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COOKING APPLIANCE WITH DUAL USER INTERFACE**Technical field**

The present invention generally relates to a cooking appliance for cooking food products, and in particular, a grill- and/or barbecue-type electrical cooking appliance.

5 **Prior art**

It is known from the prior art to use a cooking appliance which comprises:

- a first structure comprising a first cooking plate configured to cook a food;
- a second structure comprising a second cooking plate, the second
10 structure being mounted articulated with respect to the first structure about a pivot axis, and
- a user interface which is provided on the first structure and which is configured to enable a user to select at least one parameter for operating the cooking appliance.

15 The cooking appliance such as known in the prior art can alternatively occupy a so-called "grill" function, in which a food is intended to be inserted and cooked between the first and second cooking plates, and a so-called "barbecue" second function, in which the first and second cooking plates are moved apart at 180°, so as to be substantially in one same plane, said plane being generally horizontal, when the cooking appliance rests on a
20 horizontal surface.

The cooking appliance such as described in the prior art, advantageously makes it possible to use one single household electrical appliance, in order to respond to two distinct functions: that of a food grill, and that of a barbecue.

25 In order to improve the use and the ergonomics of this cooking appliance family, it is advantageous to provide a user interface, which is easy and practical to access for a user in all the cooking modes, namely the grill mode and the barbecue mode. To this end, it is known to dispose the user interface on a front face of the first structure; however, such an arrangement of the user interface prevents being able to collect cooking juices from a front face of the first structure.

30 It is also known from the prior art to provide the user interface on the second structure of the cooking appliance, and more specifically, on a handling part, which is mechanically connected to the second structure; however, this configuration is

problematic, as it makes the handling of the user interface complex, when the cooking appliance is in "barbecue" function.

Document US2007/119442A1 discloses a cooking appliance of the prior art.

Summary of the invention

5 The technical problem at the basis of the invention consists, in particular, of providing a cooking appliance, making it possible to cook food products in a grill configuration, but also in a barbecue configuration, while being ergonomic and simple to use in the grill configuration, as well as in the barbecue configuration, and while optionally making it possible to collect cooking juices from a front face of the first structure.

10 To this end, the present invention relates to a cooking appliance for cooking food products, the cooking appliance comprising:

- - a first structure comprising a first cooking module comprising a first cooking plate,
- - a second structure comprising a second cooking module comprising
15 a second cooking plate,
- - a pivot connection connecting the second structure to the first structure and configured to enable a pivoting of the second structure with respect to the first structure about a pivot axis and between a closing position, in which the first cooking plate and the second cooking plate have a minimum spacing, and for example are in
20 contact, and a maximum opening position, in which the first cooking plate and the second cooking plate have a maximum spacing when the cooking appliance rests on a support surface which is horizontal,
- - a first user interface disposed on the first structure,
- - a control unit configured to control the operation of the cooking
25 appliance,

the cooking appliance having a first use mode, called grill mode, in which a food is intended to be inserted between the first and second cooking plates, and a second use mode, called barbecue mode, in which each of the first and second cooking plates is capable of supporting and cooking a respective food, i.e. in which each of the first and
30 second cooking plates is operational,

characterised in that the cooking appliance comprises a second user interface disposed on the second structure, in that the first user interface is dedicated to the first use mode and the second user interface is dedicated to the second use mode, and in that

the control unit is configured to activate the first user interface and deactivate the second user interface when the cooking appliance is in the first use mode, and to activate the second user interface and deactivate the first user interface when the cooking appliance is in the second use mode.

5 The presence of a second user interface provided on the second structure, as well as a first user interface provided on the first structure make it possible for the user to interact easily and ergonomically with the cooking appliance, whatever the position of the second structure. Advantageously also, the interdependence between the activation of the first user interface and the deactivation of the second user interface makes it possible
10 to limit the possible risks of an undesired interaction with one or the other of the user interfaces of the cooking appliance during its handling, for example.

 The electrical cooking appliance can further have one or more of the following features, taken individually or in combination.

 According to an embodiment of the invention, the second structure occupies the
15 maximum opening position when the cooking appliance is in the second use mode.

 According to an embodiment of the invention, the cooking appliance is configured such that the first cooking plate and the second cooking plate define a first tilt angle of between 150 and 200°, advantageously between 170 and 190°, and for example, around 180°, when the second structure occupies the maximum opening position.

20 According to an embodiment of the invention, each of the first and second user interfaces is configured to enable a user to select at least one parameter for operating the cooking appliance.

 According to an embodiment of the invention, the activation of the first user interface is conditioned by the deactivation of the second user interface, and reciprocally,
25 the activation of the second user interface is conditioned by the deactivation of the first user interface.

 According to an embodiment of the invention, the second user interface and the first user interface are configured to enable a user, in particular, to switch on or switch off the cooking appliance, to adjust the temperature of the first and second cooking modules,
30 and/or also access automatic cooking programs.

 According to an embodiment of the invention, the first cooking module and the second cooking module respectively comprise a first heating element and a second heating element.

According to an embodiment of the invention, the control unit is configured to activate the first user interface and deactivate the second user interface, when a first activation condition is detected by the control unit, and to activate the second user interface and deactivate the first user interface, when a second activation condition is detected by the control unit.

According to an embodiment of the invention, the first and second cooking plates are substantially parallel when the second structure is in the maximum opening position.

According to an embodiment of the invention, the first user interface, as well as the second user interface can have different keys or buttons or a touchscreen making it possible to access a menu.

According to an embodiment of the invention, the cooking appliance is configured such that the first activation condition is reached when the second structure is pivoted, from the maximum opening position, in the direction of the closing position and reaches a first predetermined position located between the closing position and the maximum opening position, and such that the second activation condition is reached when the second structure is pivoted, from the closing position, in the direction of the maximum opening position and reaches a second predetermined position located between the closing position and the maximum opening position.

According to an embodiment of the invention, the first and second predetermined positions are identical.

According to an embodiment of the invention, the first and second predetermined positions are distinct from one another.

According to an embodiment of the invention, the second structure is capable of occupying an intermediate opening position which is stable and located between the closing position and the maximum opening position.

According to an embodiment of the invention, the cooking appliance is configured such that the first cooking plate and the second cooking plate define a second tilt angle of between 90 and 120° when the second structure occupies the intermediate opening position.

According to an embodiment of the invention, when the cooking appliance is in the first use mode, the second structure occupies a position located between the closing position and the intermediate opening position.

According to an embodiment of the invention, the first and second predetermined positions correspond, for example, to one same position located in the proximity of, and for example immediately after, the intermediate opening position, or located in the proximity of the maximum opening position.

5 According to an embodiment of the invention, the second structure comprises at least one connecting arm connected to the pivot connection, and for example, two lateral connecting arms, each connected to the pivot connection. Advantageously, the handle comprises the two lateral connecting arms.

10 According to an embodiment of the invention, the cooking appliance comprises at least one additional pivot connection which is configured to connect the second cooking module to the at least one connecting arm and to enable a rotation of the second cooking module with respect to the at least one connecting arm about an additional pivot axis. Advantageously, the at least one additional pivot connection makes it possible to position the second cooking module according to the desired orientation, and generally
15 substantially parallel to the first cooking module, without being impacted by the relative spacing between the first and second cooking modules, and more specifically, the first and second cooking plates.

 According to an embodiment of the invention, the additional pivot axis is substantially parallel to the pivot axis.

20 According to an embodiment of the invention, the pivot axis is substantially horizontal when the cooking appliance rests on a horizontal surface.

 According to an embodiment of the invention, the cooking appliance further comprises an electric contact configured to occupy a first state when the cooking appliance is in the first use mode, and for example, when the second structure occupies
25 a position located between the closing position and the intermediate opening position, and configured to occupy a second state, when the cooking appliance is in the second use mode, and for example, when the second structure occupies a position located between the intermediate opening position and the maximum opening position.

 According to an embodiment of the invention, the electric contact configured to
30 occupy the first state as the second structure occupies a position located between the closing position and the intermediate opening position, and to occupy the second state as the second structure occupies a position located between the intermediate opening

position and the maximum opening position, excluding the intermediate opening position.

According to an embodiment of the invention, the electric contact is an on-off sensor, and for example, a switch, a lever switch, a pushbutton or a microswitch.

5 According to the first embodiment of the invention, the electric contact is configured to be moved in the second state when the second structure is pivoted, from the intermediate closing position, in the direction of the maximum opening position and reaches a second predetermined position, and to be moved in the first state when the second structure is pivoted, from a position located between the maximum opening
10 position and the intermediate opening position, in the direction of the intermediate opening position and reaches the first predetermined position.

 According to an embodiment of the invention, the cooking appliance comprises an actuation device configured to move the electric contact in the first state when the second structure is pivoted, from the maximum opening position, in the direction of the closing
15 position and reaches the first predetermined position, and to move the electric contact in the second state when the second structure is pivoted, from the closing position, in the direction of the intermediate opening position and reaches the second predetermined position.

 According to an embodiment of the invention, the actuation device comprises an actuation member, such as an actuation finger, which is pivotingly secured to the second
20 structure and which is configured to activate or deactivate the electric contact when the second structure reaches the first predetermined position and to deactivate or activate the electric contact when the second structure reaches the second predetermined position. According to such an embodiment, the electric contact can, for example, be fixed
25 to the first structure and be static.

 According to an embodiment of the invention, the actuation device comprises a movable actuation member, for example, in translation, between an actuation position in which the actuation member is configured to activate the electric contact and a rest position in which the actuation member is configured to deactivate the electric contact,
30 and a cam configured to move the actuation member from the rest position to the actuation position, when the second structure reaches the first predetermined position or the second predetermined position.

According to an embodiment of the invention, the actuation device is at least partially provided inside one of the lateral connecting arms. Such an arrangement makes it possible to reduce the size of the cooking appliance.

5 According to an embodiment of the invention, the cam is pivotingly secured to the second structure.

According to another embodiment of the invention, the cam is immovable with respect to the first structure.

10 According to an embodiment of the invention, the actuation member is mounted on the second structure, and is therefore movably, rotatably mounted about the pivot axis.

According to an embodiment of the invention, the actuation member has a first actuation portion configured to engage with the cam and a second actuation portion configured to engage with the electric contact, and more specifically, to activate and deactivate the electric contact.

15 According to an embodiment of the invention, the actuation device also comprises an urging member, such as a return spring for example, configured to urge the actuation member to the rest position when the cam is angularly offset with respect to the actuation member.

20 According to an embodiment of the invention, the handle is configured to be located on the side of a front face of the first structure when the second structure is in the closing position.

According to an embodiment of the invention, the second user interface is provided on the handle, and for example, on the gripping part.

25 According to an embodiment of the invention, the first user interface is provided on a lateral face of the first structure.

30 According to an embodiment of the invention, the cooking appliance comprises a blocking device which is moveable between a blocking state, in which the pivot amplitude of the second structure is restricted to a pivoting between the closing position and the intermediate opening position, and an unblocking state in which the second structure is capable of being moved to the maximum opening position.

According to an embodiment of the invention, the blocking device comprises a handling part and a blocking part, which are mechanically connected, the handling part being movably mounted, for example in translation, between a first position and a second

position, the blocking device is configured such that a movement of the handling part from the first position to the second position leads to a movement of the blocking part in a blocking position corresponding to the blocking state of the blocking device, and such that a movement of the handling part from the second position to the first position leads to a movement of the blocking part in an unblocking position corresponding to the unblocking state of the blocking device.

According to an embodiment of the invention, the blocking device comprises an electric contact configured to occupy a first state, and for example, to be deactivated or activated, when the blocking part occupies the blocking position, and configured to occupy a second state, and for example, to be activated or deactivated, when the blocking part occupies the unblocking position.

According to an embodiment of the invention, the blocking part is configured to be maintained in the unblocking position as the second structure occupies a position located between the intermediate opening position and the maximum opening position, excluding the intermediate opening position.

According to an embodiment of the invention, the cooking appliance is configured such that the first activation condition is reached when the blocking part is moved in the unblocking position, and such that the second activation condition is reached when the blocking part is moved in the blocking position.

According to an embodiment of the invention, the blocking part is automatically moved in the unblocking position when the second structure is pivoted, from a position located between the maximum opening position and the intermediate opening position, in the direction of the intermediate opening position and reaches the intermediate opening position.

According to an embodiment of the invention, the handling part is provided on the at least one connecting arm of the second structure.

According to an embodiment of the invention, the actuation device is formed at least partially by the blocking device.

According to an embodiment of the invention, the second structure comprises a handle configured to be handled by a user, the second user interface being provided on the handle.

According to an embodiment of the invention, when the first structure rests on a horizontal surface and when the second structure occupies the maximum opening position, the handle is in contact with said horizontal surface.

5 According to an embodiment of the invention, the handle is configured to support the second cooking module.

According to an embodiment of the invention, the first cooking plate is configured to be inclined towards the bottom and towards a front face of the first structure when the cooking appliance rests on a horizontal surface.

10 According to an embodiment of the invention, the second cooking plate is configured to be inclined towards the bottom and towards a front face of the first structure when the cooking appliance rests on a horizontal surface and when the second structure is in the maximum opening position.

15 According to an embodiment of the invention, the cooking appliance further comprises a cooking juice collecting tray configured to collect cooking juice coming from at least the first cooking plate, the cooking juice collecting tray being disposed at least partially under the first cooking module.

20 According to an embodiment of the invention, the first cooking plate comprises a front discharge part which is provided on a front edge of the first cooking plate and which is located in vertical alignment with a front part of the cooking juice collecting tray, the front discharge part being configured to enable a flowing, through gravity, of the cooking juices coming from the first cooking plate into the cooking juice collecting tray. Such a configuration of the first cooking plate, associated with an inclination towards the bottom and towards the front of the first cooking plate, makes it possible to generate a flowing of cooking juices, present on the first cooking plate, in the direction of the cooking juice
25 collecting tray, when the cooking appliance rests on a support surface, which is substantially horizontal. These arrangements limit the emission of smoke and ensure a release of burning vapours behind the cooking appliance, and therefore at a distance from a user.

30 According to an embodiment of the invention, the second cooking plate comprises an additional discharge part which is provided on a front edge of the first cooking plate and which is configured to be located in vertical alignment with a rear part of the cooking juice collecting tray, when the second structure is in the maximum opening position, the additional discharge part is configured to enable a flowing, through gravity, of the cooking

juices coming from the second cooking plate into the cooking juice collecting tray, when the second structure is in the maximum opening position. Such a configuration of the second cooking plate, associated with an inclination towards the bottom and towards the front of the second cooking plate, when the second structure occupies the maximum opening position, makes it possible to generate a flowing of cooking juices, present on the second cooking plate, in the direction of the cooking juice collecting tray, when the cooking appliance rests on a support surface, which is substantially horizontal, and is used in barbecue configuration.

According to an embodiment of the invention, the cooking juice collecting tray is removable.

According to an embodiment of the invention, the cooking appliance comprises a position detection device configured to detect the use modes, the position detection device being an angular sensor such as a potentiometer, for example.

Brief description of the figures

The present invention will be well understood using the description below, in reference to the accompanying figures, in which identical reference signs correspond to structurally and/or operationally identical or similar elements.

[Fig. 1] is a side, perspective view of a cooking appliance according to a first embodiment of the invention in grill configuration;

[Fig. 2] is a side, perspective view of the cooking appliance of figure 1 in barbecue configuration;

[Fig. 3] is a longitudinal, cross-sectional view of the cooking appliance of figure 1 in a closing position;

[Fig. 4] is a longitudinal, cross-sectional, partial view of the cooking appliance of figure 1 in a maximum opening position;

[Fig. 5] is a side, schematic view of a cooking appliance according to a second embodiment of the invention and in a closing position;

[Fig. 6] is a side, schematic view of the cooking appliance of figure 5 in a maximum opening position;

[Fig. 7] is a side, schematic view of a cooking appliance according to a third embodiment of the invention and in a closing position;

[Fig. 8] is a side, schematic view of the cooking appliance of figure 7 in a maximum opening position.

Detailed description

Figures 1 to 4 represent a cooking appliance 1 according to a first embodiment of the invention. The cooking appliance 1 is configured for cooking food, such as meat, fish, vegetables or other food products.

5 The cooking appliance 1 comprises a first structure 2 which comprises a first cooking module 3 which itself comprises a first cooking plate 3.1 and a first heating element (which cannot be seen in the figures) configured to heat the first cooking plate 3.1, and a second structure 4 which comprises a second cooking module 5 which itself comprises a second cooking plate 5.1 and a second heating element (which cannot be
10 seen in the figures) configured to heat the second cooking plate 5.1.

 The cooking appliance 1 has a first use mode, called grill mode, in which a food is intended to be inserted and cooked between the first and second cooking plates 3.1, 5.1, and a second use mode, called barbecue mode, in which each of the first and second cooking plates 3.1, 5.1 is capable of supporting and cooking a respective food, i.e. in which
15 each of the first and second cooking plates 3.1, 5.1 is operational. The second structure 4 also comprises a handle 6 comprising a gripping part 7 configured to be handled by a user, as well as two lateral connecting arms 8. The handle 6 is advantageously configured to support the second cooking module 5 and has a U-shape.

 The second structure 4 is connected to the first structure 2 by a pivot connection 9
20 which defines a pivot axis A1. The pivot connection 9 is configured such that the second structure 4 is mounted articulated with respect to the first structure 2 and is moveable between a closing position in which the first cooking plate 3.1 and the second cooking plate 5.1 have a minimum spacing, and for example are in contact with one another, and a maximum opening position, in which the first cooking plate 3.1 and the second cooking
25 plate 5.1 have a maximum spacing and define a first tilt angle of between 150 and 200°, and advantageously between 170 and 190°.

 Advantageously, the second structure 4 is configured to occupy:

 - an intermediate opening position which is stable and located between
 the closing position and the maximum opening position and in which the first cooking
30 plate 3.1 and the second cooking plate 5.1 define a second tilt angle of between 90 and 120°, and

- a plurality of cooking positions located between the closing position and the intermediate opening position and in each of which, a food can be inserted between the first cooking plate 3.1 and the second cooking plate 5.1.

Advantageously, the first and second cooking plates 3.1, 5.1 are substantially parallel, when the second structure 4 is in a maximum opening position, this in order to propose to the user, a use of the cooking appliance 1 which is similar to an electric barbecue.

For clear practicality reasons, the first structure 2 comprises feet configured to rest on a flat support surface SA, such as a work surface.

According to the first embodiment of the invention, the second structure 4 comprises an additional pivot connection 24 which is configured to connect the second cooking module 5 to the lateral connecting arms 8 and to enable a rotation of the second cooking module 5 with respect to the lateral connecting arms 8 about an additional pivot axis A2 which is substantially parallel to the pivot axis A1. Advantageously, the additional pivot connection 24 makes it possible to position the second cooking module 5 according to the desired orientation, and generally, substantially parallel to the first cooking module 3, when the second structure 4 is in one of the cooking positions. In other words, the second cooking module 5 is pivotally mounted with respect to the handle 6. Advantageously, the gripping part 7 of the handle 6 is configured to be in contact with the support surface SA when the second structure 4 occupies the maximum opening position.

According to the first embodiment of the invention such as presented in figures 1 to 4, the cooking appliance 1 also comprises a first user interface 10 which is provided on the first structure 2, and which is configured to enable a user to select at least one parameter for operating the cooking appliance 1. Advantageously, the first user interface 10 is provided on a lateral face of the first structure 2.

The cooking appliance 1 also comprises a second user interface 11 which is provided on the second structure 4, and which is also configured to enable a user to select at least one parameter for operating the cooking appliance 1. Advantageously, the second user interface 11 is provided on the gripping part 7, in order to facilitate access by the user, when the second structure 4 is in one of the cooking positions, or in the closing position.

Advantageously, the first user interface 10 is dedicated to the first use mode and the second user interface 11 is dedicated to the second use mode.

The first user interface 10, as well as the second user interface 11, can have different keys or buttons, or also a touchscreen, making it possible to access a menu. The second user interface 11 and the first user interface 10 are configured, in particular, to enable a user to switch on or switch off the cooking appliance 1, to adjust the temperature of the first and second cooking modules 3, 5, or also access automatic cooking programs.

The cooking appliance 1 also comprises a control unit 13 configured to control the operation of the cooking appliance 1. Advantageously, the control unit 13 is configured to activate the first user interface 10 and deactivate the second user interface 11, when the cooking appliance 1 is in the first use mode, and to activate the second user interface 11, and deactivate the first user interface 10 when the cooking appliance 1 is in the second use mode.

The control unit 13 is more specifically configured to activate the first user interface 10 and deactivate the second user interface 11 when a first activation condition is detected by the control unit 13, and to activate the second user interface 11 and deactivate the first user interface 10 when a second activation condition is detected by the control unit 13. The first and second activation conditions are defined, such that the first user interface 10 and the second user interface 11 are respectively activated and deactivated, when the cooking appliance 1 is in the first embodiment, and such that the first user interface 10 and the second user interface 11 are respectively deactivated and activated when the cooking appliance 1 is in the second use mode.

Moreover, the cooking appliance is configured such that the first activation condition is reached when the second structure 4 is pivoted, from the maximum opening position, in the direction of the intermediate opening position and reaches a first predetermined position located between the intermediate opening position and the maximum opening position, and such that the second activation condition is reached when the second structure 4 is pivoted, from the intermediate opening position, in the direction of the maximum opening position and reaches a second predetermined position located between the intermediate opening position and the maximum opening position.

According to the first embodiment of the invention, the first and second predetermined positions are adjacent and located in the proximity of the maximum opening position. For example, the second predetermined position could be the maximum opening position, such that the second activation condition would be detected by the control unit 13, only when the second structure 4 reaches the maximum opening

position and the first predetermined position could be located immediately before the maximum opening position, such that the first activation condition would be detected by the control unit 13, as soon as the second structure 4 leaves the maximum opening position. According to a variant of an embodiment of the invention, it can be considered
5 that the first and second predetermined positions are moved away from one another, or are located in the proximity of the intermediate opening position.

Advantageously, the presence of a second user interface 11 provided on the second structure 4, and more specifically, on the gripping part 7 of the handle 6, as well as a first user interface 10 provided on the first structure 2, making it possible for the user to access
10 and to interact easily and ergonomically with the cooking appliance 1, whatever the position of the second structure 4. Advantageously also, the interdependence between the activation of the first user interface 10 and the deactivation of the second user interface 11 makes it possible to limit the possible risks of an undesired interaction with either of the user interfaces of the cooking appliance 1 during its handling, for example.

As can be seen more specifically in figures 3 and 4, the cooking appliance 1 further comprises an electric contact 15, such as a microswitch, configured to occupy a first state, and for example, to be deactivated or activated, when the cooking appliance 1 is in the first use mode, and configured to occupy a second state, and for example, to be activated or deactivated, when the cooking appliance 1 is in the second use mode.
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According to the first embodiment of the invention, the electric contact 15 is configured to be moved in the second state when the second structure 4 is pivoted, from the intermediate opening position, in the direction of the maximum opening position and reaches the second predetermined position, and to be moved in the first state when the second structure 4 is pivoted, from a position located between the maximum opening position and the intermediate opening position, in the direction of the intermediate opening position and reaches the first predetermined position.
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Advantageously, the electric contact 15 is configured to occupy the first state as a minimum, when the second structure 4 occupies a position located between the closing position and the intermediate opening position, and to occupy the second state as a minimum, when the second structure 4 occupies the maximum opening position. According to a variant of an embodiment of the invention, the electric contact 15 could be configured to occupy the first state as the second structure 4 occupies a position located between the closing position and the intermediate opening position, and to
30

occupy the second state as the second structure 4 occupies a position located between the intermediate opening position and the maximum opening position, excluding the intermediate opening position.

According to the first embodiment of the invention, the electric contact 15 is static and is disposed in the first structure 2, and for example, in the proximity of the pivot connection 9.

The cooking appliance 1 comprises an actuation device configured to move the electric contact 15 in the first state when the second structure 4 is pivoted, from the maximum opening position, in the direction of the closing position and reaches the first predetermined position, and to move the electric contact 15 in the second state when the second structure 4 is pivoted, from the closing position, in the direction of the maximum opening position and reaches the second predetermined position.

According to the first embodiment of the invention, the actuation device comprises an actuation member 17, such as an actuation finger, which is pivotally secured to the second structure 4 and which is configured to activate the electric contact 15 when the second structure 4 reaches the maximum opening position and to deactivate the electric contact 15 when the second structure 4 is moved away slightly from the maximum opening position.

Advantageously, the cooking appliance 1 comprises a blocking device 18 which is moveable between a blocking state, in which the pivot amplitude of the second structure 4 is restricted to a pivoting between the closing position and the intermediate opening position, and an unblocking state in which the second structure 4 is capable of being moved to the maximum opening position, and is therefore moveable between the closing position and the maximum opening position. Advantageously, the blocking state of the blocking device 18 makes it possible to maintain in a stable position, the second structure 4 when it is in the intermediate opening position.

According to the first embodiment of the invention, the blocking device 18 comprises a blocking part which is mechanically connected to a handling part 19 which is provided on one of the lateral connecting arms 8 of the handle, so as to be accessible by the user. The handling part 19 is moveable in translation between a first position and a second position. The blocking device 18 is configured, such that a movement of the handling part 19 from the first position to the second position leads to a movement of the blocking part in a blocking position corresponding to the blocking state of the blocking

device 18, and such that a movement of the handling part 19 from the second position to the first position leads to a movement of the blocking part in an unblocking position corresponding to the unblocking state of the blocking device 18. Advantageously, the cooking appliance 1 is configured, such that the handling part 19 is maintained in the first position, when the second structure 4 is moved between the intermediate opening position and the maximum opening position.

Still according to the first embodiment of the invention, the cooking appliance 1 further comprises a cooking juice collecting tray 21, which is configured to collect cooking juices coming from the first and second cooking modules 3, 5. The cooking juice collecting tray 21 is disposed under the first cooking module 3. The cooking juice collecting tray 21 can, for example, be removable, so as to be able to be emptied and cleaned.

According to the first embodiment of the invention, the first cooking plate 3.1 comprises a front discharge part 22 which is provided on a front edge of the first cooking plate 3.1, and which is located in vertical alignment with a front part of the cooking juice collecting tray 21. The front discharge part 22 is more specifically configured to enable a flowing, through gravity, of the cooking juices coming from the first cooking plate 3.1 in the cooking juice collecting tray 21.

Advantageously, the second cooking plate 5.1 comprises an additional discharge part 23, which is provided on a transverse edge of the second cooking plate 5.1, and which is configured to be located in vertical alignment with a rear part of the cooking juice collecting tray 21, when the second structure 4 is in the maximum opening position. The additional discharge part 23 is configured to enable a flowing, through gravity, of the cooking juices coming from the second cooking plate 5.1 in the cooking juice collecting tray 21, when the second structure 4 is in the maximum opening position.

Advantageously, the first cooking plate 3.1 is configured to be inclined towards the bottom and towards a front face 12 of the first structure 2, when the cooking appliance 1 rests on a horizontal surface, and the second cooking plate 5.1 is also configured to be inclined towards the bottom and towards the front face 12 of the first structure 2, when the cooking appliance 1 rests on a horizontal surface and when the second structure 4 is in the maximum opening position. Such an inclination of the first and second cooking plates 3.1, 5.1 makes it possible to generate a flowing of the cooking juices in the direction of the cooking juice collecting tray 21, when the cooking appliance 1 rests on a support surface SA, which is substantially horizontal.

Figures 5 and 6 represent a cooking appliance 1 which differs from the first embodiment represented in figures 1 to 4, mainly in that the first and second predetermined positions are identical and located in the proximity of the intermediate opening position, and for example, immediately after the intermediate opening position in the direction of the maximum opening position, and in that the actuation device comprises a cam 16 and an actuation member 17 which is moveable, for example in translation, between an actuation position, in which the actuation member 17 is configured to activate the electric contact 15 and a rest position, in which the actuation member 17 is configured to deactivate the electric contact 15. The cam 16 is more specifically configured to move the actuation member 17 from the rest position to the actuation position, when the second structure 4 is pivoted, from a position located between the maximum opening position and the intermediate opening position, in the direction of the intermediate opening position and substantially reaches the intermediate opening position.

Advantageously, the actuation device comprises an urging member (not represented in the figures), such as a return spring for example, configured to urge the actuation member 17 in the rest position, when the cam 16 is angularly offset with respect to the actuation member 17.

According to the second embodiment of the invention, the cam 16 is immovable with respect to the first structure 2 and comprises a cam surface, which is circular arc-shaped, and which is coaxial with the pivot axis A1, and the actuation member 17 is mounted on the second structure 4, and is for example, housed in one of the lateral connecting arms 8. Advantageously, the electric contact 15 is also housed in one of the lateral connecting arms 8.

The actuation member 17 has a first actuation portion, for example formed by a first end of the actuation member 17, configured to engage with the cam 16, and a second actuation portion, for example formed by a second end of the actuation member 17, configured to engage with the electric contact 15, and more specifically, to activate and deactivate the electric contact 15. Advantageously, during the movement of the second structure 4 between the closing position and the intermediate opening position, the cam 16 engages with the actuation member 17 and maintaining it in its actuation position; conversely, during the movement of the second structure 4 between the intermediate

opening position and the maximum opening position, the cam 16 releases the actuation member 17, and the latter is urged towards the rest position by the urging member.

Figures 7 and 8 represent a cooking appliance 1 according to a third embodiment of the invention, which differs from the second embodiment, in particular in that the blocking device 18 also comprises an electric contact 20, such as a microswitch, configured to occupy a first state, and for example, to be deactivated or activated, when the blocking part occupies the blocking position, and configured to occupy a second state, and for example, to be activated or deactivated, when the blocking part occupies the unblocking position. Advantageously, the blocking part is configured to be maintained in the unblocking position as the second structure 4 occupies a position located between the intermediate opening position and the maximum opening position, excluding the intermediate opening position.

Thus, according to this third embodiment of the invention, the cooking appliance 1 is configured, such that the first activation condition is reached when the blocking part is moved in the unblocking position, i.e. when the handling part 19 is moved in the first position and when the electric contact 20 is activated, and such that the second activation condition is reached when the blocking part is moved in the blocking position, i.e. when the handling part 19 is moved in the second position and when the electric contact 20 is deactivated.

According to an embodiment of the invention not represented in the figures, the cooking appliance 1 could comprise a position detection device, such as a linear or rotary potentiometer for example, and the position detection device could be configured to control the first and second use modes, according to values coming from the position detection device. Naturally, the present invention is not at all limited to the embodiments described and illustrated, which have only been given as examples.

P a t e n t k r a v

1. Køkkenapparat (1) til tilberedning af fødevarer, hvor køkkenapparatet (1) omfatter:

- 5 - en første struktur (2), der omfatter et første kogemodul (3) med en første kogeplade (3.1),
- en anden struktur (4), der omfatter et andet kogemodul (5) med en anden kogeplade (5.1),
- en drejeforbindelse (9), der forbinder den anden struktur (4) med den første
- 10 struktur (2) og er konfigureret til at muliggøre en drejning af den anden struktur (4) i forhold til den første struktur (2) omkring en drejeakse (A1) og mellem en lukkeposition, hvor den første kogeplade (3.1) og den anden kogeplade (5.1) har en minimal indbyrdes afstand, og en maksimal åbningsposition, hvor den første kogeplade (3.1) og den anden kogeplade (5.1) har en maksimal indbyr-
- 15 des afstand, når køkkenapparatet (1) hviler på en understøtningsflade (SA), der er vandret,
- en første brugergrænseflade (10), der er anbragt på den første struktur (2),
- en styreenhed (13), der er konfigureret til at styre driften af køkkenapparatet (1),
- 20 hvor køkkenapparatet (1) har en første brugertilstand, kaldet grill-tilstand, hvor en fødevarer er beregnet til at blive indsat mellem den første og anden kogeplade (3.1, 5.1), og en anden brugertilstand, kaldet barbecue-tilstand, hvor enhver af den første og anden kogeplade (3.1, 5.1) er i stand til at understøtte og tilberede en respektive fødevarer,
- 25 hvor køkkenapparatet (1) omfatter en anden brugergrænseflade (11), der er anbragt på den anden struktur (4), **kendetegnet ved, at** den første brugergrænseflade (10) er dedikeret til den første brugstilstand, og den anden brugergrænseflade (11) er dedikeret til den anden brugstilstand, og **ved, at** styreenheden (13) er konfigureret til at aktivere den første brugergrænseflade (10)
- 30 og deaktivere den anden brugergrænseflade (11), når køkkenapparatet er i den første brugstilstand, og til at aktivere den anden brugergrænseflade (11)

og deaktivere den første brugergrænseflade (10), når køkkenapparatet (1) er i den anden brugstilstand.

5 **2.** Køkkenapparat (1) ifølge krav 1, hvor styreenheden (13) er konfigureret til at aktivere den første brugergrænseflade (10) og deaktivere den anden brugergrænseflade (11), når en første aktiveringsbetingelse detekteres af styreenheden (13), og til at aktivere den anden brugergrænseflade (11) og deaktivere den første brugergrænseflade (10), når en anden aktiveringsbetingelse detekteres af styreenheden (13).

10 **3.** Køkkenapparat (1) ifølge krav 2, som er konfigureret således, at den første aktiveringstilstand nås, når den anden struktur (4) drejes fra den maksimale åbningsposition i retning af lukkepositionen og når en første forudbestemt position, der befinder sig mellem lukkepositionen og den maksimale åbningsposition, og således at den anden aktiveringstilstand nås, når den anden struktur (4) drejes fra lukkepositionen i retning af den maksimale åbningsposition og når en anden forudbestemt position, der befinder sig mellem lukkepositionen og den maksimale åbningsposition.

20 **4.** Køkkenapparat (1) ifølge krav 3, hvor den første og anden forudbestemte position er identiske.

25 **5.** Køkkenapparat (1) ifølge et hvilket som helst af de foregående krav, hvor den anden struktur (4) er i stand til at indtage en mellemliggende åbningsposition, som er stabil og befinder sig mellem lukkepositionen og den maksimale åbningsposition.

30 **6.** Køkkenapparat (1) ifølge krav 5, som omfatter en blokeringsanordning (18), som kan bevæges mellem en blokeringstilstand, hvor den anden strukturs (4) drejeamplitude er begrænset til en drejning mellem lukkepositionen og den mellemliggende åbningsposition, og en frigivelsestilstand, hvor den anden

struktur (4) kan bevæges til den maksimale åbningsposition.

5 **7. Køkkenapparat (1)** ifølge krav 6, hvor blokeringsanordningen (18) omfatter en håndteringsdel (19) og en blokeringsdel, som er mekanisk forbundet, hvor håndteringsdelen (19) er bevægeligt monteret mellem en første position og en anden position, og blokeringsanordningen (18) er konfigureret således, at en bevægelse af håndteringsdelen (19) fra den første position til den anden position fører til en bevægelse af blokeringsdelen i en blokeringsposition svarende til blokeringsanordningens (18) blokeringstilstand, og således at en bevægelse af håndteringsdelen (19) fra den anden position til den første position fører til en bevægelse af blokeringsdelen i en frigivelsesposition svarende til blokeringsanordningens (18) frigivelsestilstand.

15 **8. Køkkenapparat (1)** ifølge et hvilket som helst af de foregående krav, som yderligere omfatter en elektrisk kontakt (15), der er konfigureret til at indtage en første tilstand, når køkkenapparatet (1) er i den første brugstilstand, og konfigureret til at indtage en anden tilstand, når køkkenapparatet (1) er i den anden brugstilstand.

20 **9. Køkkenapparat (1)** ifølge krav 3 og 8, som omfatter en aktiveringsanordning, der er konfigureret til at bevæge den elektriske kontakt (15) i den første tilstand, når den anden struktur (4) drejes fra den maksimale åbningsposition i retning af lukkepositionen og når den første forudbestemte position, og til at bevæge den elektriske kontakt (15) i den anden tilstand, når den anden struktur (4) drejes fra lukkepositionen i retning af den mellemliggende åbningsposition og når den anden forudbestemte position.

10. Køkkenapparat (1) ifølge krav 9, hvor aktiveringsanordningen omfatter:

- et aktiveringselement (17), som er bevægeligt mellem en aktiveringsposition, hvor aktiveringselementet (17) er konfigureret til at aktivere den elektriske kontakt (15), og en hvileposition, hvor aktiveringselementet (17) er konfigureret til at deaktivere den elektriske kontakt (15), og

5 - en knast (16), der er konfigureret til at bevæge aktiveringselementet (17) fra hvilepositionen til aktiveringspositionen, når den anden struktur (4) når den første forudbestemte position eller den anden forudbestemte position.

10 **11.** Køkkenapparat (1) ifølge krav 9 kombineret med krav 6 eller 7, hvor aktiveringsanordningen i det mindste delvist er dannet af blokeringsanordningen (18).

15 **12.** Køkkenapparat (1) ifølge et hvilket som helst af de foregående krav, hvor den anden struktur (4) omfatter et håndtag (6), der er konfigureret til at blive håndteret af en bruger, hvor den anden brugergrænseflade (11) er anbragt på håndtaget (6).

20 **13.** Køkkenapparat (1) ifølge krav 12, hvor håndtaget (6) er i kontakt med den vandrette overflade, når den første struktur (2) hviler på en vandret overflade, og når den anden struktur (4) indtager den maksimale åbningsposition.

25 **14.** Køkkenapparat (1) ifølge et hvilket som helst af de foregående krav, hvor den første kogeplade (3.1) er konfigureret til at være skrånende mod bunden og mod en forside (12) af den første struktur (2), når køkkenapparatet (1) hviler på en vandret overflade.

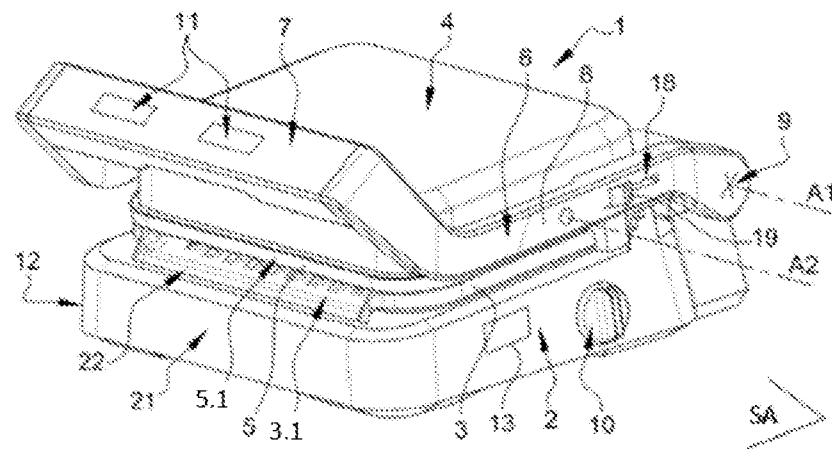
15. Køkkenapparat (1) ifølge et hvilket som helst af de foregående krav, som yderligere omfatter en kogesaftopsamlingsbakke (21), der er konfigureret til at opsamle kogesaft, der kommer fra mindst den første kogeplade (3.1), hvor

kogesaftopsamlingsbakken (21) er anbragt mindst delvist under det første kogemodul (3).

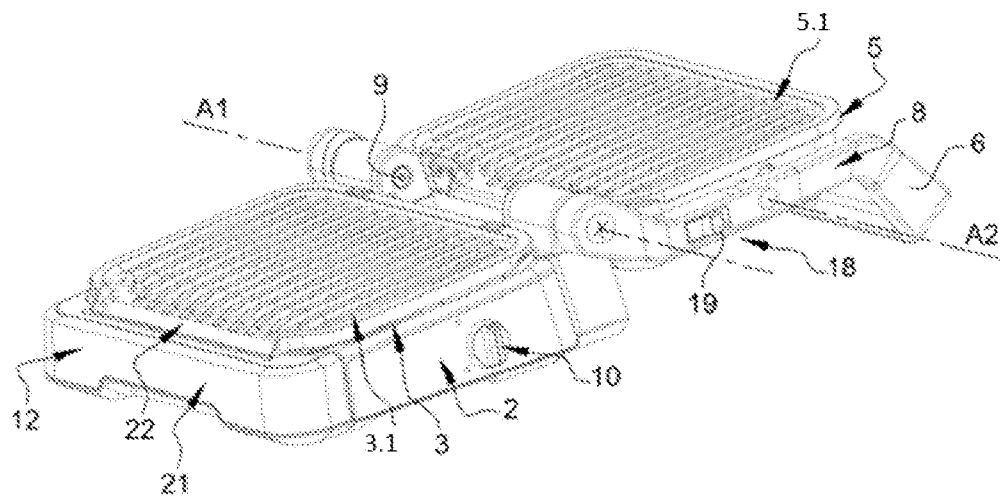
5 **16.** Køkkenapparat (1) ifølge det foregående krav, hvor den første kogeplade (3.1) omfatter en forreste udløbsdel (22), som er anbragt på en forkant af den første kogeplade (3.1), og som er placeret lodret på linje med en forreste del af kogesaftopsamlingsbakken (21), hvor den forreste udløbsdel (22) er konfigureret til at muliggøre en strømning, gennem tyngdekraften, af kogesaften, der kommer fra den første kogeplade (3.1), ind i kogesaftopsamlingsbakken
10 (21).

17. Køkkenapparat (1) ifølge et hvilket som helst af de foregående krav, hvor den første brugergrænseflade (10) er anbragt på en sideflade af den første struktur (2).

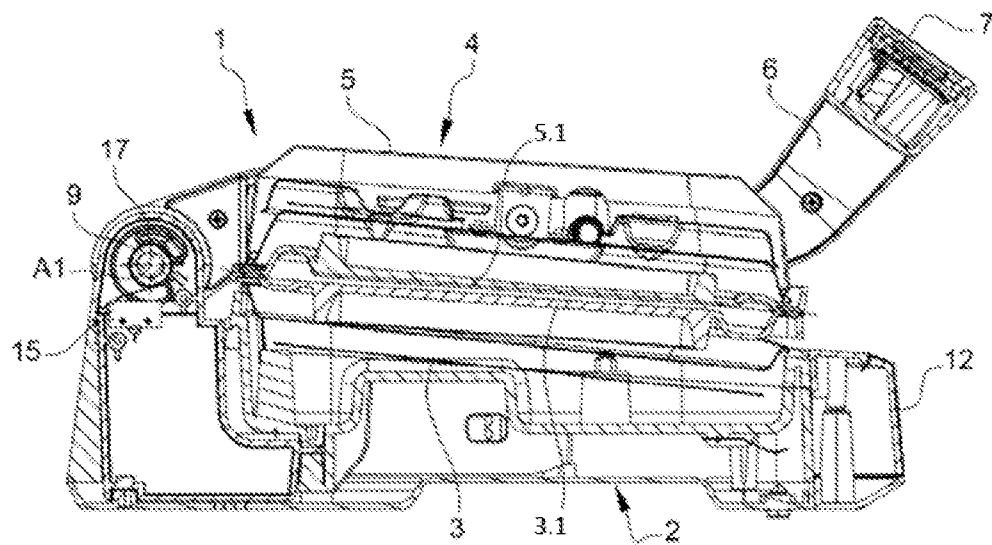
[Fig 1]



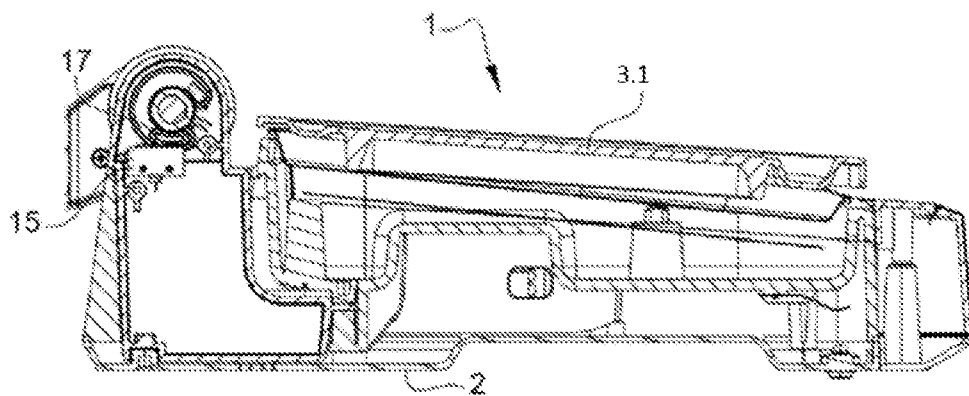
[Fig 2]



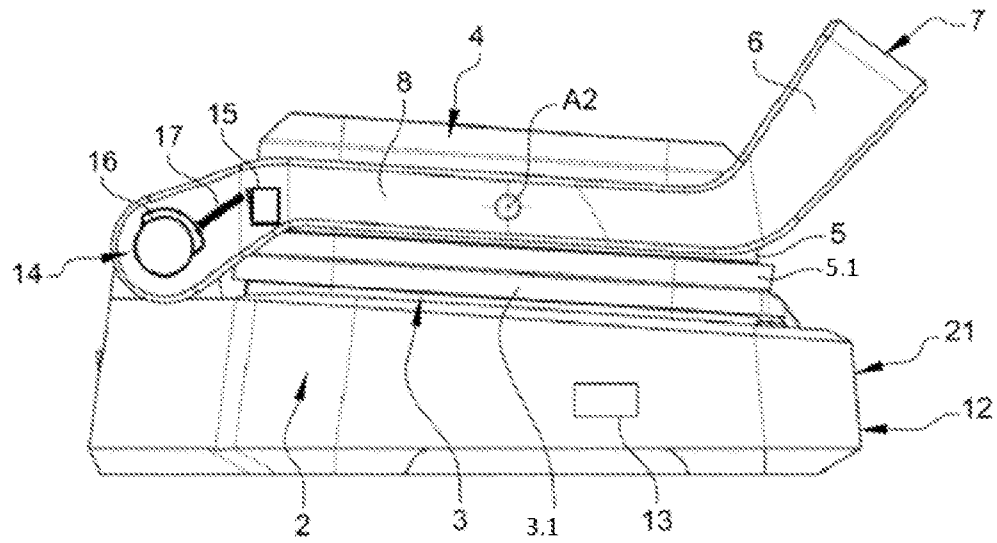
[Fig 3]



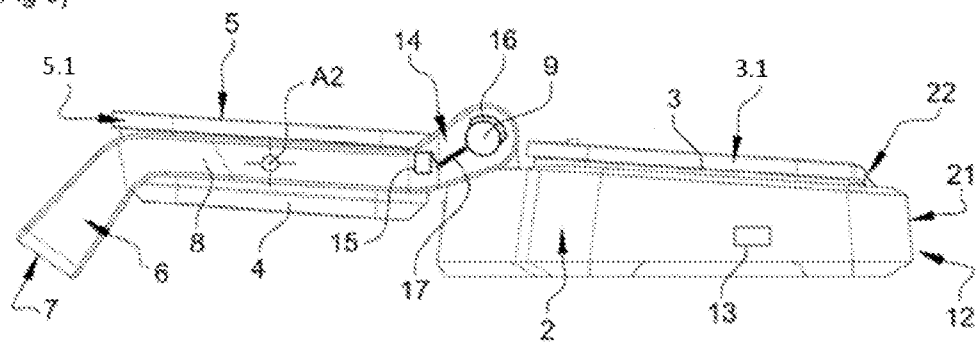
[Fig 4]



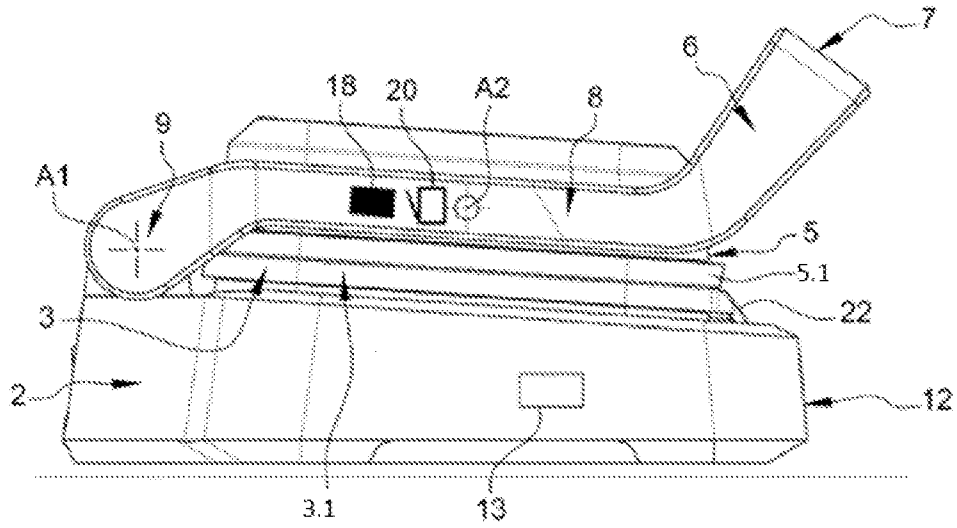
[Fig 5]



[Fig 6]



[Fig 7]



[Fig 8]

