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(54) **COOKING SURFACE**

(57) A cooking surface (10, 210, 310, 410) comprising a worktop (11, 211, 311, 411) which has at least one opening (12, 212, 312, 412), for the accommodation of a cooktop (13, 213, 313, 413), and a rim (14, 214, 314,

414) which is perimetric to the opening and defines the outer perimeter of the worktop (11, 211, 311, 411); the cooktop (13, 213, 313, 413) being mounted with the rim (30, 230, 330, 430) below the rim (14, 214, 314, 414).

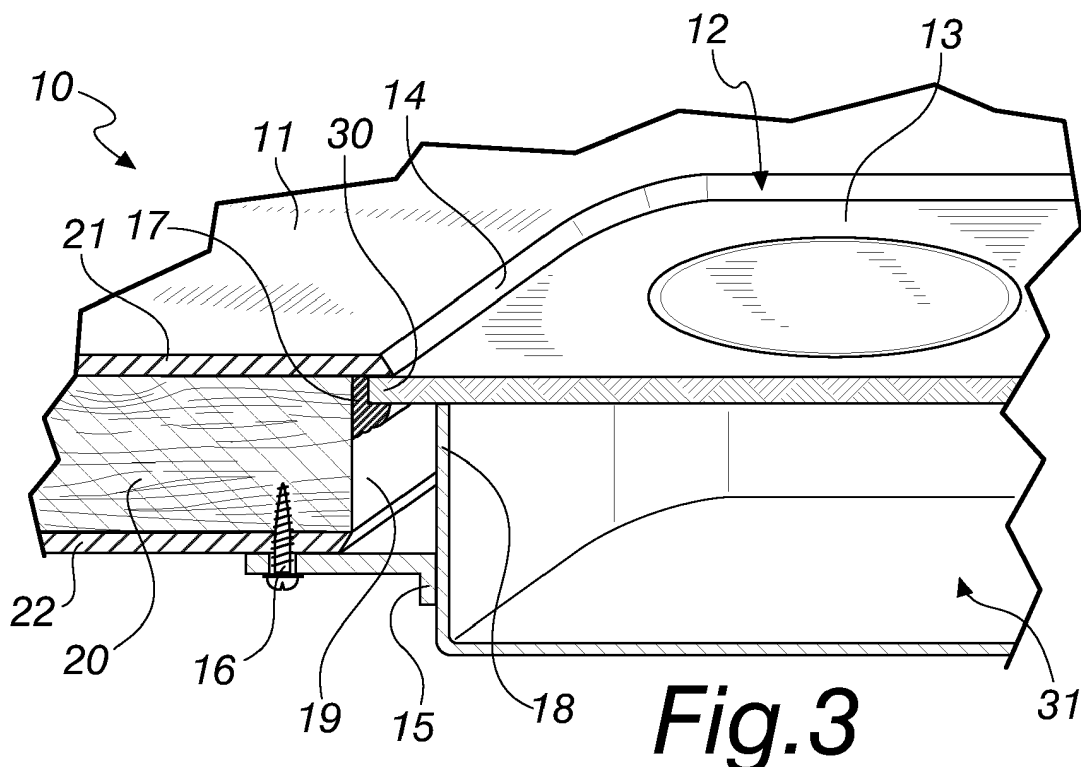


Fig.3

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Description

[0001] The present invention relates to a cooking surface.

[0002] The cooking surface is applied, in general, in domestic environments; however, it can also be applied in other environments, for example restaurants and hotels.

[0003] Nowadays, many types of kitchen worktops and the like are widespread, including composites that are made with a chipboard counter covered with a layer of laminate adapted to simulate the appearance of a solid counter.

[0004] Special openings are provided in the worktops which are designed to accommodate sinks and cooktops.

[0005] Typically the cooktop is fitted by inserting it into the adapted opening of the worktop, with the rim protruding perimetrically with respect to the opening.

[0006] Such conventional mounting techniques exhibit some drawbacks.

[0007] Often it can in fact happen that dirt settles around the rim, impeding a total and effective cleaning, and furthermore it is necessary to carry out a manual sealing, 3 mm thick, around the entire perimeter in order to prevent infiltrations of dirt. This sealing, in addition to being difficult to apply, with time and the necessary cleaning can deteriorate, resulting in a rather unappealing visual appearance.

[0008] The aim of the present invention is to provide a cooking surface that is capable of improving the known art in one or more of the above mentioned aspects.

[0009] Within this aim, an object of the invention is to provide a cooking surface that is easier to clean.

[0010] Another object of the invention is to provide a cooking surface with a new and pleasing visual impact.

[0011] A still further object of the invention is to provide a cooking surface that is highly reliable, easy to implement and low cost.

[0012] This aim and these and other objects which will become better apparent hereinafter are achieved by a cooking surface according to claim 1, optionally provided with one or more of the characteristics of the dependent claims.

[0013] Further characteristics and advantages of the invention will become better apparent from the description of some preferred, but not exclusive, embodiments of the cooking surface according to the invention, which are illustrated by way of non-limiting example in the accompanying drawings wherein:

- Figures 1 and 2 are ensemble views of the cooking surface according to the invention in a first embodiment thereof;
- Figure 3 shows a part of the cooking surface according to the invention in the first embodiment thereof;
- Figure 4 shows a part of the cooking surface according to the invention in the second embodiment thereof;

- Figure 5 shows a part of the cooking surface according to the invention in the third embodiment thereof;
- Figure 6 shows a part of the cooking surface according to the invention in the fourth embodiment thereof.

[0014] With reference to the figures, the cooking surface according to the invention, generally designated by the reference numeral 10, in its first embodiment, is intended preferably for kitchens and comprises a worktop 11 that has at least one opening 12, for the accommodation of a cooktop 13 which can be made of steel or glass ceramic, with or without burners, and an upper rim 14 which is perimetric to such opening.

[0015] With reference to Figure 3, the cooktop 13 is mounted with the rim 30 below the rim 14.

[0016] The rim 14 is flared upward, ending above the cooktop 13.

[0017] The structure 10 comprises at least one upside-down L-shaped bracket 15 which is fixed with one side to the outer side wall 18 of the lower casing 31 of the cooktop 13 and with the other side underneath the worktop 11.

[0018] Preferably, for a cooking surface 10, with a square or rectangular cooktop, there are four brackets 15, each one extending along a side wall 18 of the casing 31.

[0019] The bracket 15 is fixed to the worktop 11 by way of at least one fixing screw 16 and to the casing 18 of the cooktop 13 by way of an adhesive or heat-sealing.

[0020] The worktop 11 and the cooktop 13 are sealed below the rim 14 and at the connection of the latter with the rim 30 of the cooktop 13.

[0021] In particular, the worktop 11 and the cooktop 13 are sealed by way of a deposit of polyurethane adhesive 17 applied between the side wall 19 of the worktop 11 which is directed toward the opening and the outer boundary of the cooktop 13, at the rim 30.

[0022] The polyurethane adhesive is conveniently applied along the entire perimeter of the rim of the cooking surface.

[0023] As illustrated, the worktop 11 consists of a layered composite provided with a supporting core 20 and an upper covering layer 21 which protrudes with respect to the core 20 toward the inside of the opening 12 so as to define the rim 14.

[0024] In particular, the worktop 11 is preferably made of HPL (acronym for High Pressure Laminate) or "unicolor" or of a laminate of nanotechnology-based material such as for example FENIX®.

[0025] The worktop 11 also has a lower layer 22, which with the upper layer 21 encloses the core 20 sandwich-fashion.

[0026] A second embodiment of the cooking surface according to the invention is shown in Figure 4 and is generally designated with the reference numeral 210.

[0027] With reference to Figure 4, the cooking surface 210 according to the invention comprises, as in the previous embodiment, a worktop 211 with at least one open-

ing 212, for the accommodation of the cooktop 213, and a perimetric upper rim 214. Below such rim is a block 223 made of HPL. The block 223 has, in cross-section, a tab 224 that protrudes toward the opening 212 of the worktop 211 and extends below the rim 214 and has the same flaring as the latter so as to provide with this a uniformly inclined surface.

[0028] The cooktop 213 is mounted with the rim 214 below the tab 224.

[0029] The structure 210 comprises, as in the first embodiment, four upside-down L-shaped brackets 215, each one fixed with one side to the outer side wall 218 of the casing 231 of the cooktop 213 and with the other side underneath the worktop 211.

[0030] The bracket 215 is fixed to the worktop 211 by way of at least one fixing screw 216 and to the casing 218 by way of an adhesive or heat-sealing.

[0031] The worktop 211 and the cooktop 213 are sealed below the tab 224 and at the connection of the latter with the rim 230 of the cooktop 213.

[0032] In particular, the worktop 211 and the cooktop 213 are sealed by way of a deposit of polyurethane adhesive 217 applied between the side wall 219 of the worktop 211 which is directed toward the opening 212, at the block 223 and its tab 224, and the outer boundary of the cooktop 213, at the rim 230.

[0033] The polyurethane adhesive is conveniently applied along the entire perimeter of the rim of the cooking surface.

[0034] This embodiment differs from the previous one in that the core 220 of the worktop 211 comprises a block 223 with a tab 224 made of HPL, at which the deposit 217 of polyurethane adhesive is made.

[0035] In general, in the second embodiment, the presence of the block 223 improves the sealing.

[0036] A third embodiment is shown in Figure 5 and is generally designated with the reference numeral 310.

[0037] With reference to Figure 5, the cooktop 313 has, along the external perimeter, a rim 332 which connects to the portion 333 of the cooktop 313 by way of an upward flaring 324. In this case, the core 319 of the cooking surface 311 has an interspace 334 at the rim 330. In particular, the worktop 311 and the cooktop 313 are sealed by way of a deposit of polyurethane adhesive 317 between the side wall 319 of the worktop 311, which is directed toward the opening 312 and comprises the interspace 334, and the outer boundary of the cooktop 313, at the rim 330.

[0038] The worktop 311 and the cooktop 313 are sealed below the rim 314 and at the connection of the latter with the rim 330 of the cooktop 313.

[0039] The polyurethane adhesive is conveniently applied along the entire perimeter of the rim of the cooking surface.

[0040] The structure 310 comprises, as in the previous embodiments, four upside-down L-shaped brackets 315, each one fixed with one side to the outer side wall 318 of the casing 331 of the cooktop 313 and with the other

side underneath the worktop 311.

[0041] The bracket 315 is fixed to the worktop 311 by way of at least one fixing screw 316 and to the side wall 318 of the casing 331 by way of an adhesive or heat-sealing.

[0042] This embodiment differs from the previous ones in the presence of the interspace 334 which ensures a better sealing and by virtue of the flaring 324 which gives the cooktop an appearance that is visually more pleasing.

[0043] A fourth embodiment of the cooking surface according to the invention is shown in Figure 6 and is generally designated with the reference numeral 410.

[0044] With reference to Figure 6, the cooking surface 410 according to the invention comprises, as in the previous embodiments, a worktop 411 with at least one opening 412, for the accommodation of the cooktop 413, and a perimetric upper rim 414.

[0045] The cooktop 413 is mounted with the rim 430 below the rim 414. The rim 414 is flared upward, ending above the cooktop 413. The structure comprises at least one bracket 425 which extends laterally, in contact with the outer side walls 418 and, underneath, in contact with the lower surface 423 of the casing 431 of the cooktop 413. The casing 431 is placed on the bracket 425. The bracket is fixed to the worktop 411 by way of at least two fixing screws 416 and to the cooktop 413 by way of at least one screw 426 that allows its height to be adjusted.

[0046] The worktop 411 and the cooktop 413 are sealed below the rim 414 and at the connection of the latter with the rim 430 of the cooktop 413.

[0047] In particular, the worktop 411 and the cooktop 413 are sealed by way of a deposit of polyurethane adhesive 417 applied between the side wall 419 of the worktop 411, which is directed toward the opening 412, and the outer boundary of the cooktop 413, at the rim 430.

[0048] The polyurethane adhesive is conveniently applied along the entire perimeter of the rim of the cooking surface.

[0049] This embodiment differs from the previous ones because the casing 431 of the cooktop 413 is supported by at least one bracket 425 along the entire base of the casing 431. In general, in the fourth embodiment, the presence of the bracket 425 and of the screw 426 makes it possible for the height to be adjusted.

[0050] It should be noted that the flaring of the rim of the worktop at the opening where the seat of the cooktop is, together with the sealing on the lower side of the surface, gives the product a pleasing visual impact overall. It should also be noted that the flaring acts as an obstacle to the outflow of liquids that may emerge during cooking, thus producing a solution of easier and more effective cleaning.

[0051] In practice it has been found that the invention fully achieves the intended aim and objects by providing a cooking surface that is less subject, with respect to conventional cooking surfaces, to infiltrations of dirt, and is more easily and effectively sealable and has a pleasing visual impact.

[0052] The invention, thus conceived, is susceptible of numerous modifications and variations, all of which are within the scope of the appended claims. Moreover, all the details may be substituted by other, technically equivalent elements.

[0053] In practice the materials employed, provided they are compatible with the specific use, and the contingent dimensions and shapes, may be any according to requirements and to the state of the art.

[0054] The disclosures in Italian Patent Application No. 102017000047884 from which this application claims priority are incorporated herein by reference.

[0055] Where technical features mentioned in any claim are followed by reference signs, those reference signs have been included for the sole purpose of increasing the intelligibility of the claims and accordingly, such reference signs do not have any limiting effect on the interpretation of each element identified by way of example by such reference signs.

Claims

1. A cooking surface (10, 210, 310, 410) which comprises a worktop (11, 211, 311, 411) which has at least one opening (12, 212, 312, 412) for the accommodation of a cooktop (13, 213, 313, 413) comprising its casing (31, 231, 331, 431), and an upper rim (14, 214, 314, 414) which is perimetric to said opening and defines, with the rest of said worktop (11, 211, 311, 411), the perimeter of the cooktop (13, 213, 313, 413), the latter being mounted with the rim (30, 230, 330, 430) below said rim (14, 214, 314, 414), said cooking surface (10, 210, 310, 410) being **characterized in that** said rim (30, 230, 330, 430) is located below said rim (14, 214, 314, 414).
2. The cooking surface according to claim 1, **characterized in that** it comprises at least one upside-down L-shaped bracket (15, 215, 315) which is fixed with one side to the outer side wall (18, 218, 318) of said casing (31, 231, 331) and with the other side underneath said worktop (11, 211, 311).
3. The cooking surface according to one or more of the preceding claims, **characterized in that** said bracket (15, 215, 315) is fixed to said worktop (11, 211, 311) by way of at least one fixing screw (16, 216, 316).
4. The cooking surface according to one or more of the preceding claims, **characterized in that** said bracket (15, 215, 315) is fixed to said casing (31, 231, 331) by way of an adhesive.
5. The cooking surface according to one or more of the preceding claims, **characterized in that** said worktop (11, 211, 311, 411) and said cooktop (13, 213, 313, 413) are sealed below said rim (14, 214, 314, 414) and at the connection of the latter with the rim of said cooktop (13, 213, 313, 413).
6. The cooking surface according to one or more of the preceding claims, **characterized in that** said worktop (11, 211, 311, 411) and said cooktop (13, 213, 313, 413) are sealed by way of a deposit of polyurethane adhesive (17, 217, 317, 417) applied between the side wall (19, 219, 319, 419) of said worktop (11, 211, 311, 411), which is directed toward said opening (12, 212, 312, 412), and the outer wall of said rim (30, 230, 330, 430).
7. The cooking surface according to one or more of the preceding claims, **characterized in that** said worktop (11, 211, 311, 411) consists of a layered composite which has a supporting core (20, 220, 320, 420) and an upper covering layer (21, 221, 321, 421) which protrudes with respect to said core (20, 220, 320, 420) toward the inside of said opening (12, 212, 312, 412) so as to define said rim (14, 214, 314, 414).
8. The cooking surface according to one or more of the preceding claims, **characterized in that** said core (220) of said worktop (211) comprises a block (223) made of HPL, at which said deposit (217) of polyurethane adhesive is present.
9. The cooking surface according to one or more of the preceding claims, **characterized in that** said block (223) has, in cross-section, a tab (224) that protrudes toward said opening (212) of said worktop (211) and extends below said rim (214) and has the same flaring as the latter so as to provide with this a uniformly inclined surface, said worktop (211) and said cooktop (213) being sealed by way of a deposit of polyurethane adhesive (217) which is applied between said block (223) and the outer walls of said rim (230).
10. The cooking surface according to one or more of the preceding claims, **characterized in that** it has an interspace (334) inside the core (320) proximate to the rim (314), said worktop (311) and said cooking range (313) being sealed by way of a deposit of polyurethane adhesive (317) which is applied between the side wall (319) of said worktop (311), which is directed toward said opening (312) and comprises the interspace (334), and the outer walls of said rim (330).
11. The cooking surface according to one or more of the preceding claims, **characterized in that** it comprises at least one bracket (425) which is fixed with one side to the outer side wall (418) and to the outer lower wall (423) of said casing (431) and with the other side underneath said worktop (411).

12. The cooking surface according to one or more of the preceding claims, **characterized in that** said bracket (425) is fixed to said worktop (411) by way of at least one fixing screw (416).

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13. The cooking surface according to one or more of the preceding claims, **characterized in that** said bracket (425) is fixed to said cooktop (413) by way of at least one screw (426).

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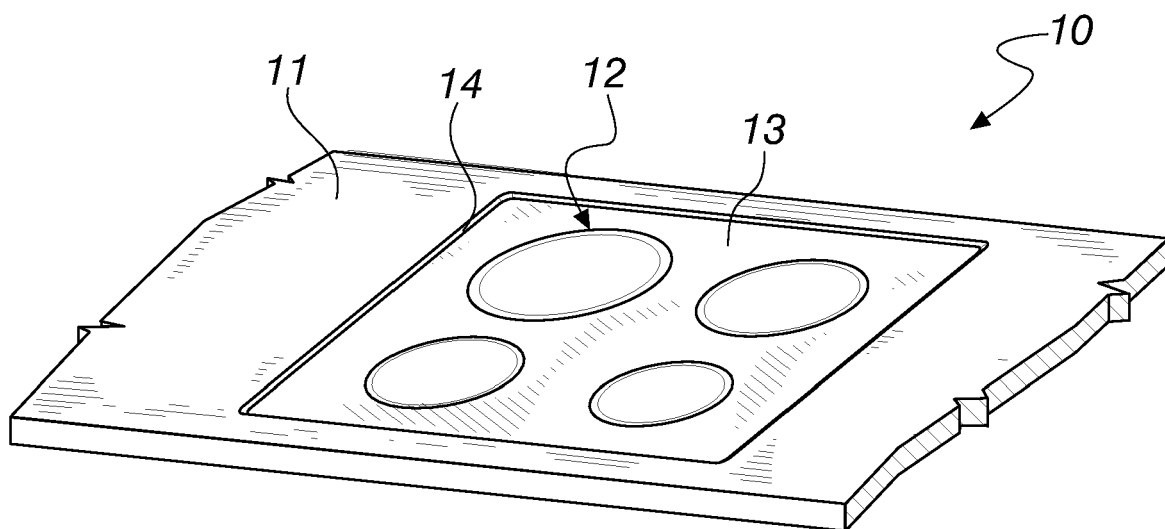


Fig. 1

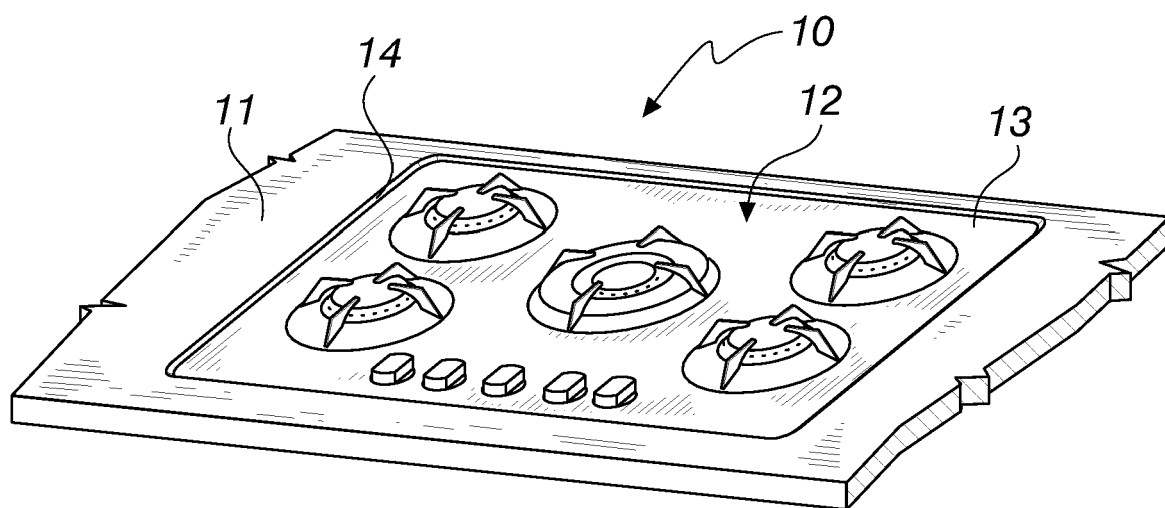
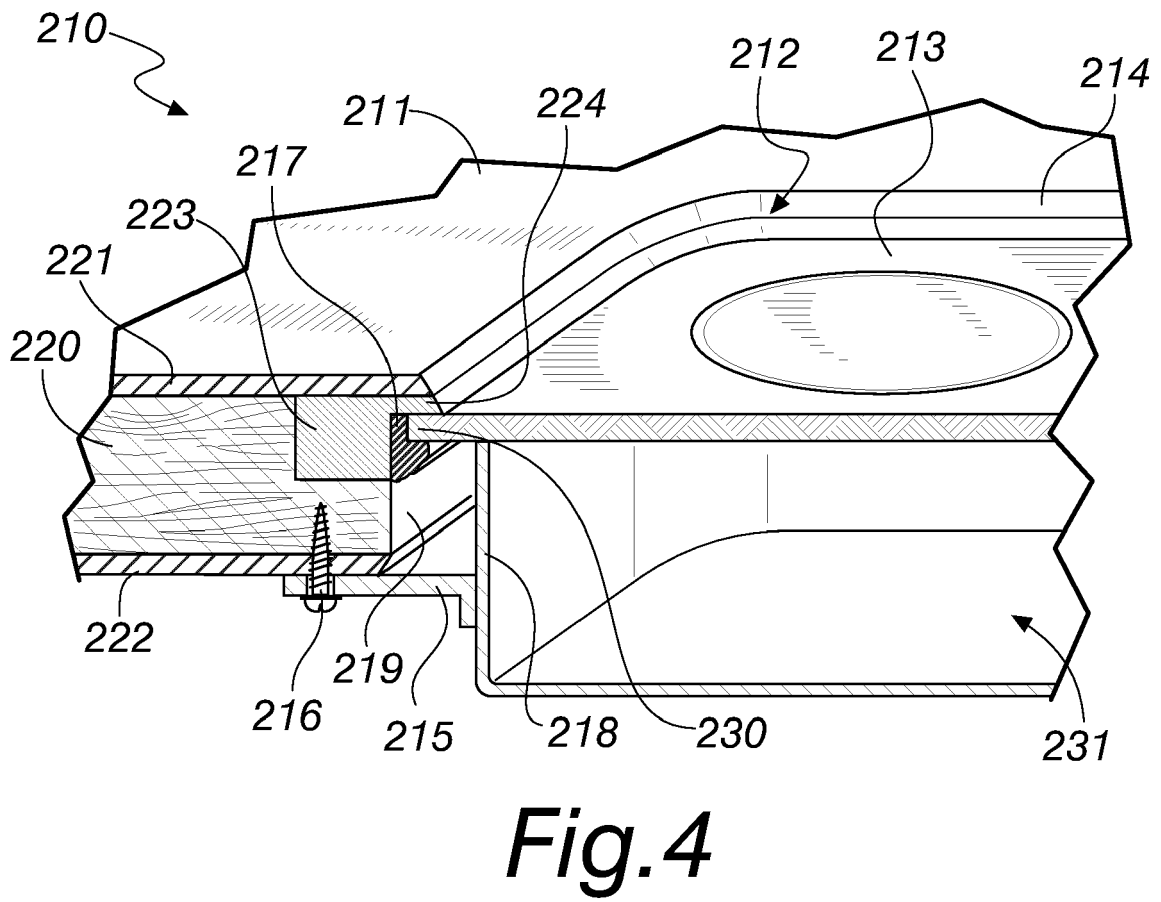
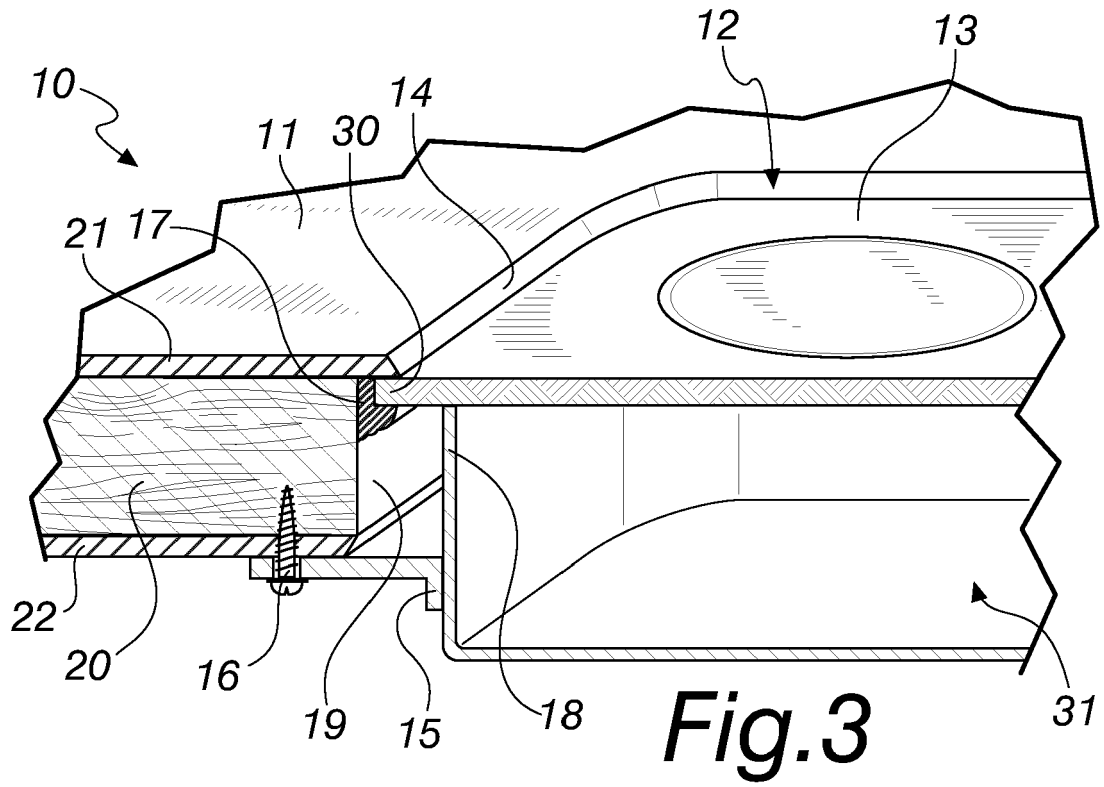


Fig. 2



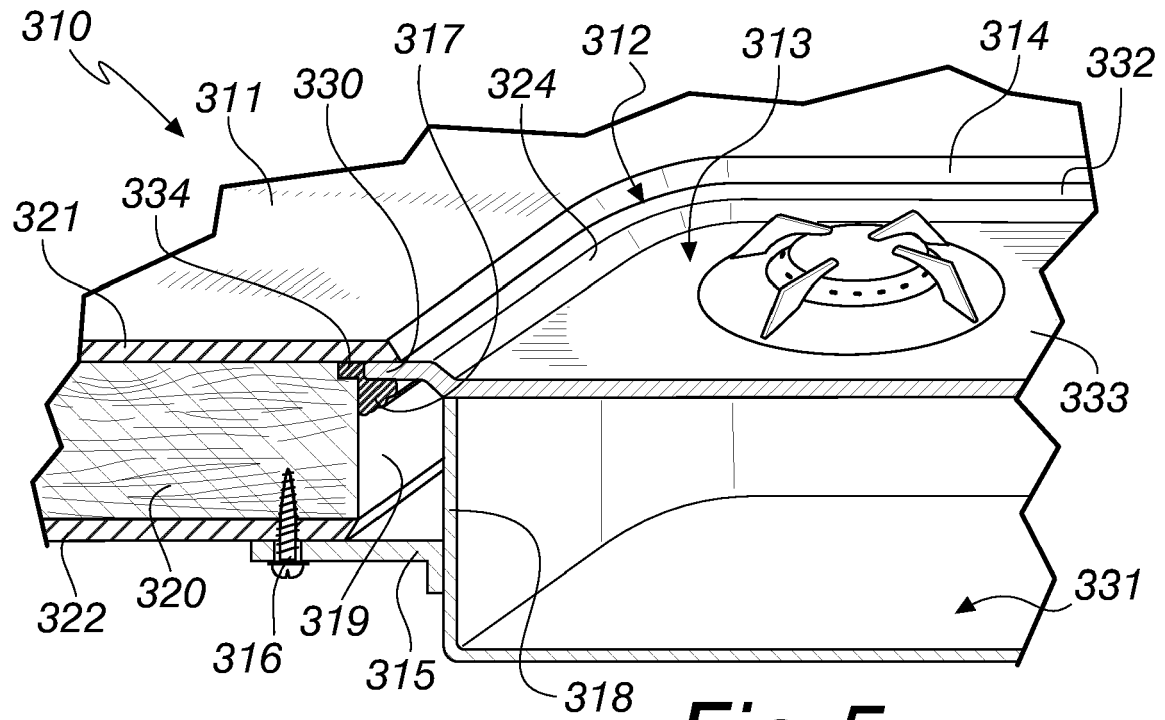


Fig.5

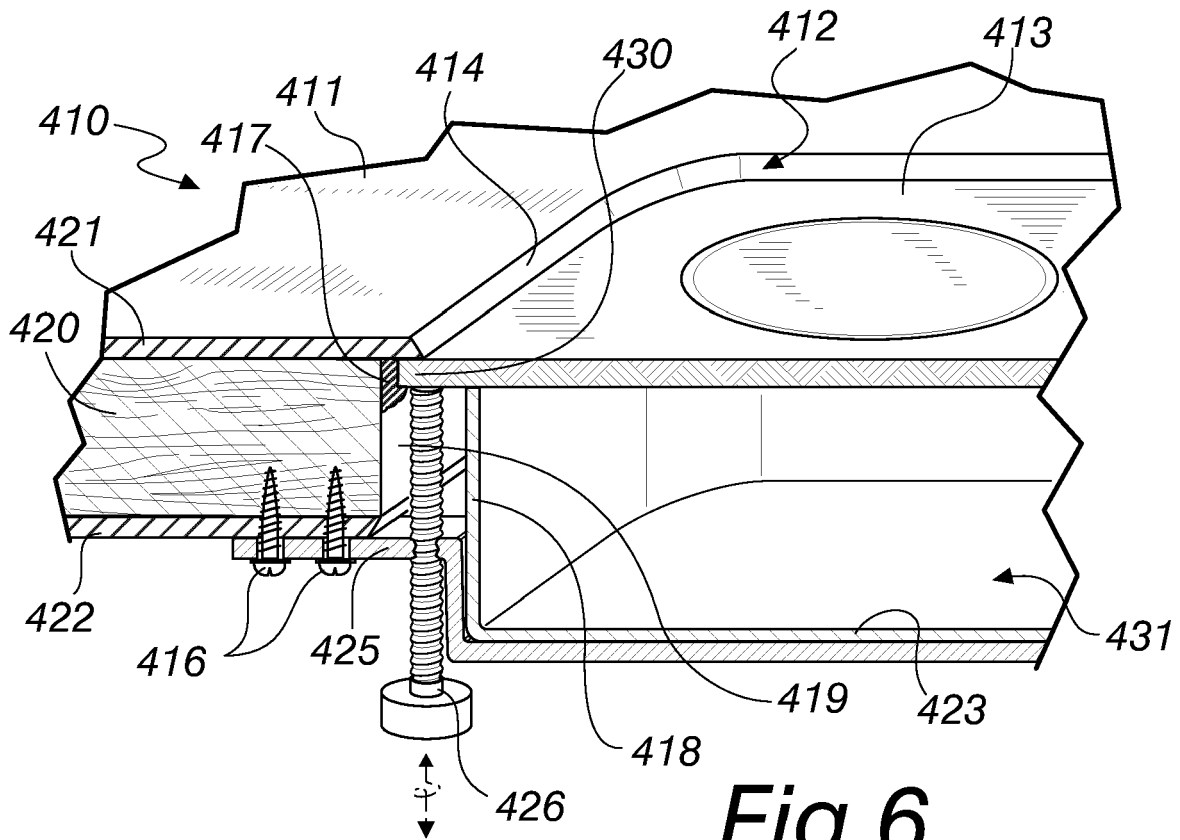


Fig.6



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Application Number
EP 18 16 9566

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The present search report has been drawn up for all claims			
Place of search The Hague		Date of completion of the search 30 May 2018	Examiner de Cornulier, P
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			

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