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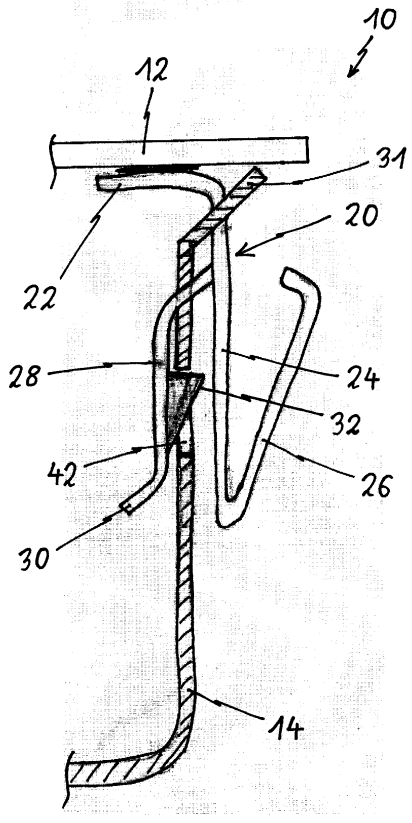
(54) A ONE-PIECE FASTENING ELEMENT FOR A COOKING HOB

(57) The present invention relates to a one-piece fastening element (20) for a cooking hob (10). The fastening element (20) comprises a first portion (22) being permanently connectable to an upper part (12) of the cooking hob (10) and a second portion (24) being detachably connectable to a lower part (14) of the cooking hob (10), so that the upper part (12) and the lower part (14) form the cooking hob (10). The first portion (22) of the fastening element (20) is formed as a plane sheet extending in a horizontal plane. The second portion (24) of the fastening element (20) comprises at least two spring elements (26), provided for a sidewall of the cooking hob (10) in order to clamp the cooking hob (10) within a cutout (34) of a worktop (36) enclosing circumferentially the cooking hob (10). The second portion (24) of the fastening element (20) includes a latch element (28) arranged between the two spring elements (26). The spring elements (26) have a U-shaped form and elastic properties which cause them to act in a radial direction. The latch element (28) includes a lug element (32), wherein said lug element (32) is engageable with a recess (42) formed in the side wall of the lower part (14) of the cooking hob (10), and wherein said lug element (32) extends outwards into a radial direction in a mounted state of the fastening element (20), and wherein the latch element (28) is aligned at an inner side of the side wall of the lower part (14) in the mounted state of the fastening element (20).

FIG 1



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Description

[0001] The present invention relates to a one-piece fastening element for a cooking hob according to the preamble of claim 1. Further, the present invention relates to a cooking hob according to the preamble of claim 4.

[0002] A cooking hob has to be fastened within a cutout, which supports and/or surrounds said cooking hob. The cutout is arranged directly in a worktop of a cabinet in a kitchen. Typically, the cooking hob is fastened within the cutout by screw fastenings.

[0003] DE 198 35 140 A1 discloses a cooking hob provided for the cutout within the worktop of a cabinet. The device for fastening the cooking hob in the cutout comprises multiple different elements. The installation of the cooking hob is very complex.

[0004] DE 94 16 466 U1 discloses a fastening element for fixing a cooking hob in a cutout of a working top. The fastening element is Z-shaped and includes an upper horizontal portion, a lower horizontal portion and a central vertical portion. The upper horizontal portion of the fastening element extends outwards and is supported by a border enclosing the cutout. The lower horizontal portion is connected to a lower part of the cooking hob by a screw. An upper part of the cooking hob is supported by a separate element, which extends inwards and is connected to the central vertical portion by a screw. A C-shaped spring element extending outwards is indirectly connected to a frame of the cooking hob by a screw. However, installation of the cooking hob in the cutout of the worktop is relative complex.

[0005] It is an object of the present invention to provide a cooking hob and according fastening elements, which allow an easy installation of the cooking hob in the cutout of the worktop.

[0006] The object of the present invention is achieved by the fastening element for a cooking hob according to claim 1.

[0007] According to the present invention the latch element includes a lug element, wherein said lug element is engageable with a recess formed in the side wall of the lower part of the cooking hob, and wherein said lug element extends outwards into a radial direction in a mounted state of the fastening element, and wherein the latch element is aligned at an inner side of the side wall of the lower part in the mounted state of the fastening element.

[0008] The main idea of the present invention is that the fastening element is provided for connecting the upper art of the cooking hob to the lower part of said cooking hob on the one hand and to fasten the cooking hob within a cutout on the other hand. The geometric form of the fastening element allows two different kinds of connections by one single fastening element. The fastening element is permanently connected to the upper part of the cooking hob, while the lower part of said cooking hob is detachably connected to the fastening element. Said detachable connection is provided by the interaction between the lug element of the latch element and the recess in the side wall of the lower part. The resulting assembled cooking hob is connectable to the cutout by the same fastening element.

[0009] In particular, the latch element comprises a buckled appendix, wherein said buckled appendix extends inwards in the mounted state of the fastening element, and wherein preferably said buckled appendix acts as a grip.

[0010] Preferably, the horizontal first portion is adapted to the flat upper part, while the vertical second portion is adapted to the side walls of the lower part.

[0011] The object of the present invention is further achieved by the cooking hob according to claim 4.

[0012] According to the present invention the at least two fastening elements are arranged at opposite sidewalls of the cooking hob, wherein preferably the upper part of the cooking hob is a glass-ceramic panel and the lower part of the cooking hob is made of metal, e.g. steel. At least two fastening elements at opposite sides of the cooking hob are sufficient for a stable installation of the cooking top within the cutout.

[0013] Further, the lower part may comprise at least one further buckled appendix arranged above the recess in the side wall of said lower part, wherein preferably said appendix extends outwards in a radial direction and acts as a grip. Said further buckled appendix may be formed in the side wall of the lower part of the cooking hob. The further buckled appendix of the lower part may be provided for pulling the recess away from the lug element, so that the lug element and the recess can be disengaged from each other.

[0014] Moreover, the lower part may comprise at least one slot arranged beneath the recess in the side wall of said lower part, wherein preferably said slot allows an access to the buckled appendix of the latch element. For example, a tool may penetrate the slot and act on the buckled appendix, so that the latch element is pushed inwards and away from the side wall of the lower part. Thus, the upper part of the cooking hob can be easily removed from the lower part of the cooking hob.

[0015] Preferably, the first portion of the fastening element is glued at the upper part of the cooking hob and/or fixed at a bottom side of the upper part of the cooking hob, wherein preferably the first portion of the fastening element comprises a bending for supporting at least a section of a circumferential side of the upper part, thus, in particular definitely determining the position of the fastening element at the upper part.

[0016] In particular, the at least one lug element of the latch element is engaged with the recess in the side wall of the lower part in order to joint the upper part and the lower part, wherein preferably the recess is marginally bigger than the lug element, and wherein preferably the lug element is latched into the recess when the upper part is set from above onto the lower part, and wherein in particular the lug element is arranged at a circumferential side or a side wall of the lower part of the cooking

hob.

[0017] Furthermore, the appendix of the latch element may act as a grip and be provided for releasing the latch element away from the side wall of the lower part, in particular for pulling the lug element of the latch element away from the recess in the sidewall of the lower part, and/or the appendix of the lower part acts as a grip and is provided for releasing the side wall of said lower part from the latch element, in particular to pull the recess in the side wall of the lower part away from the lug element of the latch element.

[0018] For example, the upper part has a rectangular form and comprises eight fastening elements, wherein each side of the upper part comprising two fastening elements.

[0019] Further, the second portion of the fastening element extends substantially in a vertical plane, so that the bigger part of the fastening element has the form of an L-profile, and/or wherein the second portion is arranged at an outer sidewall of the lower part of the cooking hob.

[0020] Preferably, the spring element is a leaf-spring, wherein the elastic properties of the spring element act into a radial direction, i.e. perpendicular to the side wall of the lower part.

[0021] In particular, the circumferences of the upper part and the lower part of the cooking hob are marginally smaller than the circumference of the cutout, wherein in particular the cooking hob is completely counter-sunk within the worktop and, in particular, the topsides of the upper part and the worktop are arranged at the same level, or wherein the circumference of the upper part is marginally bigger and the circumference of the lower part of the cooking hob is marginally smaller than the circumference of the cutout, and wherein in particular the worktop supports directly the upper part and indirectly also the lower part of the cooking hob.

[0022] Additionally, the cooking hob may comprise at least one casing, the casing being in particular made of plastics, for an electric or electronic circuitry arranged at the bottom side of the upper part of the cooking hob, wherein in particular the casing comprises one open side covered by the bottom side of the upper part of the cooking hob and wherein in particular the casing is adapted to the form of the electric or electronic circuitry and other components, and wherein preferably a sealing strip is arranged between the casing and the bottom side of the upper part, and wherein in particular the sealing strip is applied onto the bottom side of the upper part as a fluid or a viscous paste or the sealing strip is made of a foamed material, and wherein in particular the bottom side of the upper part, the casing and the sealing strip form a leak-proof space.

[0023] At last, the upper part may include two bendings, which are angled about 90° and associated with a section of a circumferential side of the upper part of the cooking hob.

[0024] Novel and inventive features of the present invention are set forth in the appended claims.

[0025] The present invention will be described in further detail with reference to the drawing, in which

FIG 1 illustrates a schematic sectional side view of a fastening element arranged in a cooking hob according to the preferred embodiment of the present invention,

FIG 2 illustrates a schematic perspective view of the fastening element arranged in the cooking hob according to the preferred embodiment of the present invention,

FIG 3 illustrates a further schematic perspective view of the fastening element arranged in the cooking hob according to the preferred embodiment of the present invention,

FIG 4 illustrates a schematic perspective view of the fastening element attached at an upper part of the cooking hob according to the preferred embodiment of the present invention, and

FIG 5 illustrates a further schematic perspective view of the fastening element attached at an upper part of the cooking hob according to the preferred embodiment of the present invention.

[0026] FIG 1 illustrates a schematic sectional side view of a fastening element 20 arranged in a cooking hob 10 according to the preferred embodiment of the present invention. The cooking hob 10 is arrangeable within a cutout of a worktop.

[0027] The cooking hob 10 comprises an upper part 12 and a lower part 14. The upper part 12 of the cooking hob 10 is arranged above the lower part 14 of said cooking hob 10. In this example, the upper part 12 is a glass ceramic panel, while the lower part 14 is a casing with an open top side covered by said glass ceramic panel. Said casing is made of metal, e.g. steel, or plastics.

[0028] The fastening element 20 comprises a first portion 22 and a second portion 24. The first portion 22 of the fastening element 20 is formed as a plane sheet extending in a horizontal plane. The first portion 22 is fixed at a bottom side of the upper part 12 of the cooking hob 10. Preferably, the first portion 22 is glued at the bottom side of the upper part 12.

[0029] The second portion 24 of the fastening element 20 extends substantially in a vertical plane, so that a substantial part of the fastening element 20 has the form of an L-profile. The second portion 24 of the fastening element 20 includes two spring elements 26 and one latch element 28. The latch element 28 is arranged between said two spring elements 26. In FIG 1 only one spring element 26 is visible, while the other spring element 26 is hidden by the visible spring element 26.

[0030] The second portion 24 of the fastening element

20 is attached at a sidewall of the lower part 14 of the cooking hob 10. The spring elements 26 have a U-shaped form and are elastic. The spring elements 26 are provided for clamping the cooking hob 10 within the cutout of the worktop. The elastic properties of the spring elements 26 act into a radial direction, i.e. perpendicular to the sidewall of the lower part 14 and outwards in relation to the cooking hob 10. The latch element 28 includes a buckled appendix 30 at its lower end. The buckled appendix 30 of the latch element 28 is inclined and extends downwards and inwards in relation to the cooking hob 10. The buckled appendix 30 of the latch element 28 acts as a grip.

[0031] A lug element 32 is formed at the latch element 28. In this example, the lug element 32 is formed as an embossment in the latch element 28. Said lug element 32 extends in the radial direction and engages with a recess 42 in the side sidewall of the lower part 14 of the cooking hob 10. The recess 42 is marginally bigger than the lug element 32. The recess 42 and the lug element 32 form a snap-in mechanism. When the upper part 12 is set from above onto the lower part 14, then the lug element 32 is latched into the recess 42. The upper part 12 and the lower part 14 of the cooking hob 10 are connected by two or more lug elements 32 and associated recesses 42.

[0032] The buckled appendix 30 of the latch element 28 is provided for pulling the latch element 28 away from the sidewall of the lower part 14, so that the lug element 32 can be disengaged from the recess 42. Thus, the upper part 12 of the cooking hob 10 may be easily removed again from the lower part 14 of the cooking hob 10.

[0033] A further buckled appendix 31 is formed in the side wall of the lower part 14 of the cooking hob 10. The buckled appendix 31 of the lower part 14 is arranged above the recess 42 of the lower part 14. The buckled appendix 31 of the lower part 14 acts as a grip. The buckled appendix 31 of the lower part 14 is provided for pulling the recess 42 away from the lug element 32, so that the lug element 32 and the recess 42 can be disengaged from each other.

[0034] The upper part 12 and the lower part 14 of the cooking hob 10 are jointed by the engagement of the lug element 32 in the recess 42 of the side sidewall of the lower part 14. Preferably, the cooking hob 10 comprises at least two fastening elements 20. At least two of said fastening elements 20 are arranged at opposite sides of the cooking hob 10. In a similar way, the lower part 14 comprises at least two recesses 42 arranged at opposite sides of the cooking hob 10.

[0035] The cooking hob 10 can be clamped by the spring elements 26 within the cutout of the worktop, wherein the spring elements 26 press against the inner sides of the cutout.

[0036] FIG 2 illustrates a schematic perspective view of the fastening element 20 arranged in the cooking hob 10 according to the preferred embodiment of the present invention.

[0037] The cooking hob 10 comprises the upper part 12 and the lower part 14, wherein the upper part 12 is arranged above the lower part 14. In this example, the upper part 12 is the glass ceramic panel, while the lower part 14 is the casing with the open top side covered by said glass ceramic panel.

[0038] The fastening element 20 comprises the first portion 22 and the second portion 24. The first portion 22 of the fastening element 20 is formed as the plane sheet and extends in the horizontal plane. The first portion 22 is fixed at the bottom side of the upper part 12 of the cooking hob 10. Preferably, the first portion 22 is glued at the bottom side of the upper part 12.

[0039] The second portion 24 of the fastening element 20 extends substantially in the vertical plane and includes the both spring elements 26 and the latch element 28. The latch element 28 is arranged between said two spring elements 26. In FIG 2 the latch element 28 is hidden by the side wall of the lower part 14, while the lug element 32 of the latch element 28 is visible through the recess 42 in the side wall of the lower part 14.

[0040] The spring elements 26 have the U-shaped form and are elastic, so that the cooking hob 10 can be clamped within the cutout of the worktop. The elastic properties of the spring elements 26 act perpendicular to the sidewall of the lower part 14 and outwards in relation to the cooking hob 10.

[0041] A slot 46 is formed in the side wall of the lower part 14. In this example, the slot 46 extends along the edge between the side wall and a bottom wall of the lower part 14. The slot 46 is arranged beneath the recess 42 in the side wall of the lower part 14. The slot 46 allows an access to the buckled appendix 30 of the latch element 28. A tool may penetrate the slot 46 and act on the buckled appendix 30, so that the latch element 28 is pushed inwards and away from the side wall of the lower part 14. By this way, the upper part 12 of the cooking hob 10 can be easily removed again from the lower part 14 of the cooking hob 10.

[0042] The lug element 32 is formed as the embossment in the latch element 28 and engages with the recess 42 in the side sidewall of the lower part 14 of the cooking hob 10. The recess 42 is marginally bigger than the lug element 32. The recess 42 and the lug element 32 form the snap-in mechanism. When the upper part 12 is set from above onto the lower part 14, then the lug element 32 is latched into the recess 42.

[0043] The further buckled appendix 31 is formed in the side wall of the lower part 14 of the cooking hob 10. The buckled appendix 31 of the lower part 14 is arranged above the recess 42 of the lower part 14. The buckled appendix 31 of the lower part 14 acts as grip and is provided for pulling the recess 42 away from the lug element 32, so that the lug element 32 and the recess 42 can be disengaged from each other.

[0044] The upper part 12 and the lower part 14 of the cooking hob 10 are jointed by the engagement of the lug element 32 in the recess 42 of the side sidewall of the lower part 14. The cooking hob 10 can be clamped by

the spring elements 26 within the cutout of the worktop, wherein the spring elements 26 press against the inner sides of the cutout.

[0045] FIG 3 illustrates a further schematic perspective view of the fastening element 20 arranged in the cooking hob 10 according to the preferred embodiment of the present invention.

[0046] The cooking hob 10 comprises the upper part 12 and the lower part 14, wherein the upper part 12 is arranged above the lower part 14. In this example, the upper part 12 is the glass ceramic panel, while the lower part 14 is formed by the casing with the open top side covered by said glass ceramic panel.

[0047] The fastening element 20 comprises the first portion 22 and the second portion 24. The first portion 22 of the fastening element 20 is formed as the plane sheet and extends in the horizontal plane. The first portion 22 is fixed at the bottom side of the upper part 12 of the cooking hob 10. Preferably, the first portion 22 is glued at the bottom side of the upper part 12, e.g. the glass ceramic panel.

[0048] The second portion 24 of the fastening element 20 extends substantially in the vertical plane and includes the both spring elements 26 and the latch element 28. The latch element 28 is arranged between said two spring elements 26. In FIG 3 the latch element 28 is hidden by the side wall of the lower part 14, while the lug element 32 of said latch element 28 is visible through the recess 42 in the side wall of the lower part 14.

[0049] The U-shaped spring elements 26 are elastic, so that the cooking hob 10 can be clamped within the cutout of the worktop. The elastic properties of the spring elements 26 act perpendicular to the sidewall of the lower part 14 and outwards in relation to the cooking hob 10.

[0050] The slot 46 is formed in the side wall of the lower part 14 and extends along the edge between the side wall and the bottom wall of the lower part 14. The slot 46 is arranged beneath the recess 42 in the side wall of the lower part 14. The slot 46 allows the access to the buckled appendix 30 of the latch element 28. A suitable tool may penetrate the slot 46 and act on the buckled appendix 30, so that the latch element 28 is pushed inwards and away from the side wall of the lower part 14. By this way, the upper part 12 of the cooking hob 10 can be easily removed again from the lower part 14 of the cooking hob 10.

[0051] The lug element 32 is formed as the embossment in the latch element 28 and engages with the recess 42 in the side sidewall of the lower part 14 of the cooking hob 10. The recess 42 is marginally bigger than the lug element 32. The recess 42 and the lug element 32 form the snap-in mechanism, when the upper part 12 is set from above onto the lower part 14. In this case, the lug element 32 is latched into the recess 42.

[0052] The further buckled appendix 31 is formed in the side wall of the lower part 14 of the cooking hob 10. The buckled appendix 31 of the lower part 14 is arranged above the recess 42 of the lower part 14. The buckled appendix 31 of the lower part 14 acts as grip and is provided for pulling the recess 42 away from the lug element 32, so that the lug element 32 and the recess 42 can be disengaged from each other.

[0053] The upper part 12 and the lower part 14 of the cooking hob 10 are jointed by the engagement of the lug element 32 in the recess 42. The cooking hob 10 can be clamped by the spring elements 26 within the cutout of the worktop, wherein the spring elements 26 press against the inner sides of the cutout.

[0054] FIG 4 illustrates a schematic perspective view of the fastening element 20 attached at the upper part 12 of the cooking hob 10 according to the preferred embodiment of the present invention. FIG 4 shows the outer side of the fastening element 20 in relation to the cooking hob 10.

[0055] The fastening element 20 comprises the first portion 22 and the second portion 24. The first portion 22 is fixed at the bottom side of the upper part 12 of the cooking hob 10. Preferably, the first portion 22 is glued at the bottom side of the upper part 12.

[0056] The second portion 24 of the fastening element 20 extends downwards substantially in the vertical plane. The substantial part of the fastening element 20 has the form of the L-profile. The second portion 24 of the fastening element 20 includes the both spring elements 26 and the latch element 28. The latch element 28 is arranged between said spring elements 26. The spring elements 26 have the U-shaped form and are elastic. The spring elements 26 are provided for clamping the cooking hob 10 within the cutout of the worktop. The elastic properties of the spring elements 26 act into the radial direction. The latch element 28 includes the buckled appendix 30 at its lower end. The buckled appendix 30 of the latch element 28 is inclined and extends downwards and inwards in relation to the cooking hob 10. The buckled appendix 30 of the latch element 28 acts as grip.

[0057] The lug element 32 is formed at the latch element 28. In this example, the lug element 32 is formed as embossment in the latch element 28. Said lug element 32 extends in the radial direction and is engageable with the recess 42 in the side sidewall of the lower part 14 of the cooking hob 10.

[0058] The cooking hob 10 can be clamped by the spring elements 26 within the cutout of the worktop, wherein the spring elements 26 press against the inner sides of the cutout.

[0059] FIG 5 illustrates a further schematic perspective view of the fastening element 20 attached at an upper part 14 of the cooking hob 10 according to the preferred embodiment of the present invention. FIG 5 shows the inner side of the fastening element 20 in relation to the cooking hob 10.

[0060] The fastening element 20 comprises the first portion 22 and the second portion 24. The first portion 22 is fixed at the bottom side of the upper part 12 of the cooking hob 10. Preferably, the first portion 22 is glued at the bottom side of the upper part 12, e.g. the glass

ceramic panel.

[0061] The second portion 24 of the fastening element 20 extends downwards substantially in the vertical plane. The substantial part of the fastening element 20 has the form of the L-profile. The second portion 24 of the fastening element 20 includes the both spring elements 26 and the latch element 28. The latch element 28 is arranged between said spring elements 26. The spring elements 26 have the U-shaped form and are elastic. The spring elements 26 are provided for clamping the cooking hob 10 within the cutout of the worktop. The elastic properties of the spring elements 26 act into the radial direction. The latch element 28 includes the buckled appendix 30 at its lower end. The buckled appendix 30 of the latch element 28 is inclined and extends downwards and inwards in relation to the cooking hob 10. The buckled appendix 30 of the latch element 28 acts as grip.

[0062] The lug element 32 is formed at the latch element 28 and extends outwards. In this example, the lug element 32 is formed as embossment in the latch element 28. Said lug element 32 extends in the radial direction and is engageable with the recess 42 in the side sidewall of the lower part 14 of the cooking hob 10.

[0063] The cooking hob 10 can be clamped by the spring elements 26 within the cutout of the worktop, wherein the spring elements 26 press against the inner sides of the cutout.

[0064] Although an illustrative embodiment of the present invention has been described herein with reference to the accompanying drawings, it is to be understood that the present invention is not limited to that precise embodiment, and that various other changes and modifications may be affected therein by one skilled in the art without departing from the scope or spirit of the invention. All such changes and modifications are intended to be included within the scope of the invention as defined by the appended claims.

List of reference numerals

[0065]

10	cooking hob
12	upper part of the cooking hob, glass-ceramic panel
14	lower part of the cooking hob
20	fastening element
22	first portion of the fastening element
24	second portion of the fastening element
26	spring element
28	latch element
30	buckled appendix of the latch element
31	buckled appendix of the side wall of the lower part
32	lug element
42	recess
46	slot

Claims

1. A one-piece fastening element (20) for a cooking hob (10), wherein:

- the fastening element (20) comprises a first portion (22) being permanently connectable to an upper part (12) of the cooking hob (10),
- the fastening element (20) comprises a second portion (24) being detachably connectable to a lower part (14) of the cooking hob (10),
- so that the upper part (12) and the lower part (14) form the cooking hob (10),
- the first portion (22) of the fastening element (20) is formed as a plane sheet extending in a horizontal plane,
- the second portion (24) of the fastening element (20) comprises at least two spring elements (26), provided for a sidewall of the cooking hob (10) in order to clamp the cooking hob (10) within a cutout (34) of a worktop (36) enclosing circumferentially the cooking hob (10),
- the second portion (24) of the fastening element (20) includes a latch element (28) arranged between the two spring elements (26), and
- the spring elements (26) have a U-shaped form and elastic properties which cause them to act in a radial direction,

characterised in that
the latch element (28) includes a lug element (32), wherein said lug element (32) is engageable with a recess (42) formed in the side wall of the lower part (14) of the cooking hob (10), and wherein said lug element (32) extends outwards into a radial direction in a mounted state of the fastening element (20), and wherein the latch element (28) is aligned at an inner side of the side wall of the lower part (14) in the mounted state of the fastening element (20).

2. The fastening element according to claim 1,
characterised in that
the latch element (28) comprises a buckled appendix (30), wherein said buckled appendix (30) extends inwards in the mounted state of the fastening element (20), and wherein preferably said buckled appendix (30) acts as a grip.

3. The fastening element according to claim 1 or 2,
characterised in that
the horizontal first portion (22) is adapted to the flat upper part (12), while the vertical second portion (22) is adapted to the side walls of the lower part (12).

4. A cooking hob (10) with at least two one-piece fastening elements (20) according to any one of the claims 1 to 3,
characterised in that

the at least two fastening elements (20) are arranged at opposite sidewalls of the cooking hob (10), wherein preferably the upper part (12) of the cooking hob (10) is a glass-ceramic panel and the lower part of the cooking hob (10) is made of metal, e.g. steel.

5. The cooking hob according to claim 4,
characterised in that
the lower part (14) comprises at least one further buckled appendix (31) arranged above the recess (42) in the side wall of said lower part (14), wherein preferably said appendix (31) extends outwards in a radial direction and acts as a grip.

6. The cooking hob according to claim 4 or 5,
characterised in that
the lower part (14) comprises at least one slot (46) arranged beneath the recess (42) in the side wall of said lower part (14), wherein preferably said slot (46) allows an access to the buckled appendix (30) of the latch element (28).

7. The cooking hob according to any one of the claims 4 to 6,
characterised in that
the first portion (22) of the fastening element (20) is glued at the upper part (12) of the cooking hob (10) and/or fixed at a bottom side of the upper part (12) of the cooking hob (10), wherein preferably the first portion (22) of the fastening element (20) comprises a bending (18) for supporting at least a section of a circumferential side of the upper part (12), thus, in particular definitely determining the position of the fastening element at the upper part.

8. The cooking hob according to any one of the claims 4 to 7,
characterised in that
the at least one lug element (32) of the latch element (28) is engaged with the recess (42) in the side wall of the lower part (14) in order to joint the upper part (12) and the lower part (14), wherein preferably the recess (42) is marginally bigger than the lug element (32), and wherein preferably the lug element (32) is latched into the recess (42) when the upper part (12) is set from above onto the lower part (14), and wherein in particular the lug element (32) is arranged at a circumferential side or a side wall of the lower part (14) of the cooking hob (10).

9. The cooking hob according to any one of the claims 4 to 8,
characterised in that
the appendix (30) of the latch element (28) acts as a grip and is provided for releasing the latch element (28) away from the side wall of the lower part (14), in particular to pull the lug element (32) of the latch element (28) away from the recess (42) in the side-wall of the lower part (14), and/or the appendix (31) of the lower part (14) acts as a grip and is provided for releasing the side wall of said lower part (14) from the latch element (28), in particular to pull the recess (42) in the side wall of the lower part (14) away from the lug element (32) of the latch element (28).

10. The cooking hob according to any one of the claims 4 to 9,
characterised in that
the upper part (12) has a rectangular form and comprises eight fastening elements (20), each side of the upper part (12) comprising two fastening elements (20).

11. The cooking hob according to any one of the claims 4 to 10,
characterised in that
the second portion (24) of the fastening element (20) extends substantially in a vertical plane, so that the bigger part of the fastening element (20) has the form of an L-profile, and/or wherein the second portion (24) is arranged at an outer sidewall of the lower part (14) of the cooking hob (10).

12. The cooking hob according to any one of the claims 4 to 11,
characterised in that
the spring element (26) is a leaf-spring, wherein the elastic properties of the spring element (26) act into a radial direction, i.e. perpendicular to the side wall of the lower part (14).

13. The cooking hob according to any one of the claims 4 to 12,
characterised in that
the circumferences of the upper part (12) and the lower part (14) of the cooking hob (10) are marginally smaller than the circumference of the cutout (34), wherein in particular the cooking hob is completely counter-sunk within the worktop and, in particular, the topsides of the upper part and the worktop are arranged at the same level, or wherein the circumference of the upper part (12) is marginally bigger and the circumference of the lower part (14) of the cooking hob (10) is marginally smaller than the circumference of the cutout (34), and wherein in particular the worktop supports directly the upper part and indirectly also the lower part of the cooking hob.

14. The cooking hob according to any one of the claims 4 to 13,
characterised in that
the cooking hob (10) comprises at least one casing (40), the casing (40) being in particular made of plastics, for an electric or electronic circuitry arranged at the bottom side of the upper part (12) of the cooking hob (10), wherein in particular the casing (40) com-

prises one open side covered by the bottom side of the upper part (12) of the cooking hob (10 and wherein in particular the casing is adapted to the form of the electric or electronic circuitry and other components, and wherein preferably a sealing strip (38) is arranged between the casing (40) and the bottom side of the upper part (12), and wherein in particular the sealing strip (38) is applied onto the bottom side of the upper part (12) as a fluid or a viscous paste or the sealing strip (38) is made of a foamed material, and wherein in particular the bottom side of the upper part, the casing and the sealing strip form a leakproof space.

15. The cooking hob according to any one of the claims 4 to 14,
characterised in that
the upper part (12) includes two bendings (18), which are angled about 90° and associated with a section of a circumferential side of the upper part (12) of the cooking hob (10).

FIG 1

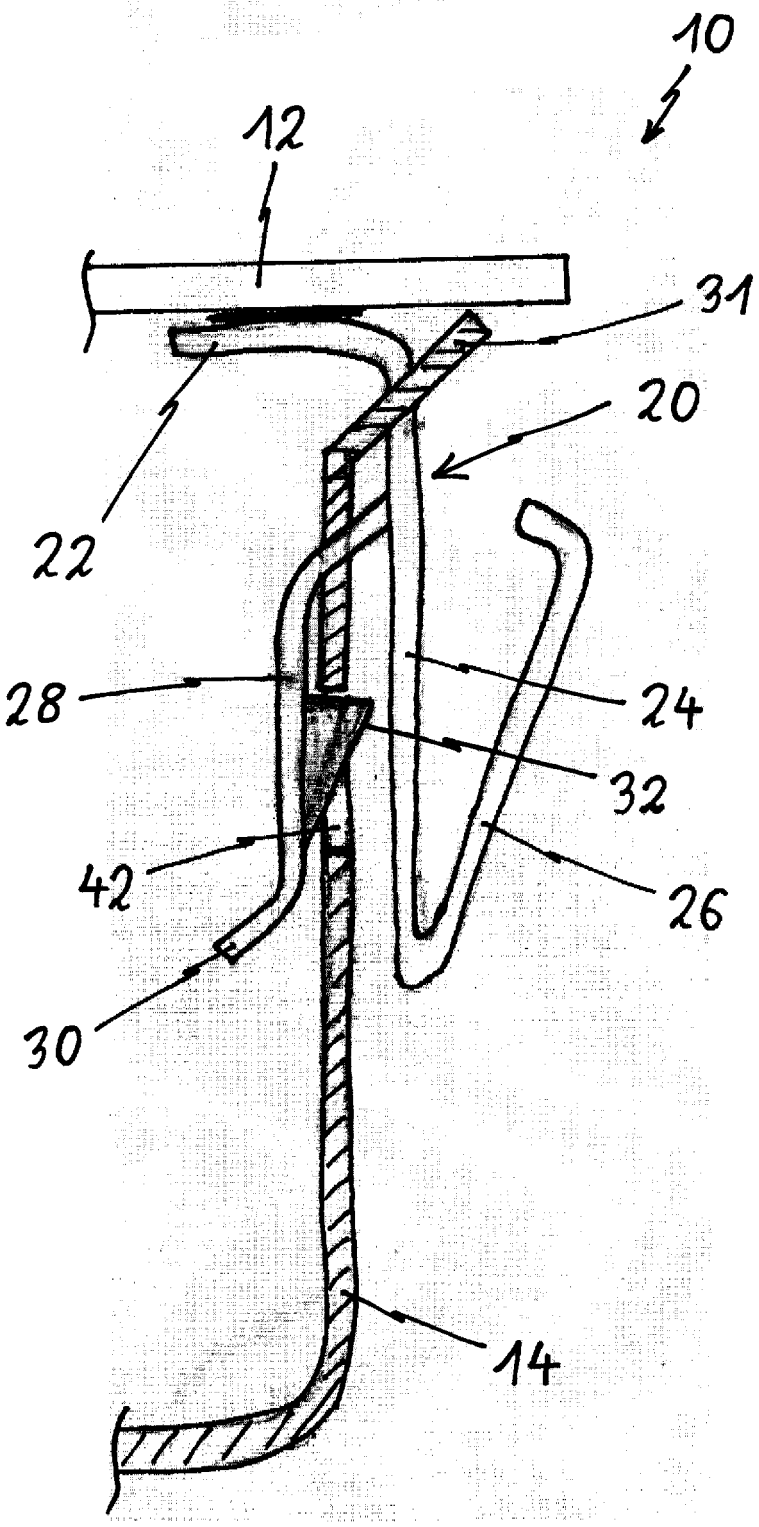


FIG 2

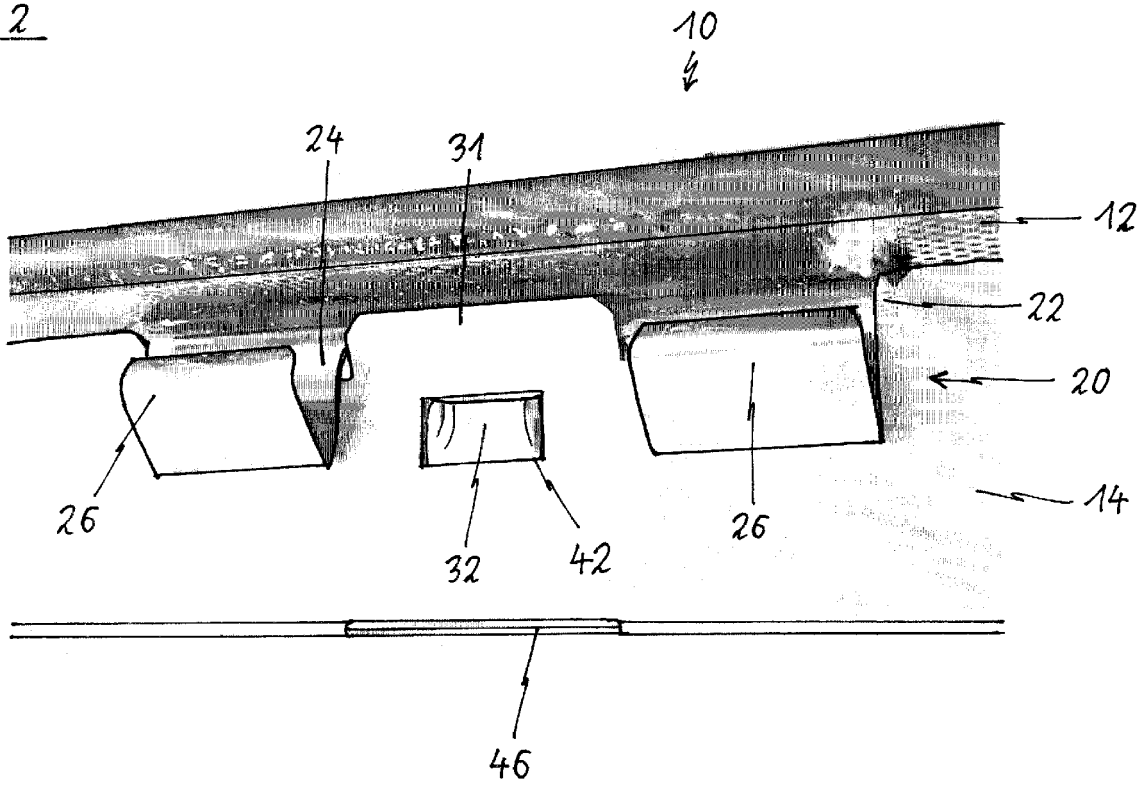


FIG 3

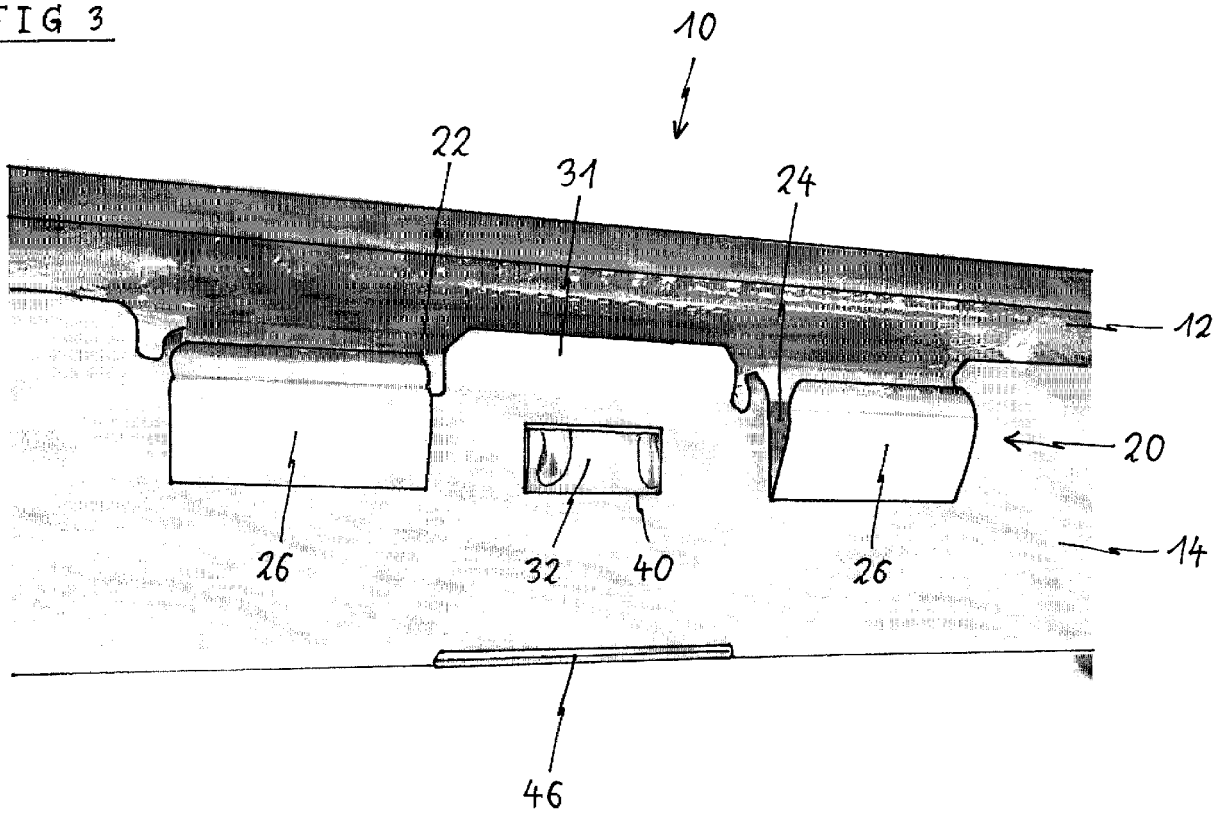


FIG 4

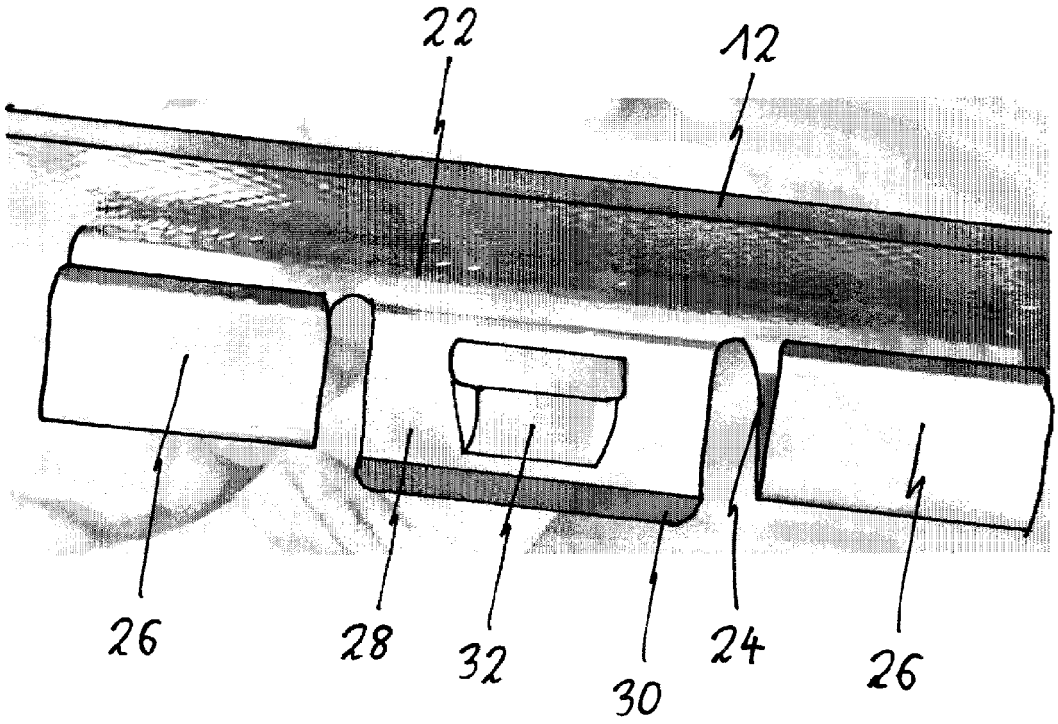
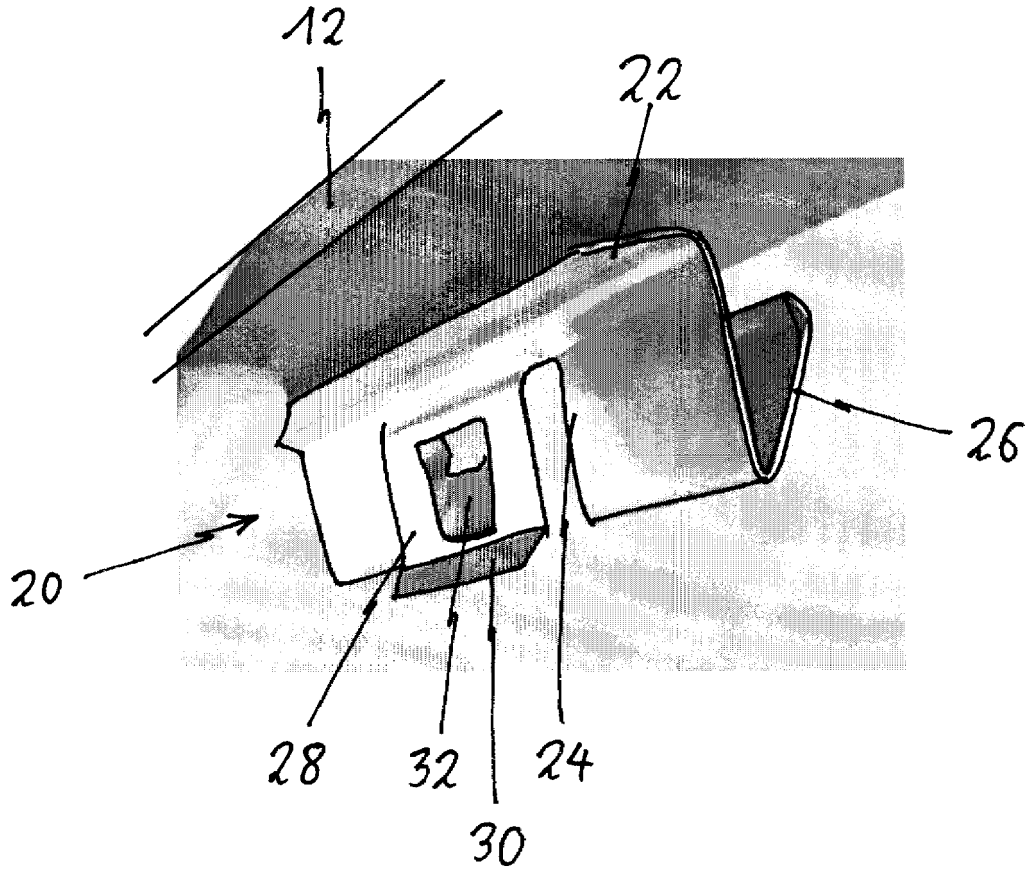


FIG 5



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EUROPEAN SEARCH REPORT

Application Number
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F24C

The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
The Hague	8 September 2017	Moreno Rey, Marcos

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