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(71) Applicant: **Electrolux Appliances Aktiebolag**
105 45 Stockholm (SE)

(72) Inventors:
- **Lazin, Luciana**
  440078 Satu Mare (RO)
- **Boitor, Radu Ioan**
  91541 Rothenburg ob der Tauber (DE)

(74) Representative: **Röder, Richard et al**
Electrolux Hausgeräte GmbH
Group Patents
90327 Nürnberg (DE)

(54) **Cover plate for a cooking top of a kitchen appliance**

(57) An at least one cover plate part (1a, 1b, 1c) for a cooking top (2) of a kitchen appliance (8), such as a stove,
wherein each cover plate part (1a, 1b, 1c) comprises at least one hinge (3), preferably two hinges (3, 3a, 3b), wherein said at least one hinge (3), preferably a cover hinge, pivotably connects the cover plate part (1a, 1b, 1c) with the cooking top (2),
wherein the dimension of each cover plate part (1a, 1b, 1c) is sufficient to cover at least a part of the cooking top (2), wherein said part of the cooking top (2), preferably comprises at least one hotplate (9), preferably two hotplates.

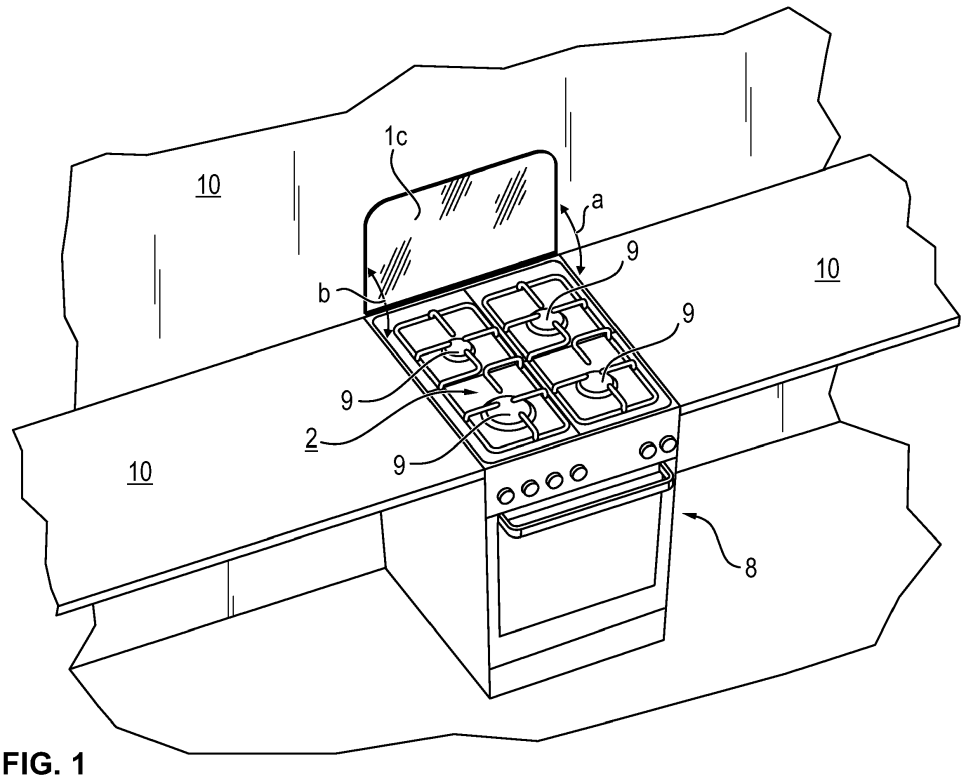

FIG. 1

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Description

[0001] The present invention relates to a cover plate for a cooking top of a kitchen appliance, such as a stove, a cover plate consisting of a number of individual cover plate parts, and a kitchen appliance comprising such cover plate that comprises at least one cover plate part.

[0002] Free kitchen appliance, such as a cooker, and particularly a free standing kitchen appliance are often equipped with a lid for closing the kitchen appliance. Such lid is, for example, present in many flame gas cookers, FS cookers with gas or mixt hob. Such cookers often are equipped with painted metal or glass lids.

[0003] The document DE 20 2004 003 159 U1, for example, shows a hinge mechanism for such lid for a stove. Practice shows, however, that such lid is mainly a non-functional component of the cookers. This is, because the lid is almost always kept open by the user, even when the cooker is not in use. Nevertheless, such lid is still requested by the customers, mainly because of tradition and aesthetic reasons.

[0004] Further hob covers independent from the kitchen appliance which may be laid on the cooking tops or hobs were developed. Such covers allow to cover only a part of the cooking top and hotplates, thereby enlarging the working space being available, although the other hotplates may be heated. However, such hob covers cannot be put in upright position which is desired by the costumer as the traditional lid had an unintentional but practical function in protecting a wall from splashes of fat or cooking liquids. Moreover, such covers are prone to break as they are pushed off or tripped over the appliance to the kitchen floor.

[0005] It is an object of the present invention to provide a solution to the above mentioned constraints.

[0006] It is a further object of the present invention to provide a cover for a kitchen appliance, enlarging the workspace for the user.

[0007] It is a still further object of the present invention to provide a cover of a kitchen appliance being secured against tripping off the appliance to the kitchen floor.

[0008] The above objects of the invention are achieved by a cover plate for a cooking top of a kitchen appliance, such as a stove, according to claim 1, a cover plate according to claim 12 and a kitchen appliance according to claim 14.

[0009] A cover plate for a cooking top , such as a stove, according to claim 1 comprises at least one hinge , preferably two hinges (3, 3a, 3b), wherein said at least one hinge , preferably a cover hinge, pivotably connects at least one cover plate part with the cooking top , wherein the dimension of each cover plate part is sufficient to cover at least a part of the cooking top , wherein said part of the cooking top , preferably comprises at least one hotplate , preferably two hotplates.

[0010] Such at least one cover plate part forms a or part of a lid of an appliance which is flexible in its use to the user's needs. The present invention thereby gives a useful function to a lid, which is hinged to the appliance, such as the traditional lids. It will be immediately understood that said hinge, preferably, is connected pivotably to the cover plate part at a bottom edge of said cover plate part.

[0011] In a preferred embodiment the cover plate part is pivotably movable around a horizontal axis, preferably the axis being formed by the hinge axis, more preferably, said hinge axis being parallel to an upper edge of the kitchen appliance and/or the cooking top.

[0012] It will be immediately understood that such at least one cover plate part can be pivotably moved around the hinge into an open position. Said open position preferably is a position where the at least one cover plate part is in an upright position relative to the cooking top, and wherein in said upright position, more preferably, an angle of the at least one cover plate part and the cooking top is about 90°. In such an open position the cover plate part may serve as a splashing guard. This function depends on its position relative to the cooking top. If said cover plate part is arranged at a rear edge of the cooking top, it may serve as a splashing guard preventing a rear kitchen wall to be splashed, or if applied on a kitchen block the part of the kitchen behind the cover plate part is prevented from being splashed. For example, also a person sitting there. If said cover plate part is arranged at a side edge of the cooking top, it may serve as a side splashing guard preventing a part of the kitchen adjacent to the cooking top to be splashed. However, it is also possible that such cover plate part is arranged at a front edge of the cooking top, facing the user. It may thus serve as a frontal splashing guard preventing the user to be splashed. Moreover, it may then serve as a frontal child safety device, preventing children from being splashed and/or preventing children from reaching the hot plates, pots or cooking top. Also an accidental tilting or tripping of a pot or a pan is prevented.

[0013] It will also be immediately understood that from an open position by a pivotal movement of the at least one cover plate part around the hinge, said cover plate part can be put down into a closed position. However, two such closed positions are possible, as said cover plate part can be put down into two directions, in principle, i.e. either put on top of a part of the cooking top, preferably covering at least one hotplate, or put in the other direction, e.g. on top of a part of a kitchen plate adjacent to the cooking top, or if installed at a front edge of the cooking top can be folded forward down.

[0014] Depending on the choice of hinge, both movements may be possible. A hinge may allow to put the cover plate part into an open upright position and may allow to put the cover plate part down in either direction of the hinge. However, also with a hinge allowing only the pivotal movement from an upright open position into a closed position around the hinge in one particular direction, it will be immediately understood that depending on the orientation of the hinge either the first or the second direction is possible.

[0015] If, for example, the cover plate part is configured such that it is to be closed by said cover plate part being put down onto the cooking top, by detaching the hinge with the cover plate part rotating the hinge with the cover plate part by 180° and re-attaching the hinge to the appliance, it will be now possible to close the cover plate part the other direction, namely putting it on top of a part of the kitchen plate being adjacent to the cooking top.

[0016] In a closed position, the cover plate part covers a part of the cooking top, preferably covering at least one hotplate, or is put on a part of a kitchen plate adjacent to the cooking top, said cover plate part enlarges the space of work. It is, for example, possible to prepare food on said cover plate and/or to put cooking equipment on the closed cover plate part, such as pots, pans or cutlery.

[0017] The term "hinge" as used herein, preferably means a bearing that connects two solid objects, e.g. a kitchen appliance of an edge thereof with a cover plate part. Such hinge, preferably allows only a limited angle of rotation between them. Two objects connected by an ideal hinge, preferably, rotate relative to each other about a fixed axis of rotation.

[0018] In a preferred embodiment of the present invention a hinge comprises a and/or is surrounded by and/or is enclosed in a housing.

[0019] In a preferred embodiment of the present invention a hinge may comprise a leaf, wherein the leaf is attached to or attachable to a cover plate part. Such leaf may be pivotably connected to the axis of the hinge.

[0020] A hinge preferably may comprise a spring, such as a spiral spring. Such spiral spring, preferably, may support itself on a housing of a hinge and/or on a leaf of a hinge. Such spring thereby may, for example, support an opening movement with its force, which may be directed against gravity, at least in a part of the opening movement. Such spring may, for example, prevent a cover plate part from being slammed closed.

[0021] Such hinge may also comprise a pivot pin or bolt, which engages a leaf of the spring.

[0022] In an advantageous embodiment of the inventive cover plate part the dimensions of each cover plate part is sufficient to cover about a quarter, about a half, about one third, about two thirds, preferably about a half, of the cooking top.

[0023] In such closed position, however, although the cover plate part may cover a hotplate or several hot plates, further not covered hot plates may be still used for cooking. Therefore, the present invention is dedicated, particularly, to people which have a small kitchen and therefore little workspace. Additional working space is gained, particularly if not all burners or hotplates are in use. Due to the reduced dimension of the lid in a closed position an additional working space is available. Said configuration is advantageous over traditional lids as described above, which have big dimension and cover, if closed, the entire cooking top and all burners or hotplates.

[0024] The dimension of each cover plate part according to the present invention is sufficient to cover at least a part of the cooking top, wherein said part of the cooking top, preferably comprises at least one hotplate, preferably two hotplates. It will be understood that, for example, using a gas oven or a CERAN field having four hotplates arranged in a square, such cover plate part may cover, about a half of the cooking top, an thus e.g. two hotplates being adjacent to each other, e.g. the upper right and upper left, the upper right and lower right, the lower right and lower left or the lower left and upper right hotplate. However, a further cover plate part may be present which covers the other two hotplates. However also other dimensions are possible. For example, the dimensions of one cover plate part may be sufficient to cover about a quarter of the cooking top. In the above example, only one hotplate may be covered. Also other dimensions are possible such as covering about one third, about two thirds. The dimensions of each cover plate part may be chosen freely. At one appliance also more than one cover plate part may be arranged. Said cover plate parts may have the same or different dimension.

[0025] In a further advantageous embodiment of the inventive cover plate part each cover plate comprises an underside and an upper side, wherein the underside and/or the upper side has a substantially flat surface, and wherein each cover plate part is manufactured essentially of a material selected from the group comprising glass, silicon, metal, metal alloy and synthetic material, wherein the material, preferably is an essentially break-proof and/or essentially scratch-proof material.

[0026] In a preferred embodiment of the cover plate part according to the present invention such cover plate part may be manufactured from glass, plastic or silicon, preferably as one piece thereof.

[0027] In a preferred embodiment of the cover plate part according to the present invention such cover plate part may be manufactured from shatterproof and/or break proof glass, preferably as one piece thereof.

[0028] Instead of using essentially break-proof and/or essentially scratch-proof material glass, also other material, preferably being in a sheet-like form, may be used for manufacturing the cover plate according to the present invention.

[0029] In a preferred embodiment of the cover plate part according to the present invention such cover plate part may be manufactured from heat-resistant material, such as laminate, glass, plastic, silicon, metal, metal alloy and synthetic material, or mixtures and/or combinations thereof.

[0030] In a preferred embodiment of the cover plate part according to the present invention such cover plate part may be manufactured from stainless steel.

[0031] In a preferred embodiment of the cover plate part according to the present invention such cover plate part may be manufactured from a relatively hard and/or hardened material.

[0032] In a preferred embodiment of the cover plate part according to the present invention such cover plate part as such, i.e. only the plate, not the hinge, may consist

of a material selected from the group comprising glass, silicon, metal, metal alloy and synthetic material, wherein the material, preferably is an essentially break-proof and/or essentially scratch-proof and/or heat-resistant material. It will be understood that in such case the cover plate part may still comprise a hinge.

[0033] An upper side of a cover plate part according to the present invention, preferably, is the surface of the cover plate part which in a closed position, e.g. covering a part of a cooking top, is facing upwards, more preferably away from the cooking top or kitchen surface.

[0034] An underside of a cover plate part according to the present invention, preferably, is the surface of the cover plate part which in a closed position, e.g. covering a part of a cooking top, is facing downwards, more preferably towards the cooking top or kitchen surface.

[0035] It will be understood that said terms "underside" and "upper side" thus are terms, which dependent on the applied hinge or the movement to be carried out, define which side of the cover plate part is which. In an embodiment where a closing movement is possible to both sides of the hinge, terms "underside" and "upper side" are relative to the movement carried out.

[0036] In a preferred embodiment of the cover plate part according to the present invention the cover plate part is at least partially transparent. This allows the user to look on and control hotplates although being covered by the cover plate part.

[0037] In a further advantageous embodiment of the inventive cover plate at least one cover plate part comprises an at least one spacer foot (6) on one side of the cover plate , preferably on an underside of the at least one cover plate part.

[0038] Such spacer foot is particularly of advantage if it causes a distance between the cover plate part and the cooking top. Accordingly, the cover plate part is not put directly on the cooking top and thus not directly on a hotplate. An unwanted heating of the cover plate part is thus prevented, e.g. if the cover plate part is closed, although a hotplate is still heating.

[0039] A spacer foot preferably is manufactured from a heat-resistant material.

[0040] A spacer foot, preferably, is manufactured from a material not scratching a CERAN field, e.g. rubber or the like.

[0041] Such spacer foot is also of advantage as such space between the cover plate part and the cooking top enables an easier lifting up, i.e. opening movement, of the cover plate part, an easier cleaning, and/or the compensation of flatness errors, as the cover plate part is not directly laying on the cooking top.

[0042] Such spacer foot may be arranged at a rim portion or a central portion of a cover plate part and/or may be attached to the cover plate part by various means, such as a thread, clip, suction cup or glue connection, or the like.

[0043] In a further advantageous embodiment of the inventive cover plate part the at least one hinge comprises a support structure for detachable connecting the at least one cover plate part with the cooking top, preferably with a reception structure of the cooking top.

[0044] Where a hinge comprises a housing, said housing may comprise a support structure.

[0045] Such detachable connection facilitates a more flexible use of the cover plate part according to the present invention in that the cover plate part may be easily attached to one position of the kitchen top, e.g. to the front edge of the cooking top, may be easily de-attached and re-attached at another position of the kitchen top, e. g. the rear edge or a side edge thereof.

[0046] The user in a applying one or more than one cover plate part according to the present invention is thus able to attach the one or more than one cover plate part(s) in any of the three possible positions and/or combination of said positions, i.e. at the front edge of the cooking top, e.g. as child safety glass, at a rear edge as a splash wall, or at a side edge as a side splashing guard. The one or more than one cover plate part(s) may thereby be in an upright open or laid down closed position, i.e. closed on the cooking top, to cover the hotplates and use as storage for kitchen utensils, or closed out on a kitchen surface to use as cutting board, or the like. Also combinations of cover plate parts being open and closed are possible, e. g. one first cover plate part at the rear edge of the cooking top as a splash wall in upright open position and one cover plate part attached to a side edge of the cooking top laid down on, e.g. the right upper and right lower hotplate.

[0047] The cover plate part is connected to the cooking top or an edge thereof via the hinge, more particularly, via a support structure comprised by said hinge.

[0048] Such support structure is for detachable connecting the at least one cover plate part with the cooking top and thus preferably also the hinge with the cooking top.

[0049] Such detachable connection may be carried out with various means. For example, the hinge may comprise a bracket or clip.

[0050] In some embodiments the detachable connection may be carried out with via a support structure comprised by said hinge, such as a feet, pin or rod which is supported to a reception structure of the kitchen appliance. Such reception structure may be removable attachable to the kitchen appliance, however, it may also be that such reception structure is fixed to the kitchen appliance, e.g. already upon manufacture of the kitchen appliance. Such reception structure may comprise a lash or hole, to which for example a support structure is mounted. By way of example the support structure may be a rod protruding from a bottom of a hinge housing which is to be introduced into a supporting hole, wherein the supporting hole is the reception structure.

[0051] It will be immediately understood that the cover plate part with its support structure comprised by the hinge, may be easily removed from the reception structure.

[0052] In a preferred embodiment the reception structure is attachable mounted to the kitchen appliance and may be removed from its actual position and fixated to another one, e.g. in a lateral position attached to a side edge or in a frontal position attached to a front edge of the cooking top or in a back position attached to a rear edge of the cooking top. Such removable reception structure may be a rubber part comprising a recess for a support structure.

[0053] In a preferred embodiment the reception structure and/or the support structure are configured such that a distance between the hinge and the edge of the cooking top is adjustable, e.g. by inserting washers. This allows to adjust the height of the hinge relative to the cooking top. In a preferred embodiment two or more cover plate parts are laid over each other. In such configuration the adjustment of the height of the hinge relative to the cooking top is of advantage. Such configuration may, for example, be, were in a four hotplate cooking top, a first cover plate part is attached to the front edge of the cooking top and is closed and laid on and covering the front left and front right hotplate. And where a second cover plate part is attached to the left side edge of the cooking top is also closed and laid, at least partially on the first cover plate part. In such configuration the first cover plate part covers the front left and front right hotplate, whereas the second cover plate part covers the front left and rear left hotplate.

[0054] It will be understood that the detachable connection also advantageously allows to detach the cover plate part for an easy cleaning, e.g. in a dish washer. Moreover, such cover plate parts may be configured to be stackable to each other and thus may be stored in space saving manner.

[0055] In a further advantageous embodiment of the inventive cover plate the at least one cover plate part comprises at least one elevating foot.

[0056] Such elevating foots can be laid on the cooking top and in particular on a hotplate and the cover plate part may be supported and laid on said elevating foot. The elevating foot may be applied in addition to a spacing foot. With such elevating foot the distance between the cooking top and the cover plate part is adjustable.

[0057] An elevating foot may also be applied directly to a spacer foot, e.g. by inserting, fitting or pressing the elevating foot on the spacer foot.

[0058] Alternatively, in a preferred embodiment of the present invention the distance between the cover plate part and the cooking top may be adjusted by adjusting the length of the spacer foot, e.g. where a spacer foot comprises a thread, the spacer foot may be screwed in or out.

[0059] In a further advantageous embodiment of the inventive cover plate part the at least one cover plate part comprises a security material, such as a security foil.

[0060] Such security material is particularly of advantage to secure the cover plate part against or prevent breaking or scratching.

[0061] A security material, such a s a security foil and/or security layer, in case of an unwanted break, also leads to the fragments being kept together, at least such that a broken cover plate part may be disposed safely.

[0062] Such security material is attached to one or two surface sides of the cover plate part, i.e. the upper side and/or the underside, or, where a cover plate consists of or comprises two plates, e.g. two glass plates the security material may be arranged in between.

[0063] Where a security foil is used such security foil may be glued on at least one surface of the cover plate part.

[0064] Such security foil is preferably manufactured from synthetic material, and, more preferably has a strength, permanent elasticity, adhesion and/or heat resistance sufficient to prevent, at least as far as possible, the loosening of parts and fragments after unwanted breakage of the cover plate part.

[0065] Such security foil preferably is attached to an underside of a cover plate part.

[0066] Where a cover plate part comprises spacer feet it is intended that the spacer feet are either attached on top of the security material or are directly attached to the cover plate part, IN the latter case, however, the security material, e.g. the security foil, comprises an according recess or slot for the spacer foot.

[0067] In a preferred embodiment of the cover plate part according to the present invention the security material, such as a security foil, is at least partially transparent. This allows the user to look on and control hotplates although being covered by the cover plate part and the security material.

[0068] In a preferred embodiment the cover plate part and/or the security material comprise a decor, pattern or ornament, to facilitate a better recognition of a cover plate part, particularly in closed position.

[0069] In a further advantageous embodiment of the inventive cover plate the at least one cover plate part comprises a locking mechanism for locking the at least one cover plate part in an open position.

[0070] In a further advantageous embodiment of the inventive cover plate the at least one cover plate part comprises a locking mechanism for locking the at least one cover plate part in an open position and/or closed position.

[0071] Such locking mechanism allows to lock the at least one cover plate part in one particular position. If the cover plate part is locked in an upright open position such locking mechanism prevents an unwanted close, and thus prevents a possible break. If the cover plate part is locked in a closed position, i.e. laid down, e.g. on the hot plate such locking mechanism prevents an unwanted opening.

[0072] A locking mechanism may comprise a locking pin. Said locking pin may be comprised by a hinge and/or a housing of the hinge. Such locking mechanism may block and/or prevent a pivotable movement of the hinge, for example, by blocking the axis and/or a spring and/or

a pivot pin of the hinge, if present.

[0073] In a further advantageous embodiment of the inventive cover plate the at least one cover plate part comprises a magnet support, preferably on the upper side.

[0074] Such magnet support is particularly useful to lock or fix a cover plate part in one particular position. For example such magnet support may be arranged at an upper side of the cover plate part and may interact with an according magnet support attached to a kitchen wall at the rear of the kitchen appliance. Such magnet support thus may also secure the cover plate part from an unwanted closing and, particularly, preventing a fall down.

[0075] It will be understood that such magnet support may be a particular embodiment of a locking mechanism or may be applied in addition to such locking mechanism.

[0076] In a further advantageous embodiment of the inventive cover plate part the support structure of said at least one hinge comprises a detent lug, preferably a hand-operated detent lug.

[0077] In a preferred embodiment the housing of a hinge comprises a detent lug.

[0078] A detent lug may be arranged at the hinge and/or a housing of such hinge, projecting downwards and, preferably, to the rear. Such detent lug may be a particular embodiment of a support structure of a hinge. The hinge may be detachably mounted using said detent lug to an appropriate reception structure, e.g. an appropriate receiving slot for the detent lug. Due to a, preferably, resulting snap-lock connection, an unwanted slip out of the cover plate part is prevented. Such detent lug may, preferably, be configured such that a resulting snap-lock connection is detachable easily and hand-operated.

[0079] In a further advantageous embodiment of the inventive cover plate part the hinge is a dampened hinge.

[0080] A hinge according to the present invention may comprise an at least one snap in cam. A hinge according to the present invention or parts thereof may be manufactured from synthetic material, such as nylon. A hinge according to the present invention may comprise a pivot pin and/or a bearing bushing, wherein the pivot pin and/or a bearing bushing are manufactured from a synthetic material, such as polyacetal.

[0081] A hinge according to the present invention may comprise an adjustable friction resistance. Such friction resistance may be adjusted by the manufacturer, the kitchen worker installing the kitchen of the user.

[0082] A hinge having an adjustable friction resistance may allow optionally for a free or dampened opening and/or closing movement of the cover plate part. For example, a closing movement may be braked. Both possibilities are advantageous in that application of additional stop or actuation mechanisms might not be necessary.

[0083] A movement of the hinge may also be dampened by applying a lubricant.

[0084] In a preferred embodiment of the present invention the hinge is a dampened hinge with a braked and/or dampened closing movement, more preferably at an angle of between 45° and 0°.

[0085] The above described problems are also advantageously solved by a cover plate according to claim 12. Such cover plate consist of a number of, preferably at least two, individual cover plate parts according to any of the embodiments of such cover plate parts according to the present invention.

[0086] In an advantageous embodiment of the inventive cover plate the dimensions of the number of, preferably of two, cover plate parts complement to the dimensions of the cooking top.

[0087] Such cover plate in its entirety, preferably, covers the whole cooking top.

[0088] It will be understood that in a position where each cover plate part is closed the whole cooking top and all its hotplates are covered.

[0089] The term "cooking top" as used herein, preferably, refers to the top of a kitchen appliance where hotplates are arranged. Such cooking top has a dimension formed by the border of the area were the hotplates are located and/or the border of the kitchen appliance surface were the hotplates are located. The term "cooking top", preferably, also comprises a CERAN field.

[0090] The term "hotplate" as used herein, preferably, refers to a single area and/or plate were a pan or pot is to be put for heating the pan or pot. Such hotplate may also be a cooking field of a CERAN field. Such hotplate, preferably, is of round shape. Such hotplate, more preferably, is of round or oval shape.

[0091] The above described problems are also advantageously solved by kitchen appliance according to claim 14. Such kitchen appliance comprises a cover plate according to any one of the embodiments of a cover plate according to the present invention, and/or comprising at least one, preferably two, cover plate parts, wherein the cover plate and/or the at least one, preferably two, cover plate parts are for covering a cooking top of said kitchen appliance ,

wherein each cover plate part comprises at least one hinge, preferably two hinges (3, 3a, 3b), wherein said at least one hinge , preferably a cover hinge, pivotably connects the cover plate part with the cooking top ,

wherein the dimension of each cover plate part is sufficient to cover at least a part of the cooking top , wherein said part of the cooking top , preferably comprises at least one hotplate , preferably two hotplates,

wherein the cover plate part , preferably, is a cover plate part according to any one of the embodiments of a cover plate part according to the present invention.

[0092] In an advantageous embodiment of the inventive kitchen appliance a cooking top of the kitchen appliance comprises at least one reception structure for detachably mounting

a cover plate and/or an at least one, preferably two, cover plate parts , more preferably, the cover plate and/or the at least one, preferably two, cover plate parts according to any one of the preceding claims,

wherein the at least one reception structure is, preferably, for receiving a support structure of a hinge of said cover plate and/or of said at least one cover plate part , more preferably, for pivotably connecting the cover plate and/or the cover plate part with the cooking top ,
wherein said at least one reception structure is arranged at the front and/or at the rear and/or at one or both sides of the cooking top.

[0093] Such reception structure, e.g. a hole, bracket, or the like, is for mounting the cover plate part on the kitchen appliance, more particularly, for receiving a support structure comprised by the hinge and/or the housing of the hinge.

[0094] However, it will be understood that according to one particular embodiment the reception structure is formed by a part of the kitchen appliance, e.g. an edge. For example, such edge may have a recess, a hollow or deepening for attaching a support structure, e.g. a bracket.

[0095] Such reception structures are arranged, preferably at the edges of the kitchen appliance, more preferably, at the edges of a cooking top of such appliance. The reception structures are arranged at each position were a cover plate part is to be mounted. For example, such reception structure may be arranged at a rear edge, side edge or frontal edge of the kitchen appliance and/or cooking top of said kitchen appliance.

[0096] It will be immediately understood that the number of reception structures depends on the number of positions the cover plate part is to be attached to and to the number of hinges to be mounted. For example, a part cover having two hinges, each hinge hawing one support structure, such as a feet, at its bottom edge, is to be attached to two receiving structures, such as foot loops, for each support structure on each hinge one receiving structures each. Thus, such kitchen appliance may comprise at its rear edge, frontal edge and at each side edge, two receiving structures each.

[0097] This would allow to put the cover plate part to the frontal edge, each side edge or the rear edge, according to the wish of the user.

[0098] All described embodiments of the invention have the advantage, that due to applying the at least one cover plate part for a cooking top of a kitchen appliance, such as a stove, a cover plate and a kitchen appliance according to the present invention working space in the kitchen is enlarged and additional workspace is gained. Moreover the cover plate and/or cover plate part are advantageous in serving as a splashing guard and/or represent a tripping protection and/or child safety device.

[0099] The present invention will be described in further detail with reference to the drawings, in which

FIG 1 illustrates a perspective view of a kitchen appliance comprising a cover plate part in an open position showing a first inventive embodiment;

FIG 2 illustrates a perspective view of a kitchen appliance comprising a cover plate part in a closed position showing the first inventive embodiment;

FIG 3 illustrates a perspective view of a kitchen appliance comprising several cover plate parts in open and closed positions showing the first inventive embodiment;

FIG 4 illustrates a perspective close-up view of a kitchen appliance comprising a cover plate part in an open positions showing the first inventive embodiment.

[0100] FIG 1 shows a kitchen appliance (8) with a cover plate part (1c) being attached to the rear of the kitchen appliance (8). Said cover plate part (1c) is in an open position. FIG 2 shows the kitchen appliance (8) with the cover plate part (1c) as shown in FIG 1, however, the cover plate part (1c) is shown in a closed position laid down on top of the rear left and the rear right hotplate. FIG 3 shows the kitchen appliance (8) and the cover plate part (1c) as shown in FIG 1 and FIG 2, however, the cover plate part (1c) as shown in FIG 1 and FIG 2 is depicted in an open position as (1c). In addition two further cover plate parts (1a) and (1b) are attached to the appliance (8). The cover plate part (1b) is attached to the left side edge of the appliance (8) and put in a closed position laid on the kitchen surface adjacent left to the cooking top (2), whereas cover plate part (1a) is shown once in a stage already attached to the right edge of the kitchen appliance (8) in a closed position laid on top of the cooking top (2) covering the upper right and the lower right hotplates (9). Furthermore cover plate part (1a) is shown in a not yet mounted stage, wherein the arrows indicate the movement to be done to attach the cover plate part (1a) detachably and easily to the right edge of the kitchen appliance (8).

[0101] The embodiment as shown in Figs. 1, 2, 3, and 4 shows a kitchen appliance (8), here a stove, having four hotplates (9) arranged in a rectangular shape, which defines the cooking top (2). Said cooking top (2) is embedded into the kitchen surface (10). As may be best seen in FIG 2 and FIG 3, the working space is enlarged in that cooking equipment may be placed on the closed cover plate parts (1a, 1b, 1c). This is of particular advantage as at the same time hotplates (9), according to FIG 1 the front right and front left hot plates (9) and according to FIG 3 the rear left and front left hotplates (9) may be still used for heating.

[0102] It will be understood that the present invention may be applied to all kinds of cooking tops (2) comprising traditional gas cooking tops as shown here, but also, for example, metal cooking tops, glass or glass ceramic cooking tops, or CERAN fields.

[0103] Instead of cover plate parts (1a, 1b, 1c) having all the same dimension as shown here, said cover plate parts may also having different dimensions.

[0104] The cover plate shown here is divided into different movable cover plate parts. Each cover plate part (1a, 1b, 1c) is mountable on one edge of the kitchen appliance (8), i.e. the front edge, rear edge or the side edges of the cooking top with a detachable hinge (3). The hinge (3) can be best seen in FIG 4.

[0105] An at least one cover plate part (1a, 1b, 1c) for a cooking top (2), here a stove two hinges (3, 3a, 3b), which may be best seen in FIG 3 at the bottom end of the not yet attached cover plate part (1a). Each hinge (3) pivotably connects the cover plate part (1a, 1b, 1c) with the cooking top (2). The dimension of each cover plate part (1a, 1b, 1c) is thereby sufficient to cover at least a part of the cooking top (2), wherein said part of the cooking top (2) in the shown embodiment comprises two hotplates (9). The shown cover plate parts (1a, 1b, 1c) have dimensions sufficient to cover about a half of the cooking top (2). In a closed position such as, for example shown in FIG 2, however, although the cover plate part (1) covers two hotplates, the further two not covered hot plates (9) may be still used for cooking.

[0106] Each cover plate part (1a, 1b, 1c) is pivotably movable around a horizontal axis (a) being formed by the hinge axis, wherein said hinge axis is parallel to an upper edge of the kitchen appliance and the cooking top. In FIG 1 and FIG 2 the pivotable movement of the cover plate part (1c) around said axis (a) is depicted with the double headed arrow. It is immediately clear that the cover plate part (1c) can be pivotably moved around the hinges (3) into an open position, said open position is shown, for example, in FIG 1 for cover plate part (1c). In the open position the cover plate part (1c) is in an upright position relative to the cooking top (2), and an angle (b) of the cover plate part (1c) and the cooking top (2) is about 90°. In such an open position the cover plate part (1c) serves as a splashing guard, here preventing splashing to the rear. From the open position as shown best in FIG 1 the cover plate part (1c) can be put down into a closed position, as shown best in FIG.2 by a pivotal movement of the cover plate part (1c) around the axis a and the hinge (3), as depicted by the double-headed arrow in FIG 1 and FIG 2. Two such closed positions are possible. One closed position is shown in FIG 2 for the cover plate part (1c). Here the cover plate part (1c) is put down on top of a part of the cooking top (2), which covers two hotplates (9). However, as shown best in FIG 3, the cover plate part (1b) is put down on top of a part of a kitchen plate (10) adjacent to the cooking top (2). This here depends on the orientation of the hinges (3) and thus the orientation of the cover plate parts being attached to their position. Referring to FIG 3 the difference becomes more apparent. Cover plate part (1b) is attached to the left edge of the cooking top (2), whereas cover plate part (1a) is attached to the right edge of the cooking top (2). As depicted by the double headed arrows, cover plate part (1b) can be put in an open position by moving the cover plate part (1b) clockwise around the axis c, whereas the cover plate part (1a) can be put in an open position by moving the cover plate part (1a) clockwise around the axis c'. If it would, for example, be desired to cover the upper left and lower left hotplate (9) with the cover plate part (1b) said cover plate part (1b) would have to be detached turned around about 180° and re-attached to the left edge of the cooking top (2).

[0107] As can be taken from FIG 4 the hinge (3) comprises a housing (11).

[0108] The shown cover plate parts (1a, 1b, 1c) are comprise an underside and an upper side, wherein the underside and/or the upper side has a substantially flat surface, and wherein each cover plate part (1a, 1b, 1c) is manufactured essentially of a glass, which here is an essentially break-proof and essentially scratch-proof glass. Said glass is shatterproof and breackproof glas, and one cover plate part (1a, 1b, 1c) is manufactured in one piece. The glass used here is a heat-resistant glass and is relatively hard. Such glass is transparent which allows the user to look on and control hotplates (9) although being covered by the cover plate part (1a, 1b, 1c).

[0109] The cover plate part (1a, 1b, 1c) and, more particularly, the at least one hinge (3) comprises a support structure (4) for detachable connecting the at least one cover plate part (1a, 1b, 1c) with the cooking top (2), preferably with a reception structure (5) of the cooking top (2). It may be seen best from FIG 3 that here the cover plate part (1a) is shown once in an attached and once in a detached or not yet attached configuration. Here the hinge (3) can be seen which on its bottom side each comprises a foot (4) as a support structure protruding from the housing (11).

[0110] Such detachable connection facilitates a more flexible use of the cover plate part (1a, 1b, 1c) according to the present invention in that the cover plate part (1a, 1b, 1c) may be easily attached to one position of the kitchen top, e.g. to the front edge of the cooking top, may be easily de-attached and re-attached at another position of the kitchen top, e.g. the rear edge or a side edge thereof.

[0111] The user in a applying one or more than one cover plate part (1a, 1b, 1c) according to the present invention is thus able to attach the one or more than one cover plate part(s) (1a, 1b, 1c) in any of the three possible positions and/or combination of said positions, i.e. at the front edge of the cooking top, e.g. as child safety glass, at a rear edge as a splash wall, or at a side edge as a side splashing guard. The one or more than one cover plate part(s) may thereby be in an upright open or laid down closed position, i.e. closed on the cooking top, to cover the hotplates and use as storage for kitchen utensils, or closed out on a kitchen surface to use as cutting board, or the like. Also combinations of cover plate parts being open and closed are possible, e.g. one first cover plate part at the rear edge of the cooking top as a splash wall in upright open position and one cover plate part attached to a side edge of the cooking top laid down on, e.g. the right upper and right lower hotplate. As shown in Fig 3, the cover plate part (1c) is attached at a rear

edge as a splash wall, the cover plate parts (1b) and (1a) are attached each at one side edge of the cooking top (2) closed on the cooking top, to cover the hotplates and use as storage for kitchen utensils, or closed out on a kitchen surface to use as cutting board, or the like.

[0112] It will be immediately understood that the cover plate part (1, 1a, 1b, 1c) with its support structure (4) comprised by the hinge (8), may be easily removed from the reception structure. It will be understood that the detachable connection also advantageously allows to detach the cover plate part for an easy cleaning, e.g. in a dish washer. Moreover, such cover plate parts may be configured to be stackable to each other and thus may be stored in space saving manner.

[0113] Here the entire cover plate consist of a number of individual cover plate parts (1a, 1b, 1c), two such cover plate parts, e.g. cover plate part (1a) and cover plate part (1b) complement to the dimensions of the entire cooking top (2).

[0114] Such cover plate, more particularly cover plate part (1a) and cover plate part (1b), if placed on the cooking top (2) may cover the whole cooking top (2).

[0115] It will be understood that in a position where each cover plate part is closed the whole cooking top and all its hotplates are covered.

List of reference numerals

[0116]

1a, 1b, 1c	cover plate part
2	cooking top
3, 3a, 3b	hinge
4	support structure
5	reception structure
6	spacer foot
7	elevating foot
8	kitchen appliance
9	hotplate
10	kitchen surface
11	housing

a	axis
b, c, c'	opening angle

Claims

1. A cover plate for a cooking top (2) of a kitchen appliance (8), such as a stove, comprising at least one cover plate part (1a, 1b, 1c),
wherein each cover plate part (1a, 1b, 1c) comprises at least one hinge (2), preferably two hinges (3, 3a, 3b), wherein said at least one hinge (3), preferably a cover hinge, pivotably connects said cover plate part (1a, 1b, 1c) with the cooking top (2),
wherein the dimension of each cover plate part (1a, 1b, 1c) is sufficient to cover at least a part of the cooking top (2), wherein said part of the cooking top (2), preferably comprises at least one hotplate (9), preferably two hotplates.

2. The cover plate according to claim 1, wherein the dimensions of each cover plate part (1a, 1b, 1c) is sufficient to cover about a quarter, about a half, about one third, or about two thirds, preferably about a half, of the cooking top (2).

3. The cover plate according to any one of claims 1 or 2, wherein each cover plate part (1a, 1b, 1c) comprises an underside and an upper side, wherein the underside and/or the upper side has a substantially flat surface, and wherein each cover plate part (1a, 1b, 1c) is manufactured essentially of a material selected from the group comprising glass, silicon, metal, metal alloy and synthetic material, wherein the material, preferably is an essentially break-proof and/or essentially scratch-proof material.

4. The cover plate according to any one of claims 1 to 3, wherein at least one cover plate part (1a, 1b, 1c) comprises an at least one spacer foot (6) on one side of the cover plate part (1a, 1b, 1c), preferably on an underside of the at least one cover plate part (1a, 1b, 1c).

5. The cover plate according to any one of claims 1 to 4, wherein the at least one hinge (3) comprises a support structure (4) for detachable connecting the at least one cover plate part (1a, 1b, 1c) with the cooking top (2), preferably with a reception structure (5) of the cooking top (2).

6. The cover plate according to any one of claims 1 to 5, wherein the at least one cover plate part (1a, 1b, 1c) comprises at least one elevating foot (7).

7. The cover plate according to any one of claims 1 to 6, wherein the at least one cover plate part (1a, 1b, 1c) comprises a security material, such as a security foil.

8. The cover plate according to any one of claims 1 to 7, wherein the at least one cover plate part (1a, 1b, 1c) comprises a locking mechanism (7) for locking the at least one cover plate part (1a, 1b, 1c) in an open position.

9. The cover plate according to any one of claims 1 to 8, wherein the at least one cover plate part (1a, 1b, 1c) comprises a magnet support, preferably on the upper side.

10. The cover plate according to any one of claims 5 to 9, wherein the support structure (4) of said at least one hinge (3) comprises a detent lug, preferably a

hand-operated detent lug.

11. The cover plate according to any one of claims 1 to 10, wherein the hinge (3) is a dampened hinge.

12. A cover plate (1) for a cooking top (2) of a kitchen appliance (8), such as a stove, wherein said cover plate (1) consist of a number of, preferably at least two, individual cover plate parts (1a, 1b, 1c) according to any one of claims 1 to 12.

13. The cover plate (1) according to claim 12, wherein the dimensions of the number of, preferably of two, cover plate parts (1a, 1b, 1c) complement to the dimensions of the cooking top (2).

14. Kitchen appliance (8) comprising a cover plate according to any one of claims 12 or 13, and/or
comprising at least one, preferably two, cover plate parts (1a, 1b, 1c) according to any one of claims 1 to 11, wherein the cover plate (1) and/or the at least one, preferably two, cover plate parts (1a, 1b, 1c) are for covering a cooking top (2) of said kitchen appliance (8),
wherein each cover plate part (1a, 1b, 1c) comprises at least one hinge (3), preferably two hinges (3, 3a, 3b), wherein said at least one hinge (3), preferably a cover hinge, pivotably connects the cover plate part (1a, 1b, 1c) with the cooking top (2),
wherein the dimension of each cover plate part (1a, 1b, 1c) is sufficient to cover at least a part of the cooking top (2), wherein said part of the cooking top (2), preferably comprises at least one hotplate (9), preferably two hotplates,
wherein the cover plate part (1a, 1b, 1c), preferably, is a cover plate part (1a, 1b, 1c) according to any one of claims 1 to 11.

15. Kitchen appliance (8), preferably according to claim 14, wherein a cooking top (2) of the kitchen appliance (8) comprises
at least one reception structure (5) for detachably mounting a cover plate (1) and/or an at least one, preferably two, cover plate parts (1a, 1b, 1c), more preferably, the cover plate (1) and/or the at least one, preferably two, cover plate parts (1a, 1b, 1c) according to any one of the preceding claims,
wherein the at least one reception structure (5) is, preferably, for receiving a support structure (4) of a hinge (2) of said cover plate (1) and/or of said at least one cover plate part (1a, 1b, 1c), more preferably, for pivotably connecting the cover plate part (1a, 1b, 1c) with the cooking top (2),
wherein said at least one reception structure (5) is arranged at the front and/or at the rear and/or at one or both sides of the cooking top (2).

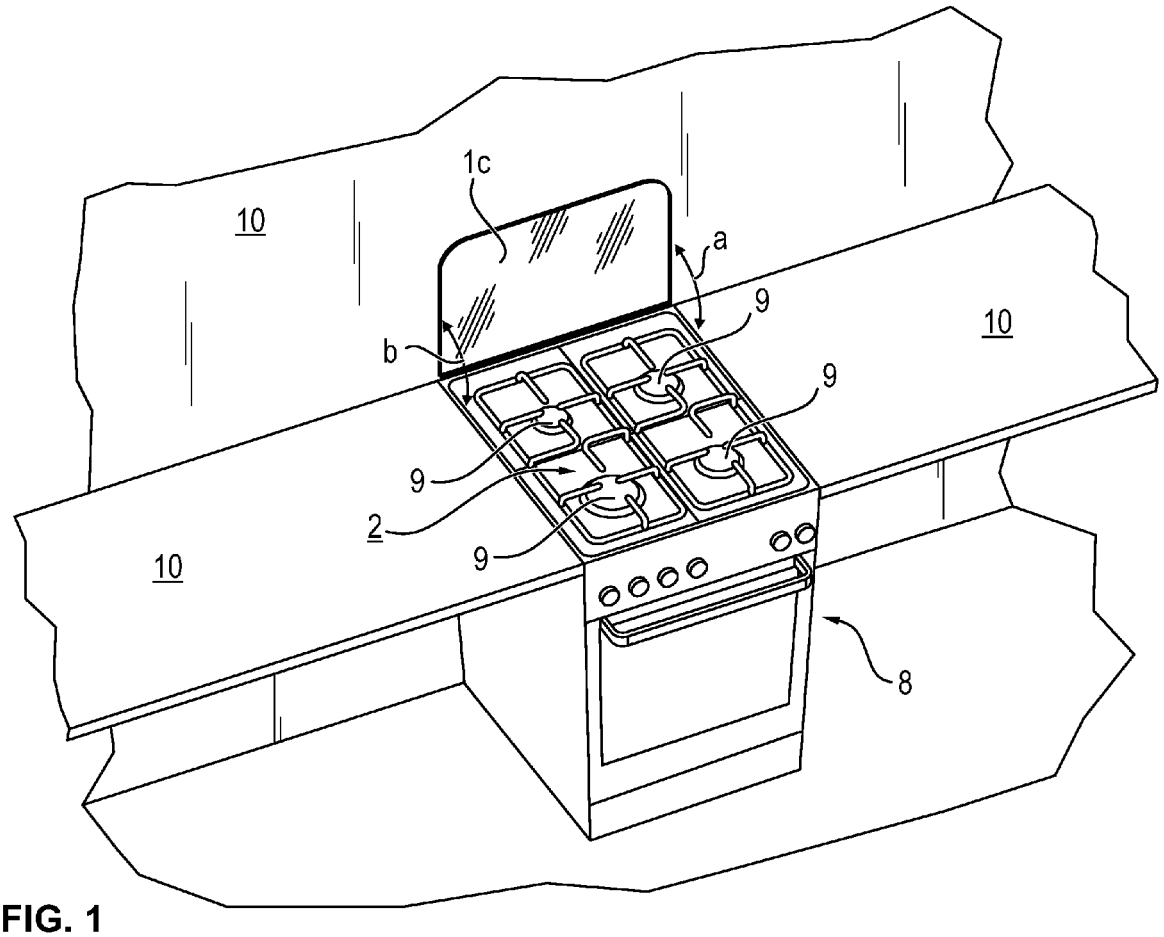

FIG. 1

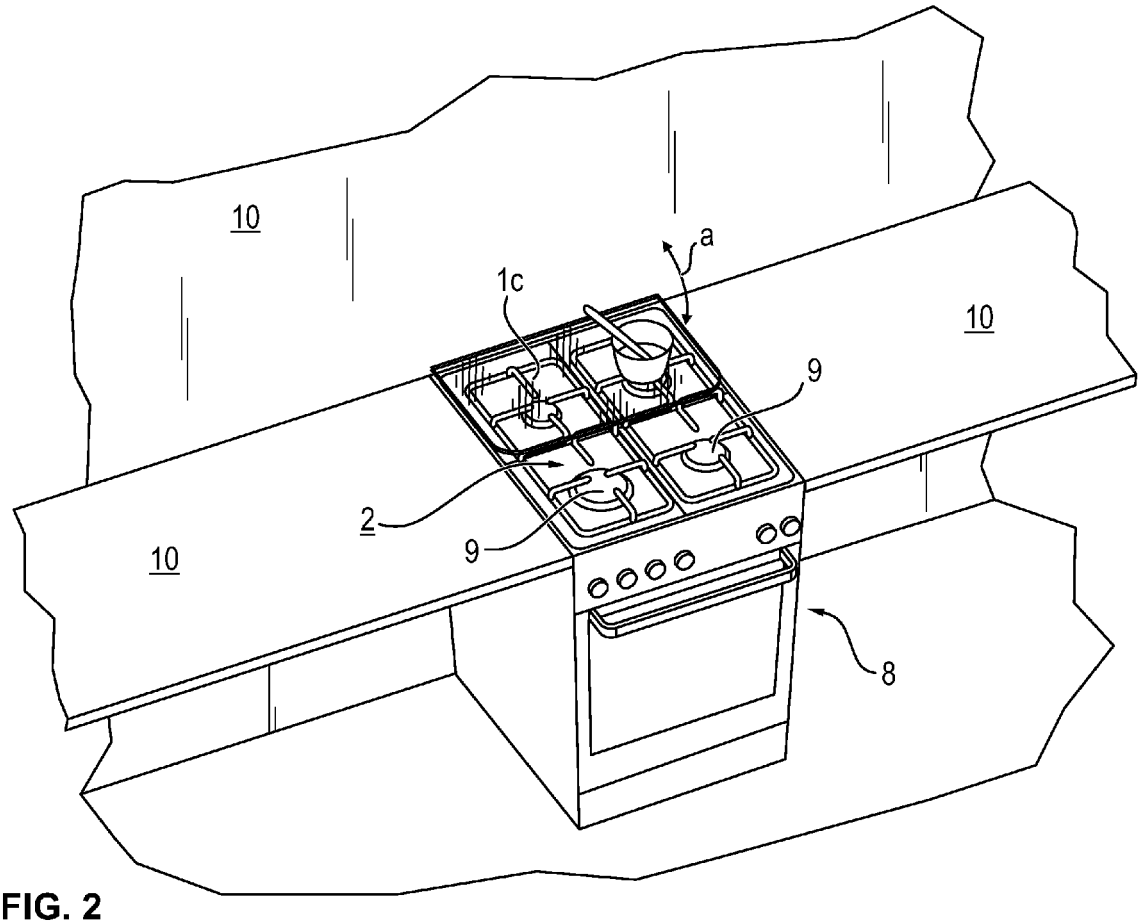

FIG. 2

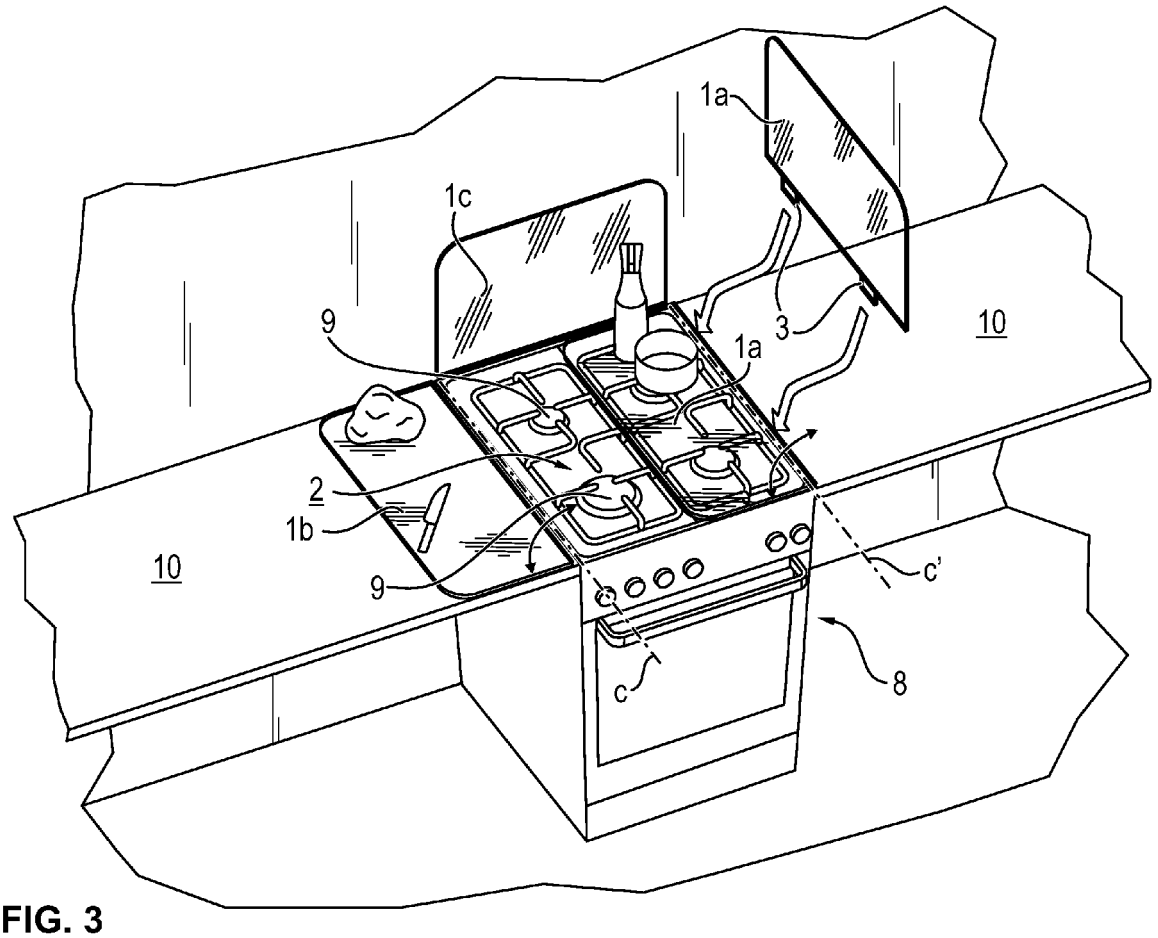

FIG. 3

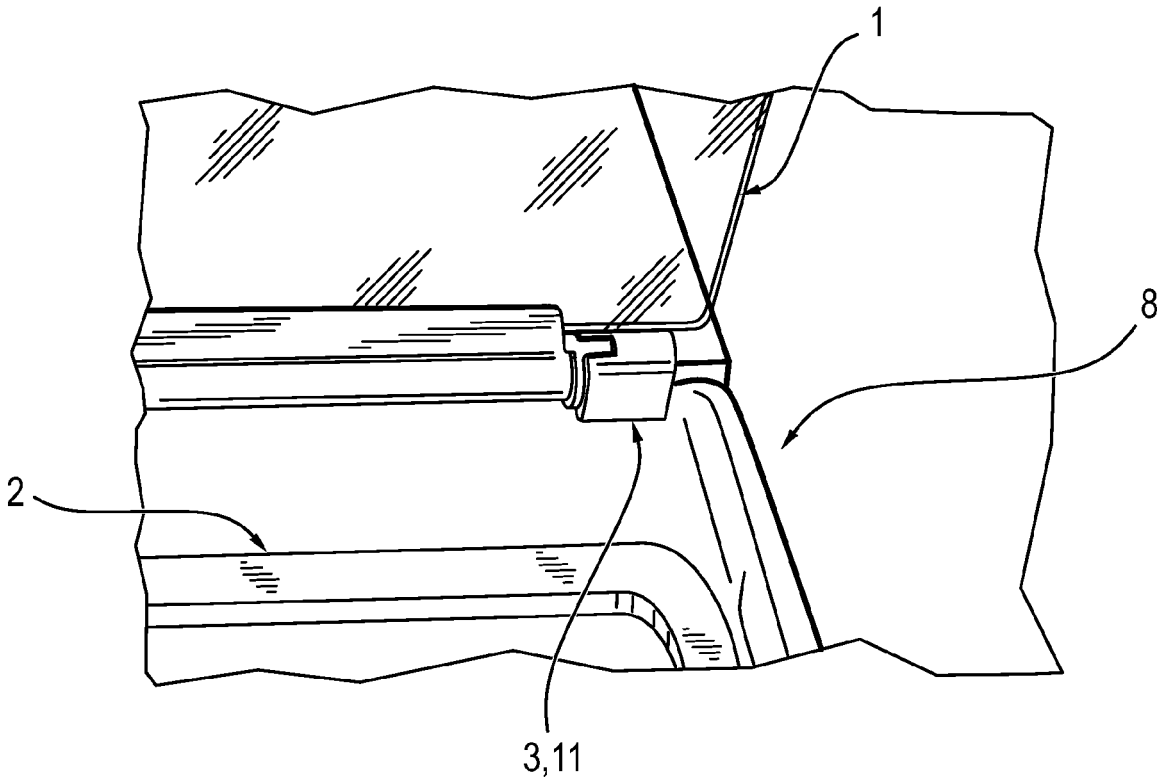

FIG. 4

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EUROPEAN SEARCH REPORT

Application Number
EP 14 16 9795

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The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
The Hague	14 November 2014	Adant, Vincent

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