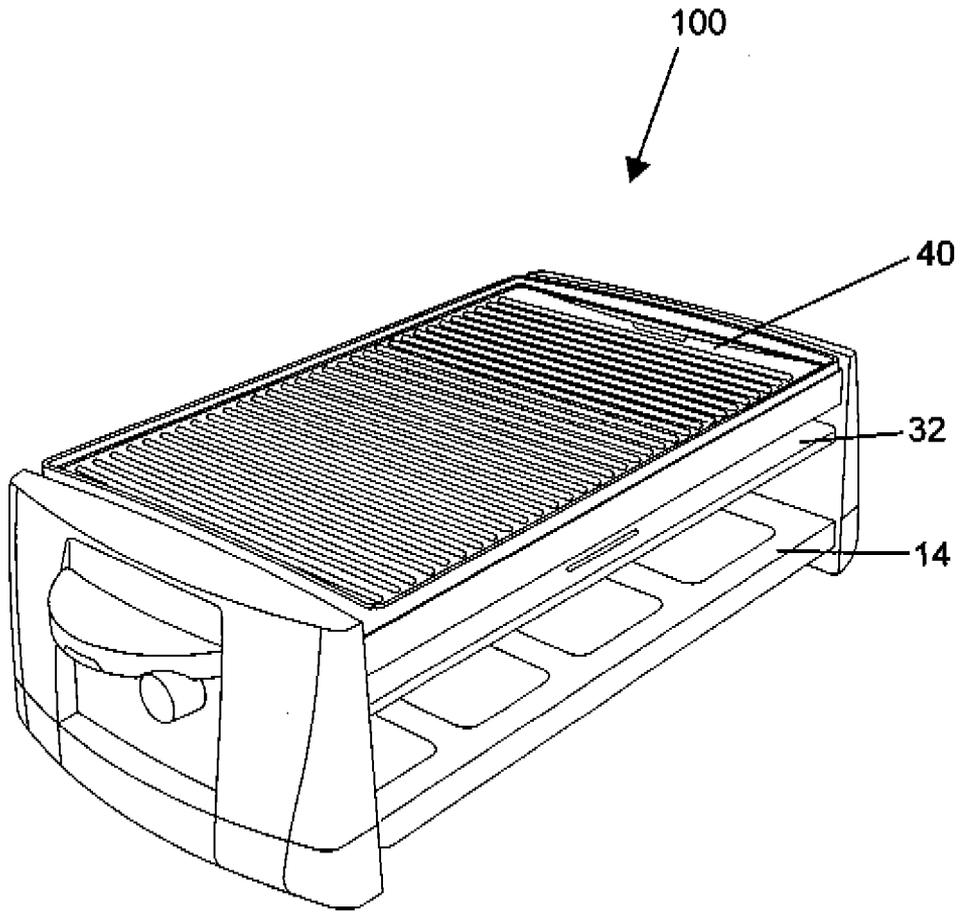


FIG. 7

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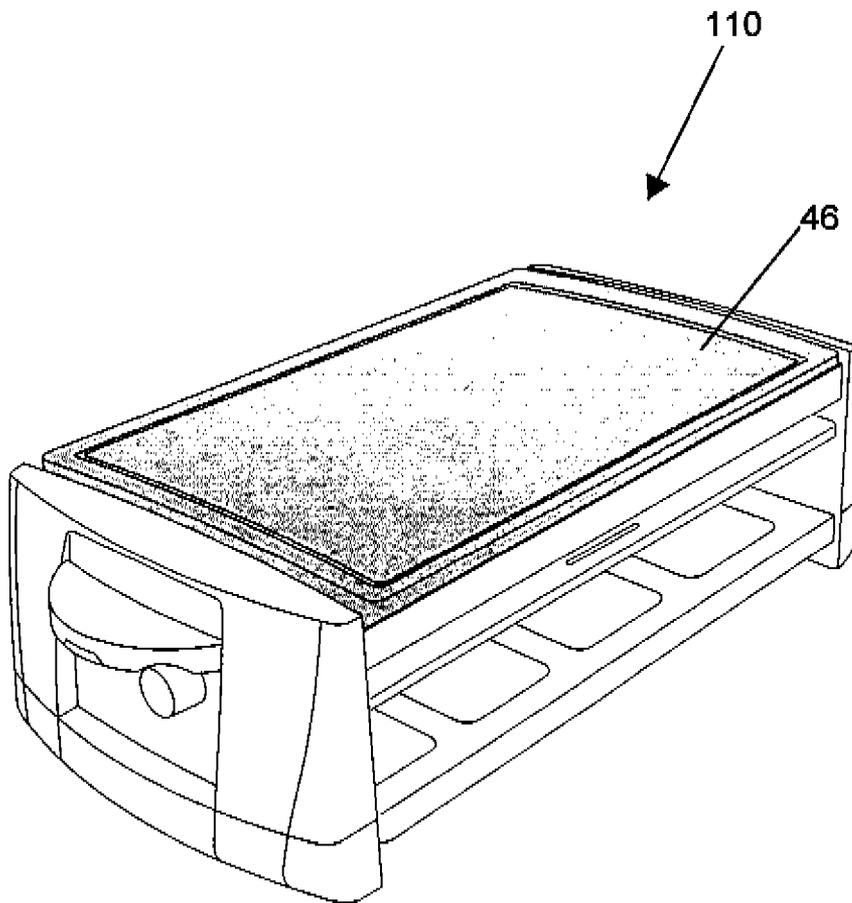


FIG. 8

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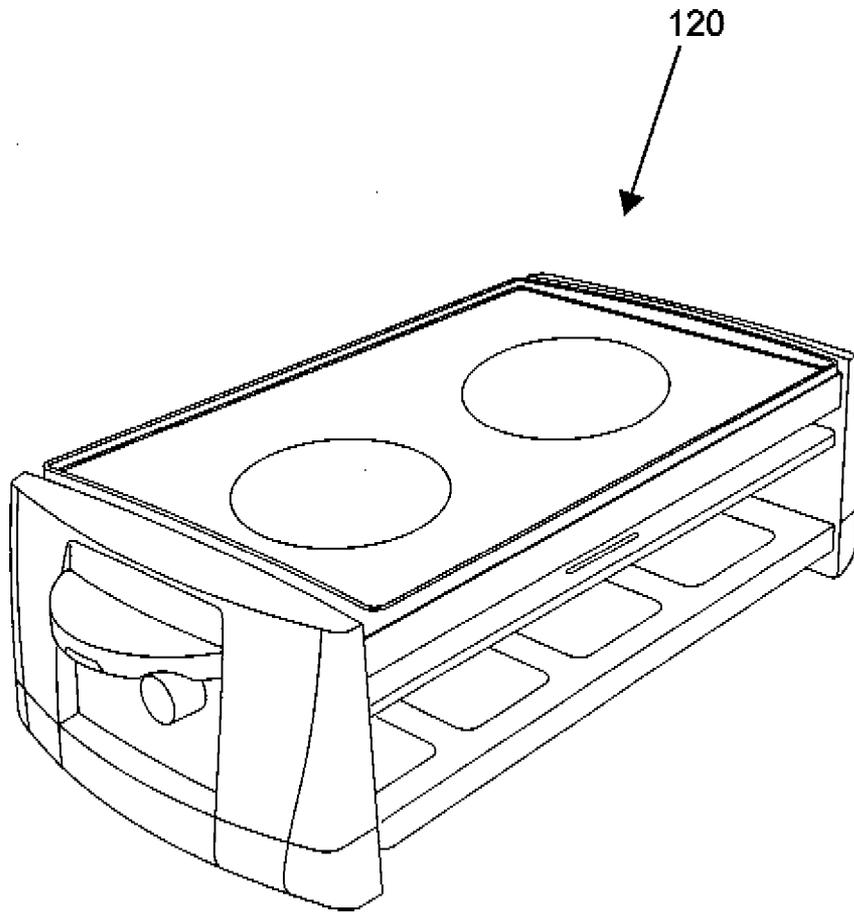


FIG. 9

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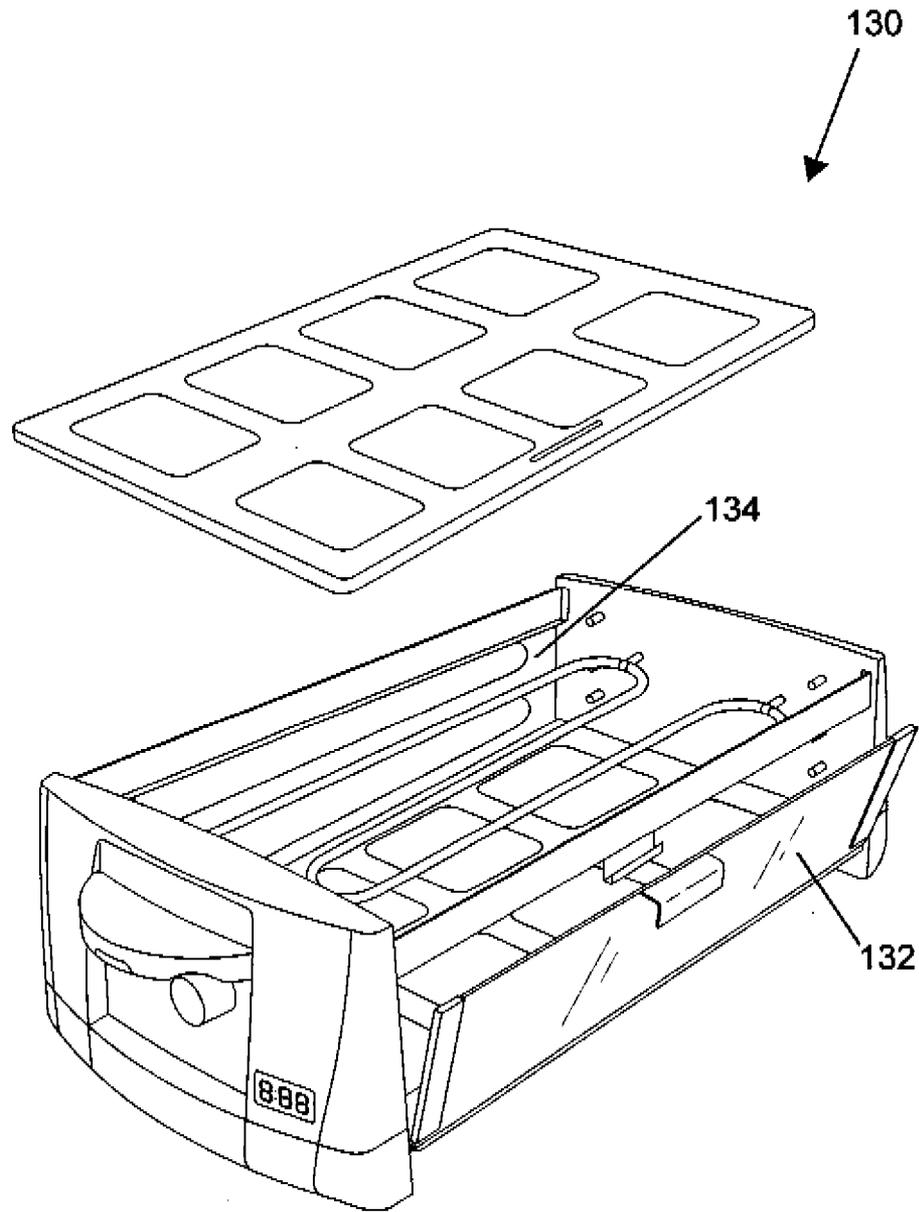


FIG. 10

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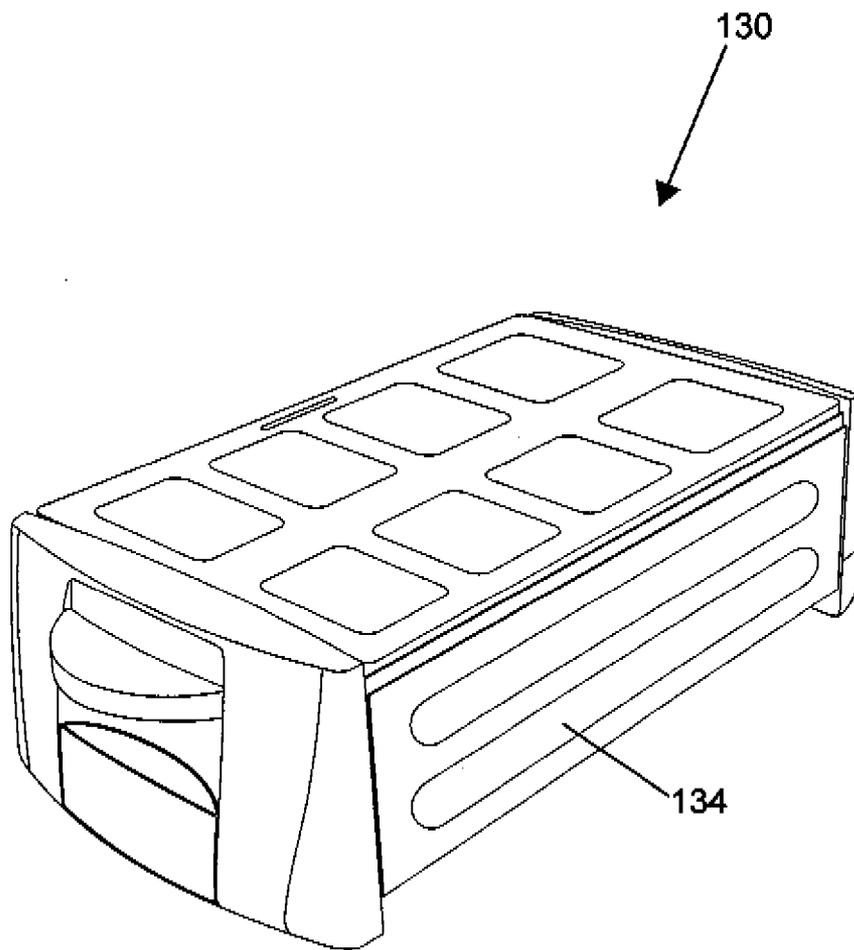


FIG. 11

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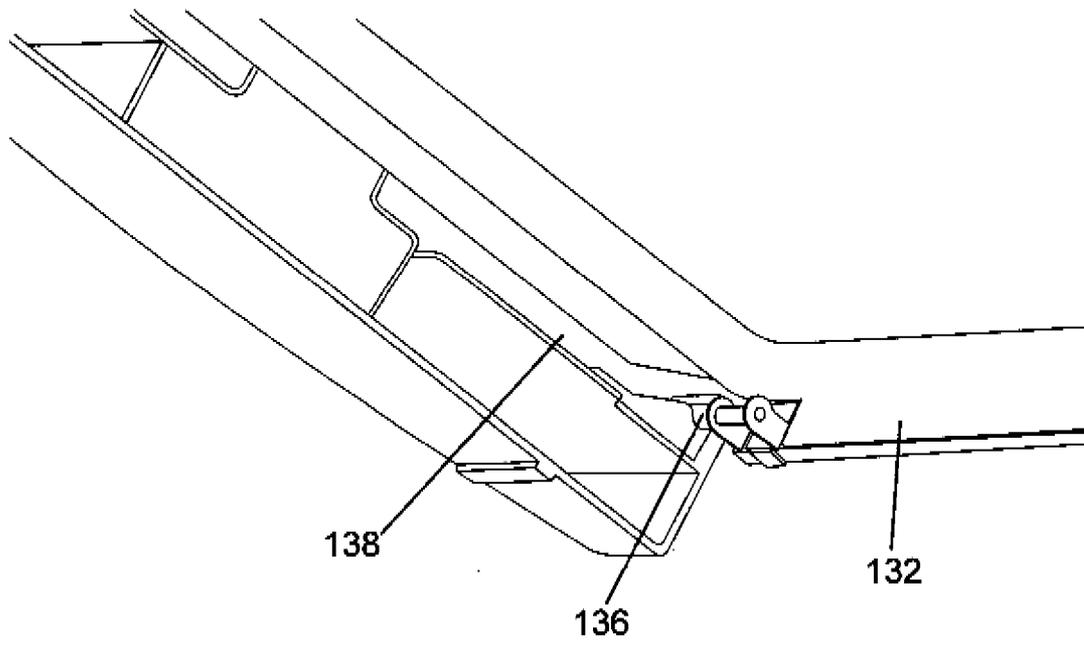


FIG. 12

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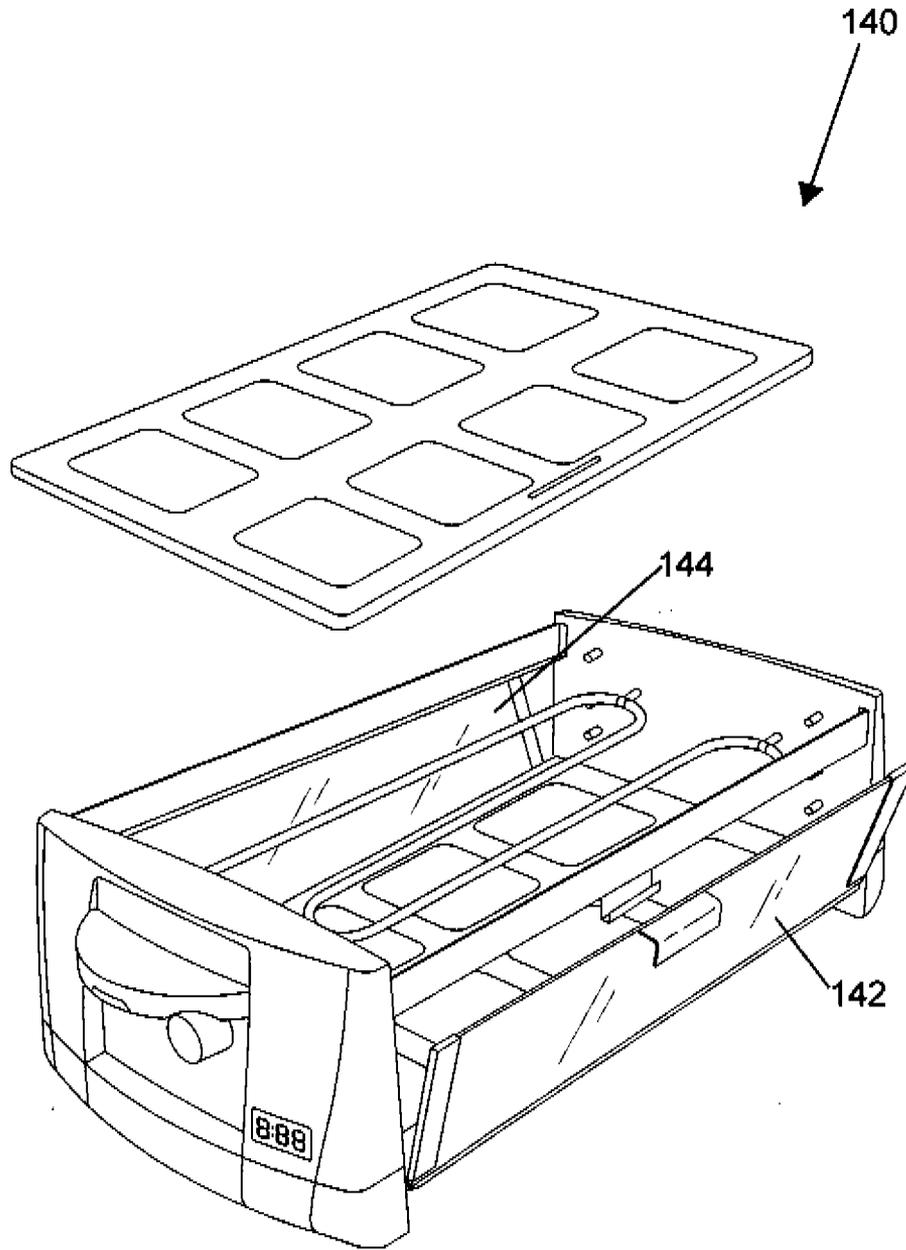


FIG. 13

# INTERNATIONAL SEARCH REPORT

International application No.  
PCT/CN2011/075930

## A. CLASSIFICATION OF SUBJECT MATTER

A47J 37/00(2006.01)i

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC:A47J 37/-,A47J 27/-,A21B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

EPODOC, WPI, CNKI, CNPAT: broiling, grilling, griddling, cooking, oven, barbecue, reflect+, heat+, roast+, up+, top+, lower,

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	KR10-0909072B1(JESE INTERNAT CO LTD)23 Jul.2009(23.07.2009) page 4 paragraph 22-page 6 paragraph 68, figures 1-9	16-17
Y		1-15,18-20
Y	US2002/0148459A1(MCCARTY BOBBY O et al.) 17 Oct.2002(17.10.2002) see paragraphs 0023-0028, figures 1-3	1-15,18-20
X	CN2290288Y(WANG,Qingxiang)09 Sep.1998(09.09.1998)page 1, paragraphs 4-6, figures 2-4	16
A	CN2446923Y(XIAHAI ELECTRICAL APPLIANCE CO)12 Sep.2001(12.09.2001) page 1, paragraphs 3-12, figure 1	1-20
A	CN2406590Y(LL,Wenqing)22 Nov.2000(22.11.2000) the whole document	1-20
A	JP2010-43847A(PALOMA KOGYO KK)25 Feb.2010(25.02.2010) the whole document	1-20

Further documents are listed in the continuation of Box C.       See patent family annex.

<p>* Special categories of cited documents:</p> <p>“A” document defining the general state of the art which is not considered to be of particular relevance</p> <p>“E” earlier application or patent but published on or after the international filing date</p> <p>“L” document which may throw doubts on priority claim (S) or which is cited to establish the publication date of another citation or other special reason (as specified)</p> <p>“O” document referring to an oral disclosure, use, exhibition or other means</p> <p>“P” document published prior to the international filing date but later than the priority date claimed</p>	<p>“T” later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention</p> <p>“X” document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone</p> <p>“Y” document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art</p> <p>“&amp;”document member of the same patent family</p>
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Date of the actual completion of the international search 05 Sep.2011(05.09.2011)	Date of mailing of the international search report <b>13 Oct. 2011 (13.10.2011)</b>
Name and mailing address of the ISA/CN The State Intellectual Property Office, the P.R.China 6 Xitucheng Rd., Jimen Bridge, Haidian District, Beijing, China 100088 Facsimile No. 86-10-62019451	Authorized officer <b>LI,Xiaoming</b> Telephone No. (86-10)62085479

**INTERNATIONAL SEARCH REPORT**  
Information on patent family members

International application No.  
PCT/CN2011/075930

Patent Documents referred in the Report	Publication Date	Patent Family	Publication Date
KR10-0909072B1	23.07.2009	none	
US2002/0148459A1	17.10.2002	none	
CN2290288Y	09.09.1998	none	
CN2446923Y	12.09.2001	none	
CN2406590Y	22.11.2000	none	
JP2010-43847A	25.02.2010	none	