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(54) **A cooking top, in particular for household use**

Kochplatte, insbesondere für den Haushaltsgebrauch

Plaque de cuisson, en particulier pour usage domestique

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Description

DESCRIPTION

[0001] The present invention relates to a cooking top 1, in particular for household use, according to the preamble of claim 1.

[0002] The present invention typically applies to cooking tops, in particular for household use, of the type comprising at least one burner, in particular a gas burner, for cooking foods placed in suitable containers.

[0003] Cooking tops of this type are known and widespread, in different forms, in every household kitchen.

[0004] In some cases, such cooking tops are separate units; in other cases, such cooking tops are add-on components adapted to be flush-mounted in standard-size apertures obtained in the worktop of a sectional kitchen; or, in other cases, such cooking tops are the upper portion of a household appliance comprising an oven suitable for cooking foods.

[0005] Cooking tops, in particular those for household use, are generally fitted with a cover that houses a plurality of cooking points.

[0006] Each cooking point is provided with at least one burner, in particular a gas burner, which is generally associated with one adjuster element (typically a tap) adapted to be operated by a user for turning on and/or off the burner and for adjusting the heat generated by said burner, said adjuster element allowing the user to adjust the gas flow, and hence the heat generated by combustion. Generally, said adjuster element is associated with a knob, so that it is more ergonomical and can be operated more easily by a user.

[0007] The cooking tops known in the art comprise at least one burner secured to a base of the cooking top, also called "cooktop bottom box"; of course, said at least one burner typically comprises a plurality of burners secured to said base of the cooking top.

[0008] The cooking tops known in the art further comprise:

- a cover, typically made of glassy material, having at least one first aperture for inserting said at least one burner;
- a plate associated with the cover made of glassy material, comprising at least one second aperture associated with said first aperture for the passage of said at least one burner. The plate associated with the cover allows containers to be stably positioned on the cooking top even should the material of the cover break or crack. In addition, the plate is also used for optimally reinforcing the cooking top;
- a heat shielding element adapted to be associated with said at least one burner and with said at least one first aperture and at least one second aperture.

[0009] In these known cooking tops, in addition to securing the burner to the cooking top base, another rigid

coupling between the heat shielding element and the burner is also provided; a further rigid coupling is then provided between the heat shielding element and the plate associated with the glassy cover.

[0010] Such a cooking top is disclosed by document US6817355.

[0011] Such a design of known cooking tops, however, implies several drawbacks.

[0012] In fact, the heat generated by the burner may cause deformations in the elements that make up the cooking top; since the elements of the cooking top are rigidly secured to one another (as previously described, the following couplings are provided: burner and cooking top base; heat shielding element and burner; heat shielding element and plate associated with the glassy cover), any deformation of one element may in turn subject the other elements of the cooking top to heavy strains.

[0013] As a consequence, such deformations and strains may even cause one element of the cooking top to break, in particular the cover made of glassy material; of course, this may significantly jeopardize the users' safety, and may lead to the necessity of replacing such elements, resulting in an inevitable increase in the costs of the cooking top as a whole.

[0014] Documents WO 03/069231 and JP 2005291582 disclose further state of the art relevant to the invention.

[0015] In this frame, it is the main object of the present invention to overcome the above-mentioned drawbacks by providing a cooking top, in particular for household use, which is so realized as to not require a rigid coupling of its elements.

[0016] It is another object of the present invention to provide a cooking top, in particular for household use, which is so realized as to avoid that any deformation of one element subjected to the heat emanated by the burner might subject the remaining elements of the cooking top to heavy strains.

[0017] It is further object of the present invention to provide a cooking top, in particular for household use, which allows to avoid that any deformation and strain caused by the heat generated by the burner might cause one element of the cooking top to break, in particular the cover made of glassy material; as a result, the cooking top according to the present invention avoids any risks for the users' safety and also the need for replacing such elements.

[0018] Said objects are achieved by the present invention through a cooking top, in particular for household use, incorporating the features set out in the appended claims, which are intended to be an integral part of the present description. Further objects, features and advantages of the present invention will become apparent from the following detailed description and from the annexed drawings, which are supplied by way of non-limiting example, wherein:

- Fig. 1 is a perspective view of a cooking top, in par-

ticalar for household use, according to the present invention;

- Fig. 2 is a first sectional view of a portion of the cooking top of Fig. 1;
- Fig. 3 is a second sectional view of a portion of the cooking top of Fig. 1 according to a first embodiment;
- Fig. 4 shows a detail of the sectional view of Fig. 3, said detail being delimited by a dashed line in Fig. 3;
- Fig. 5 is a sectional view of a portion of the cooking top of Fig. 1 according to further embodiments other than those shown in Figs. 3 and 4 and outside the scope of the present invention;
- Fig. 6 shows a detail of a second embodiment of the cooking top outside the scope of the present invention, said detail being delimited by a dashed line in Fig. 5;
- Fig. 7 shows a detail of a third embodiment of the cooking top outside the scope of the present invention, said detail being delimited by a dashed line in Fig. 5;
- Fig. 8 shows a detail of a fourth embodiment of the cooking top outside the scope of the present invention, said detail being delimited by a dashed line in Fig. 5.

[0019] For clarity, in the present description the same reference numerals will be used for designating identical or equivalent items shown in the annexed drawings. With reference to the drawings, in Fig. 1 reference numeral 1 designates as a whole a cooking top, in particular for household use, of the type comprising a base 10 and at least one burner 20, in particular a gas burner, associated with said base 10.

[0020] According to the terminology commonly in use among cooking top manufacturers, said base 10 may also be called "cooktop bottom box".

[0021] As shown in the embodiment of Fig. 1, said cooking top 1 comprises a plurality of burners 20, more precisely four or five burners 20, preferably having different size and calorific power, which can be used as necessary with cooking containers (pots, pans, jugs and the like) having different dimensions and being suitable for cooking different types of foods.

[0022] In particular, in the embodiment of Fig. 1 four burners 20 are arranged at the four corners of the quadrilateral that delimits the cooking top 1, whereas a fifth burner 20 is arranged centrally relative to the other four; it is however clear that the layout of the burners 20 on the cooking top 1 may be different from that shown in Fig. 1.

[0023] Said burners 20 may be without distinction of the type taking primary air above or below the cooking top 1 whereon they are mounted, and may operate by natural or forced convection. In addition, said burners 20 may generate a carpet flame or a crown flame depending on whether the outlet apertures of the burners 20 are horizontal or vertical. It is clear that each burner 20 may be equipped with at least one ignition spark plug and/or

at least one thermocouple for verifying if the burner 20 is on; neither said ignition spark plug nor said thermocouples are shown in the drawings.

[0024] Preferably, the cooking top 1 comprises at least one regulating element 20R for turning on/off and/or adjusting said at least one burner 20; the cooking top 1 normally comprises a number of regulating elements 20R matching the number of burners 20 on the cooking top 1.

[0025] Fig. 2 shows a first sectional view of a portion of the cooking top 1, in particular of that portion of the cooking top 1 which comprises said at least one burner 20. As can be seen in Fig. 2, said at least one burner 20 is secured to the base 10 by means of at least one fastening element 10E, preferably a self-tapping screw.

[0026] Figs. 3 and 5 show a second sectional view of a portion of the cooking top 1, said second view representing a first embodiment (shown in Fig. 3) and further embodiments (shown in Fig. 5), respectively, of said cooking top 1.

[0027] By observing Figs. 2, 3 and 5, it can be noticed that the burner 20 comprises a Venturi-effect chamber 21 extending substantially vertically within said burner 20; also, the chamber 21 extends in a central position within said burner 20, i.e. in such a way as to substantially coincide with an axis (substantially coinciding with the straight line A-A of Figs. 2 and 3) of the burner 20. It is however clear that the Venturi-effect chamber 21 may also be positioned otherwise within said burner 20 and may also extend horizontally.

[0028] The burner 20 is preferably made as one piece with a duct 22 (visible in Figs. 3 and 5) for supplying gas to said burner 20 and to said chamber 21; preferably, said duct 22 extends substantially horizontally within said burner 20, so as to limit the vertical extension thereof and, as a consequence, the height of the entire cooking top 1.

[0029] It is clear that, for the purposes of the present invention, the terms "vertical" and "horizontal" are used with reference to a burner 20 installed on a cooking top 1. The annexed Figs. 3 and 5 also show that the cooking top 1 further comprises:

- a cover 30, in particular made of glassy material, with at least one aperture 31 for the passage of said at least one burner 20;
- a plate 40, in particular made of sheet metal, associated with said cover 30, the plate 40 comprising at least one hole 41 associated with said first aperture 31 for the passage of said at least one burner 20;
- a heat shielding element 50, in particular made of enamelled sheet metal, adapted to be associated with said at least one burner 20 and with said at least one aperture 31 and said at least one hole 41.

[0030] The plate 40 associated with the cover 30 allows a container to remain stably positioned on the cooking top 1 even should the material of the cover 30 break or crack. In addition, the plate 40 also ensures optimal

strength and stability of the cooking top 1.

[0031] Preferably, a top portion 40S of the plate 40 is secured to said cover 30, in particular by glueing.

[0032] Fig. 4 shows a detail P of the cross-section of Fig. 3, said detail P being indicated in Figs. 3 and 4 by means of a dashed frame.

[0033] In Figs. 3 and 4 it can be noticed that, in accordance with the present invention, said cover 30 comprises a step (indicated as a whole by reference numeral 32) positioned in the proximity of said aperture 31, said step 32 constituting a supporting element for the heat shielding element 50.

[0034] In particular, said step 32 is so realized as to comprise:

- a first portion 32A extending substantially downwards (when the cover 30 is associated with the cooking top 1 and in the operating condition) from a top surface 30A of the cover 30;
- a second portion 32B extending from said first portion 32A, in particular said second portion 32B being substantially parallel to said top surface 30A;
- a third portion 32C extending from said second portion 32B and facing said aperture 31, in particular said third portion 32C having a trend substantially parallel to said first portion 32A.

[0035] It must be pointed out that said first portion 32A, second portion 32B and third portion 32C are clearly visible in Fig. 4.

[0036] According to the invention, said heat shielding element 50 comprises:

- an inner edge 51 adapted to be coupled to said burner 20, in particular said inner edge 51 being secured to the burner 20 through fastening means 20M, preferably metric screws;
- an outer edge 52 adapted to be shape-coupled to said step 32, in particular said outer edge 52 being adapted to rest on the step 32.

[0037] It can be understood from the above that, in accordance with the present invention, the heat shielding element 50 is secured to the burner 20 at said inner edge 51 and cooperates with the step 32 at the outer edge 52; as a consequence, the heat shielding element 50 is not secured to the cover 30, but only rests thereon. This avoids the necessity of providing a rigid coupling among all the elements that make up the cooking top 1 according to the present invention.

[0038] In a preferred embodiment, the cooking top 1 according to the present invention comprises at least one first sealing element 60A, in particular a perimetric gasket, positioned between the outer edge 52 of the heat shielding element 50 and said step 32.

[0039] Said at least one first sealing element 60A is made of flexible and/or elastic material, preferably a silicone-based material, so that it can adapt itself to the

shape of the space created between the step 32 and the heat shielding element 50 when said heat shielding element 50 is inserted in the aperture 31 of the cover 30.

[0040] The provision of the first sealing element 60A allows to improve the absorption of a possible deformation of an element of the cooking top 1 subjected to the heat emanated by the burner 20, as well as to prevent said deformation from affecting the remaining elements of the cooking top 1. In addition, the first gasket 60 ensures tightness to liquids, so that any liquid spilled on the cover 30 will not reach the inside of the cooking top 1.

[0041] The cooking top 1 according to the present invention may further comprise at least one second gasket 60B positioned between the burner 20 and the heat shielding element 50 and adapted to limit the dispersion of heat from the burner 20 to the heat shielding element 50; preferably, said at least one second gasket 60B is made of a thermally insulating material, in particular mica or a silicone-based material, mica being preferable because of its better thermal insulation properties.

[0042] The first sealing element 60A and the second gasket 60B may possibly be made as one piece of silicone-based material.

[0043] Figures 6, 7 and 8 relate to a second, a third and a fourth embodiments, respectively, of the cooking top 1 outside the scope of the present invention; in particular, Figures 6, 7 and 8 show a detail P' of the cross-section of Fig. 5, said detail P' being indicated by a dashed frame.

[0044] In the second embodiment shown in Fig. 6, it can be noticed that the cooking top 1 comprises a gasket (designated as a whole by reference numeral 60 in Fig. 6, by reference numeral 160 in Fig. 7, and by reference numeral 260 in Fig. 8) positioned in the proximity of said aperture 31, said gasket 60, 160, 260 being made of flexible and/or elastic material, preferably a silicone-based material, and constituting a supporting element for the heat shielding element 50; moreover, said gasket 60, 160, 260 also constitutes a sealing element adapted to prevent any liquid spilled on the cover 30 from penetrating into the cooking top 1.

[0045] In particular, said gasket 60, 160, 260 is so realized as to rest on:

- a first surface 30A of the cover 30, in particular said first surface 30A being so realized as to face said aperture 31;
- a top portion 40S of the plate 40.

[0046] In a preferred embodiment, the gasket 60, 160, 260 comprises, as one piece, at least one first branch 61, 161, 261 made of elastic and/or flexible material, preferably a silicone-based material, in particular said at least one branch 61, 161, 261 extending towards said first surface 30A of the cover 30 when said gasket 60, 160, 260 is associated with the cooking top 1.

[0047] The particular shape of said at least one branch 61, 161, 261 allows to increase the elasticity of the gasket

60, 160, 260 and its ability to adapt itself to the shape of the space created between the cover 30, the plate 40 and the heat shielding element 50 when said heat shielding element 50 is inserted in the aperture 31 of the cover 30.

[0048] Preferably, said gasket 60, 160, 260 further comprises, as one piece, at least one second branch 62, 162, 262 made of elastic and/or flexible material, preferably a silicone-based material, in particular said at least one second branch 62, 162, 261 resting at least partially on a top surface 30S of the cover 30 when said gasket 60, 160, 260 is associated with the cooking top 1.

[0049] The particular shape of said at least one second branch 62, 162, 262 allows to obtain a gasket 60, 160, 260 that provides better tightness to liquids and compensates for any unevenness in the cover 30.

[0050] In addition, the special provision of the gasket 60, 160, 260 allows to couple the heat shielding element 50 firmly to the cover 30 and to the plate 40, as well as to absorb any deformation of an element subjected to the heat emanated by the burner 20.

[0051] In fact, in the cooking top 1 according to the present invention, the heat shielding element 50 is, advantageously, not rigidly secured to the cover 30, but only rests on the cover 30 and on the plate 40, with the interposition of the gasket 60, 160, 260 in the embodiments shown in Figures 5 to 8.

[0052] As a result, the cooking top 1 according to the present invention is so realized as to not provide a rigid coupling among its components, in particular being so realized as to have no rigid constraint between the burner 20 and the cover 30, said rigid constraint being provided in the prior art by securing a heat shielding element to both the burner and the cover; consequently, the provisions of the present invention allow for better compensation of the expansions and/or deformations, in particular of thermal type, undergone by said burner 20 and/or said cover 30.

[0053] The cooking top 1 according to the present invention is thus so designed as to prevent any deformation undergone by an element subjected to the heat emanated by the burner 20 from creating heavy strains in the remaining elements of the cooking top 1, in particular in the cover 30 made of glassy material.

[0054] It is clear that such a provision allows to avoid that any deformations and strains deriving from the heat generated by the burner 20 might cause one element of the cooking top 1 to break, in particular the cover 30 made of glassy material.

[0055] It is also clear that this allows to avoid endangering the safety of the users of the cooking top 1, as well as to avoid having to replace an element of the cooking top 1.

[0056] In a preferred embodiment, the heat shielding element 50 comprises:

- an inner edge 51 adapted to be coupled to said burner 20, in particular said inner edge 51 being secured

to the burner 20 through fastening means 20M, preferably metric screws;

- an outer edge 52 adapted to be coupled to said gasket 60, 160, 260, in

particular said outer edge 52 being adapted to rest on said gasket 60, 160, 260. From this detail and from the above description, it can be understood that, in accordance with the present invention, the heat shielding element 50 is secured to the burner 20 at said inner edge 51 and lies on said gasket 60, 160, 260 at the outer edge 52.

[0057] As a result, said outer edge 52 of the heat shielding element 50 is not secured to the cover 30, but only lies thereon; it is thus possible to avoid a rigid coupling among all the elements that make up the cooking top 1 according to the present invention, allowing in particular the heat shielding element 50 to make small movements (of the order of approx. 1 mm) with respect to the cover 30.

[0058] In the embodiments shown in Figures 7 and 8, the gasket (designated by reference numeral 160 in Fig. 7 and by reference numeral 260 in Fig. 8) substantially corresponds to that shown in Fig. 6.

[0059] The gasket 160 of the third embodiment of Fig. 7 further comprises a strip 163 positioned between the plate 40 and the heat shielding element 50.

[0060] As can be seen in Fig. 7, the strip 163 may also be sized in a manner such that it can be associated with the underside of the heat shielding element 50 and secured to the burner 20 through said fastening means 20M.

[0061] The provision of the strip 163 allows to insulate the heat shielding element 50 against humidity and leakage from the plate 40 and the burner 20, as well as to avoid that the heat coming from the burner 20 might reach the plate 40 by conduction. Moreover, said strip 163 constitutes a non-slip surface for the heat shielding element 50, thus facilitating an accurate and easy coupling thereof to the cooking top 1.

[0062] As regards the gasket 260 of the fourth embodiment of Fig. 8, it comprises a core 263 made of a substantially incompressible material. Preferably, said core 263 is made of a thermoplastic material or a metallic material; more preferably, said core 263 is substantially buried in the material of the gasket 260.

[0063] The advantageous provision of said core 263 allows to confer high structural rigidity to the gasket 260, so as to improve the ability of said gasket 260 to act as a stable supporting element for the heat shielding element 50, in particular for the outer edge 52 of said heat shielding element 50.

[0064] In an embodiment not in the scope of the claims (visible in Fig. 6 and Fig. 8, in addition to the already described Fig. 4), the cooking top 1 comprises at least one second gasket 70 positioned between the burner 20 and the heat shielding element 50, said at least one second gasket 70 being preferably made of a thermally insulating material, such as, for example, silicone or, pref-

erably, mica.

[0065] It must be pointed out that the use of said at least one second gasket 70 between the burner 20 and the heat shielding element 50 may be avoided in the second embodiment of Fig. 7; in fact, if the strip 163 has such dimensions that it can be secured to the burner 20 through said fastening means 20M, it will be positioned between the burner 20 and the heat shielding element 50, thus performing the same function as the second gasket 70.

[0066] The advantages of a cooking top 1, in particular for household use, according to the present invention are apparent from the above description.

[0067] In particular, such advantages mainly, but not exclusively, derive from the fact that the heat shielding element 50 is not secured to the cover 30; in fact, the heat shielding element 50 has an outer edge 52 that only rests on said cover 30, in particular through the interposition of the step 32, which allows the heat shielding element to be coupled to the cover 30 without rigidly constraining such elements to each other, and through the interposition of the gasket 60, 160, 260, which at the same time allows to:

- couple the heat shielding element 50 to the cover 30 and to the plate 40,
- absorb any deformation of an element subjected to the heat emanated by the burner 20.

[0068] Consequently, said advantages lie in the fact that the cooking top 1 according to the present invention is so realized that its component are not coupled in a rigid manner, in particular it being so realized as to avoid any rigid constraint between the cover 30, the heat shielding element 50 and the burner 20; this allows to obtain high flexibility between said burner 20 and the cover 30.

[0069] It follows that the cooking top 1 is so realized as to prevent any deformation undergone by an element subjected to the heat emanated by the burner 20 from creating heavy strains in the remaining elements of the cooking top 1, in particular in the cover 30 made of glassy material.

[0070] This provision allows to avoid that any deformations and strains deriving from the heat generated by the burner 20 might cause an element of the cooking top 1 to break, in particular the cover 30 made of glassy material.

[0071] It is clear that this avoids jeopardizing the safety of the users of the cooking top 1.

[0072] Furthermore, such provisions allow to avoid having to replace an element of the cooking top 1, thus offering an economically advantageous solution.

[0073] The present invention also attains the advantage of limiting the height of the cooking top 1, since the heat shielding element 50 remains substantially flush with the cover 30. The difference in height between the heat shielding element 50 and the cover 30 is only due, in fact, to the first gasket 60 resting on the top surface of

the cover 30, and can therefore be limited to approx. 1 mm. This makes the cooking top 1 much easier to clean.

[0074] The cooking top, in particular for household use, described herein by way of example may be subject to many possible variations without departing from the scope of the claims.

[0075] According to one of the numerous variants (not shown in the annexed drawings), the gasket 60, 160, 260 is so realized as to comprise both a strip 160 and a core 263 made of a substantially incompressible material. Such a variant offers a combination of the advantages deriving from each one of said elements. It can therefore be easily understood that the present invention is not limited to the above-described cooking top, in particular for household use, but may be subject to many modifications, improvements or replacements of equivalent parts and elements without departing from the scope of the claims.

Claims

1. A cooking top (1), in particular for household use, comprising:

- a base (10) and at least one burner (20), in particular a gas burner, associated with said base (10);
- a cover (30), in particular made of glassy material, with at least one aperture (31) for the passage of said at least one burner (20);
- a plate (40), in particular made of sheet metal, comprising a top portion (40S) associated with said cover (30), the plate (40) further comprising at least one hole (41) associated with said first aperture (31) for the passage of said at least one burner (20);
- a heat shielding element (50), in particular made of enamelled sheet metal, adapted to be associated with said at least one burner (20) and with said at least one aperture (31) and said at least one hole (41),

wherein said cover (30) comprises a step (32) positioned in the proximity of said aperture (31), said step (32) constituting a supporting element for the heat shielding element (50),

wherein said heat shielding element (50) comprises an inner edge (51) adapted to be coupled to said burner (20) and an outer edge (52) adapted to be shape-coupled to said step (32), in particular said outer edge (52) being adapted to rest on the step (32),

and wherein said cooking top (1) comprises at least one first sealing element (60A), in particular a perimetric gasket, positioned between the outer edge (52) of the heat shielding element (50) and said step (32), said first sealing element (60A) being made of

flexible and/or elastic material, so that it can adapt itself to the shape of the space created between the step (32) and the heat shielding element (50) when said heat shielding element (50) is inserted in the aperture (31) of the cover (30).

2. A cooking top (1) according to claim 1, **characterized in that** said step (32) is so realized as to comprise:

- a first portion (32A) extending substantially downwards from a top surface (30A) of the cover (30);
- a second portion (32B) extending from said first portion (32A), in particular said second portion (32B) being substantially parallel to said top surface (30A);
- a third portion (32C) extending from said second portion (32B) and facing said aperture (31), in particular said third portion (32C) having a trend substantially parallel to said first portion (32A).

3. A cooking top (1) according to one or more of the preceding claims, **characterized in that** said inner edge (51) is secured to the burner (20) through fastening means (20M), in particular metric screws.

4. A cooking top (1) according to one or more of the preceding claims, **characterized in that** said at least one burner (20) is secured to the base (10) through at least one fastening element (10E), in particular a self-tapping screw.

5. A cooking top (1) according to one or more of the preceding claims, **characterized in that** said first sealing element (60A) is made of a silicone-based material.

6. A cooking top (1) according to one or more of the preceding claims, **characterized in that** it comprises at least one second gasket (60B) positioned between the burner (20) and the heat shielding element (50) and adapted to limit the dispersion of heat from the burner (20) to the heat shielding element (50), said at least one second gasket (60B) being made of a thermally insulating material, in particular mica.

7. A cooking top (1) according to one or more of the preceding claims, **characterized in that** said top portion (40S) of the plate (40) is secured to said cover (30), in particular by glueing.

Patentansprüche

1. Ein Kochfeld (1), insbesondere für die Anwendung im Haushalt, welches das Folgende umfasst:

- ein Unterteil (10) und mindestens eine Kochplatte (20), vornehmlich eine Gas-Kochplatte, die mit dem genannten Unterteil (10) verbunden ist;
- eine Abdeckung (30), vornehmlich aus glasartigem Material, mit mindestens einer Öffnung (31) für den Durchlass der genannten Kochplatte(n) (20);
- eine Platte (40), vornehmlich aus Blech, die einen oberen Teil (403) umfasst, der mit der genannten Abdeckung (30) verbunden ist, und weiterhin mindestens eine Aussparung (41), die mit der genannten ersten Öffnung (31) für den Durchlass der genannten Kochplatte(n) (20) verbunden ist,
- ein Wärme-Abschirm-Element (50), vornehmlich aus emailliertem Blech, das dafür ausgelegt ist, mit der/den genannten Kochplatte(n) (20) und der/den genannten Öffnung(en) (31) und der/den genannten Aussparung(en) (41) verbunden zu werden,

wobei die genannte Abdeckung (30) eine Stufe (32) umfasst, die in der Nähe der genannten Öffnung (31) angebracht ist und als Stützelement für das Wärme-Abschirm-Element (50) dient, wobei weiterhin das genannte Wärme-Abschirm-Element (50) eine innere Kante (51) umfasst, die dafür ausgelegt ist, an der genannten Kochplatte (20) befestigt zu werden, und eine äußere Kante (52), die dafür ausgelegt ist, mit der genannten Stufe (32) verbunden zu werden; die genannte äußere Kante (52) ist insbesondere dafür ausgelegt, auf der Stufe (32) aufzuliegen; das genannte Kochfeld (1) umfasst mindestens ein erstes Dichtungselement (60A), vornehmlich eine perimetrische Dichtung, die zwischen der äußeren Kante (52) des Wärme-Abschirm-Elementes (50) und der genannten Stufe (32) angebracht wird, wobei das erste Dichtungselement (60A) aus flexiblem und/oder elastischem Material hergestellt worden sein muss, sodass es sich an die Form des zwischen der Stufe (32) und dem Wärme-Abschirm-Element (50) entstehenden Spaltes anpassen kann, wenn das genannte Wärme-Abschirm-Element (50) in die Öffnung (31) der Abdeckung (30) eingesetzt wird.

2. Ein Kochfeld (1), das Anspruch 1 entspricht, wobei die genannte Stufe (32) wie folgt ausgeführt wird:

- einem ersten Teil (32A), der von einer Oberfläche (30A) der Abdeckung (30) im Wesentlichen nach unten verläuft;
- einem zweiten Teil (32B), der von diesem ersten Teil (32A) aus im Wesentlichen parallel zu der genannten Oberfläche (30A) verläuft;
- einem dritten Teil (32C), der von diesem zweiten Teil (32B) aus verläuft und der genannten

Öffnung (31) gegenüber liegt und dabei eher parallel zu dem genannten ersten Teil (32A) verläuft.

3. Ein Kochfeld (1), das einer oder mehreren der zuvor genannten Ansprüchen entspricht, wobei die genannte innere Kante (51) mithilfe von Befestigungsmitteln (20M), vornehmlich metrischen Schrauben, an der Kochplatte (20) befestigt ist. 5
4. Ein Kochfeld (1), das einer oder mehreren der zuvor genannten Ansprüchen entspricht, wobei die Kochplatte(n) (20) mithilfe mindestens eines Befestigungselementes (10E), vornehmlich einer selbstschneidenden Schraube, an dem Unterteil (10) befestigt ist/sind. 10
5. Ein Kochfeld (1), das einer oder mehreren der zuvor genannten Ansprüchen entspricht, wobei das genannte erste Dichtungselement (60A) aus einem silikonbasierten Material besteht. 15
6. Ein Kochfeld (1), das einer oder mehreren der zuvor genannten Ansprüchen entspricht, wobei es mindestens eine weitere Dichtung (60B) enthält, die zwischen der Kochplatte (20) und dem Wärme-Abschirm-Element (50) angebracht und dafür ausgelegt ist, die Ausbreitung der Wärme zwischen der Kochplatte (20) zum Wärme-Abschirm-Element (50) einzudämmen, wobei die zweite(n) Dichtung(en) (60B) aus wärmedämmendem Material bestehen, vornehmlich Muskovit. 20
7. Ein Kochfeld (1), das einer oder mehreren der zuvor genannten Ansprüche entspricht, wobei der genannte obere Teil (403) der Platte (40) an der genannten Abdeckung (30) befestigt ist, vornehmlich durch Kleben. 25

Revendications

1. Table de cuisson (1), en particulier pour un usage ménager, comprenant : 30
 - une base (10) et au moins un brûleur (20), en particulier un brûleur à gaz, associé à ladite base (10) ;
 - un cache (30), en particulier constitué de matériau vitreux, avec au moins une ouverture (31) pour le passage dudit au moins un brûleur (20) ;
 - une plaque (40), en particulier constituée de tôle, comprenant une portion supérieure (40S) associée audit cache (30), la plaque (40) comprenant en outre au moins un trou (41) associé à ladite première ouverture (31) pour le passage dudit au moins un brûleur (20) ;
 - un bouclier thermique (50), en particulier cons-

titué de tôle émaillée, adapté pour être associé audit au moins un brûleur (20) et à ladite au moins une ouverture (31) et audit au moins un trou (41),

dans laquelle ledit cache (30) comprend une marche (32) positionnée à proximité de ladite ouverture (31), ladite marche (32) constituant un élément de support pour le bouclier thermique (50), dans laquelle ledit bouclier thermique (50) comprend un bord interne (51) adapté pour être couplé audit brûleur (20) et un bord externe (52) adapté pour être couplé en forme à la ladite marche (32), en particulier ledit bord externe (52) étant adapté pour reposer sur la marche (32), et dans laquelle ladite table de cuisson (1) comprend au moins un premier élément d'étanchéité (60A), en particulier un joint d'étanchéité périmétrique, positionné entre le bord externe (52) du bouclier thermique (50) et ladite marche (32), ledit premier élément d'étanchéité (60A) étant constitué de matériau souple et/ou élastique, de sorte qu'il puisse s'adapter à la forme de l'espace créé entre la marche (32) et le bouclier thermique (50), lorsque ledit bouclier thermique (50) est inséré dans l'ouverture (31) du cache (30).

2. Table de cuisson (1) selon la revendication 1, **caractérisée en ce que** ladite marche (32) est réalisée de façon à comprendre :

- une première portion (32A) s'étendant sensiblement vers le bas à partir d'une surface supérieure (30A) du cache (30) ;
- une deuxième portion (32B) s'étendant à partir de ladite première portion (32A), en particulier ladite deuxième portion (32B) étant sensiblement parallèle à ladite surface supérieure (30A) ;
- une troisième portion (32C) s'étendant à partir de ladite deuxième portion (32B) et en regard de ladite ouverture (31), en particulier ladite troisième portion (32C) ayant une inclinaison sensiblement parallèle à ladite première portion (32A).

3. Table de cuisson (1) selon une ou plusieurs des revendications précédentes, **caractérisée en ce que** ledit bord interne (51) est fixé au brûleur (20) par l'intermédiaire de moyens de fixation (20M), en particulier de vis métriques.
4. Table de cuisson (1) selon une ou plusieurs des revendications précédentes, **caractérisée en ce que** ledit au moins un brûleur (20) est fixé à la base (10) par l'intermédiaire d'au moins un élément de fixation (10E), en particulier d'une vis autotaraudeuse.

5. Table de cuisson (1) selon une ou plusieurs des revendications précédentes, **caractérisée en ce que** ledit premier élément d'étanchéité (60A) est constitué d'un matériau à base de silicone.

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6. Table de cuisson (1) selon une ou plusieurs des revendications précédentes, **caractérisée en ce qu'elle** comprend au moins un second joint d'étanchéité (60B) positionné entre le brûleur (20) et le bouclier thermique (50) et adapté pour limiter la dispersion de la chaleur issue du brûleur (20) vers le bouclier thermique (50), ledit au moins un second joint d'étanchéité (60B) étant constitué d'un matériau thermiquement isolant, en particulier de mica.

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7. Table de cuisson (1) selon une ou plusieurs des revendications précédentes, **caractérisée en ce que** ladite portion supérieure (40S) de la plaque (40) est fixé audit cache (30), en particulier par collage.

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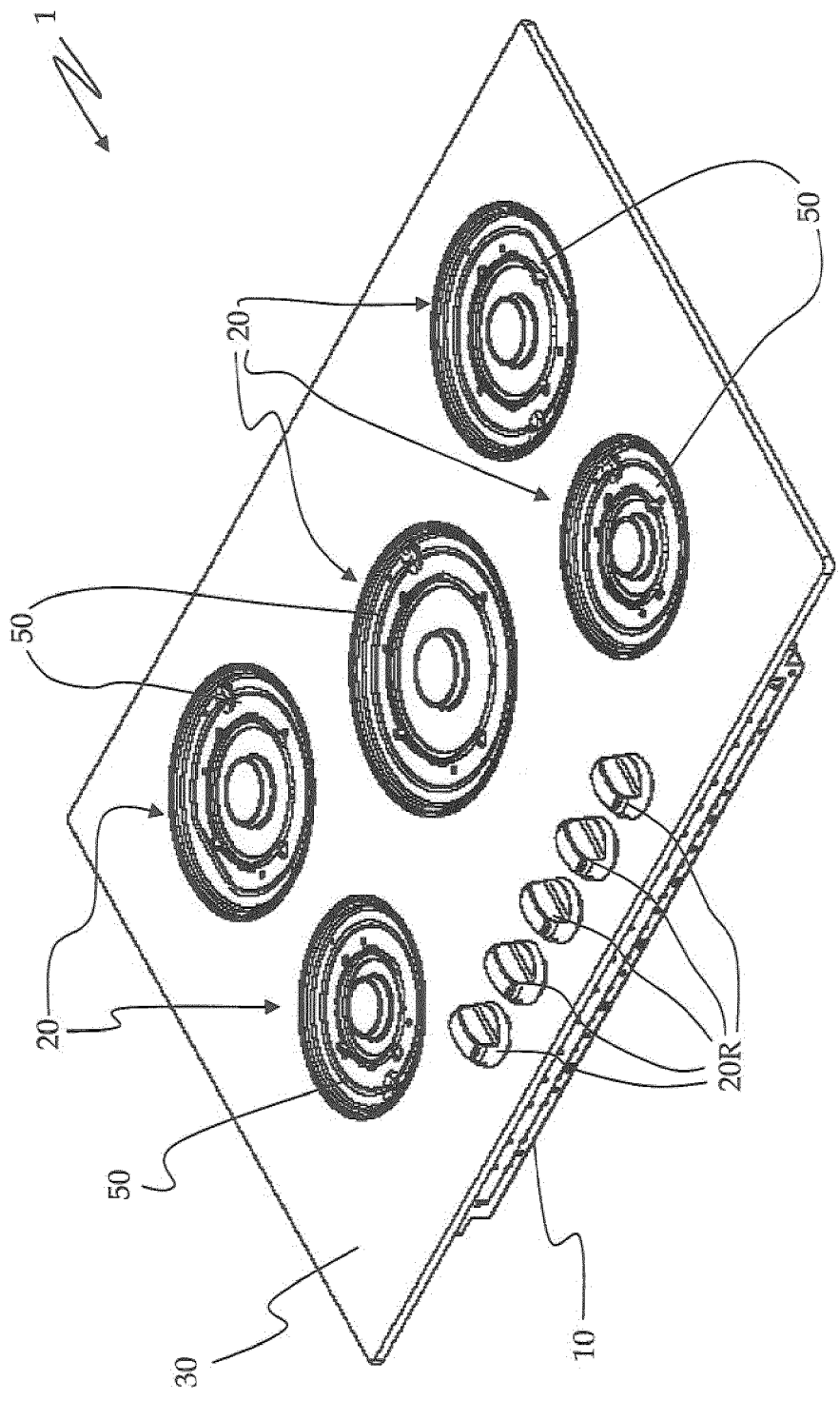


Fig. 1

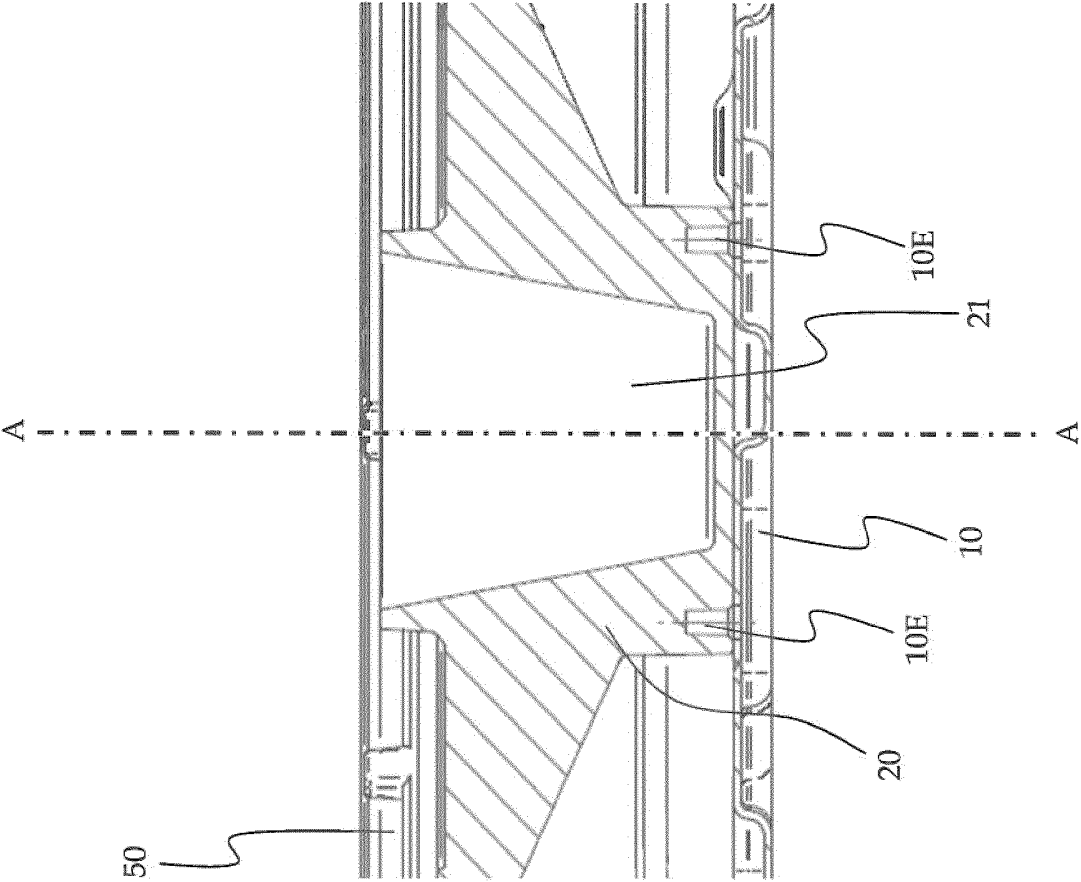


Fig. 2

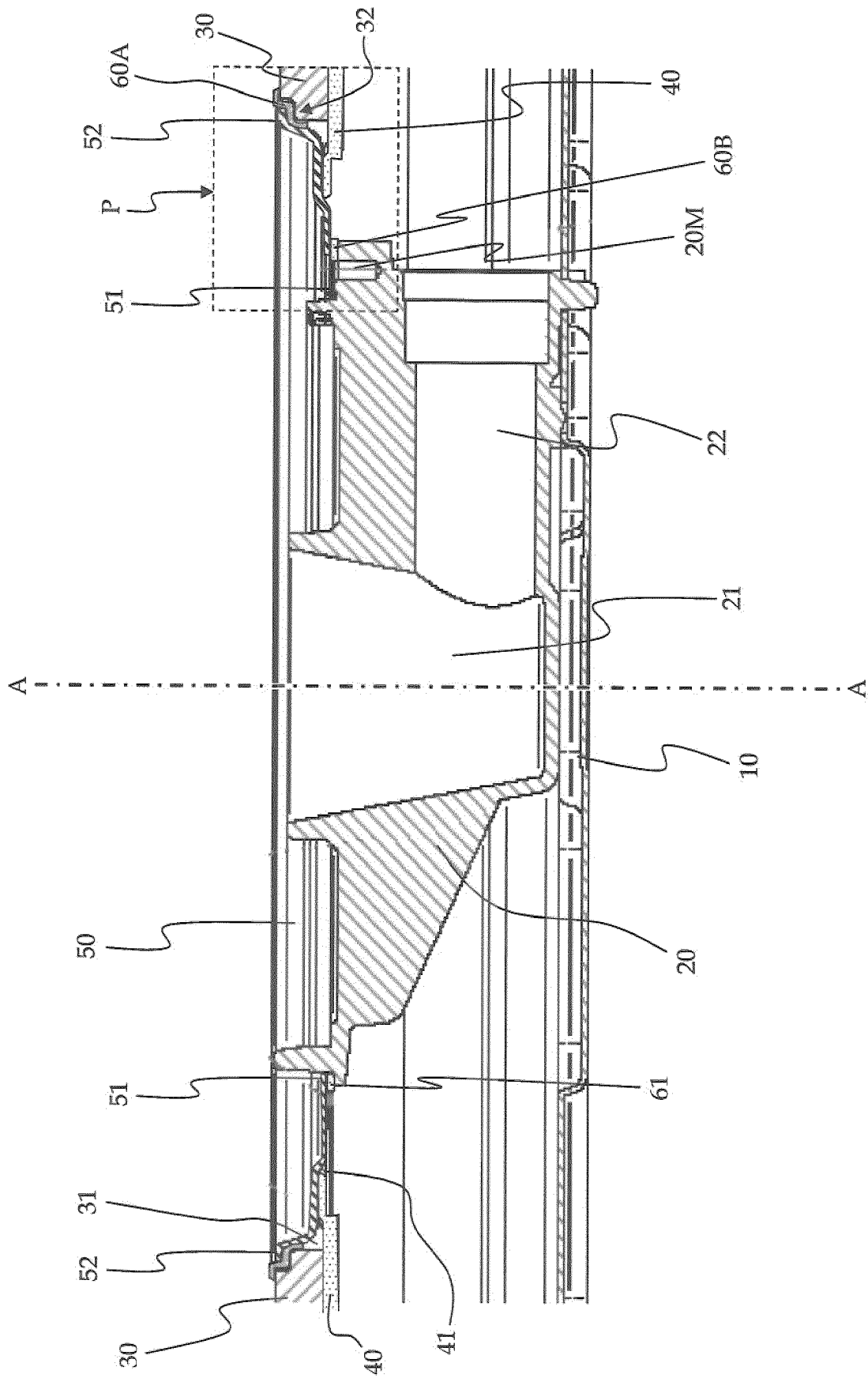


Fig. 3

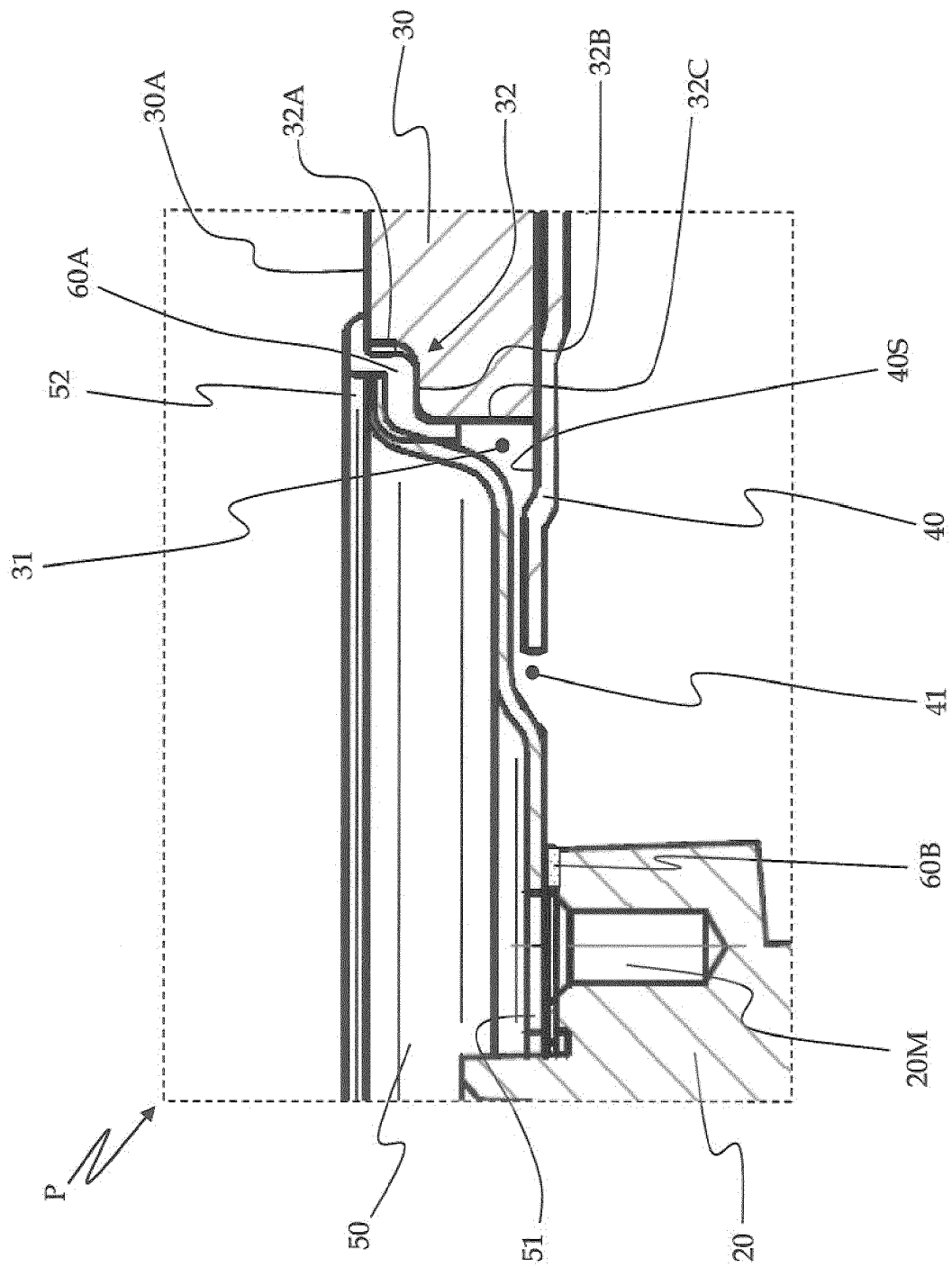


Fig. 4

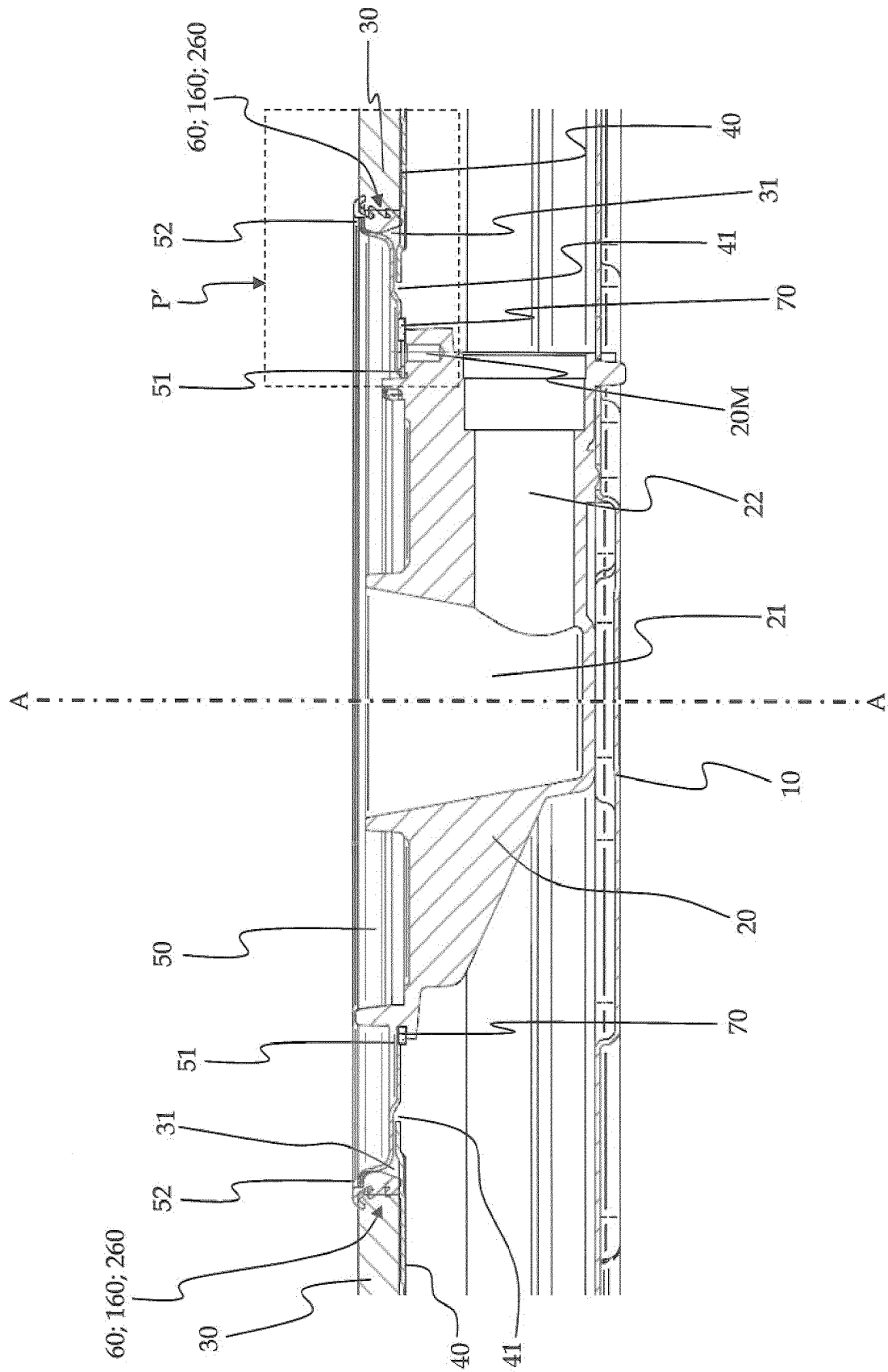


Fig. 5

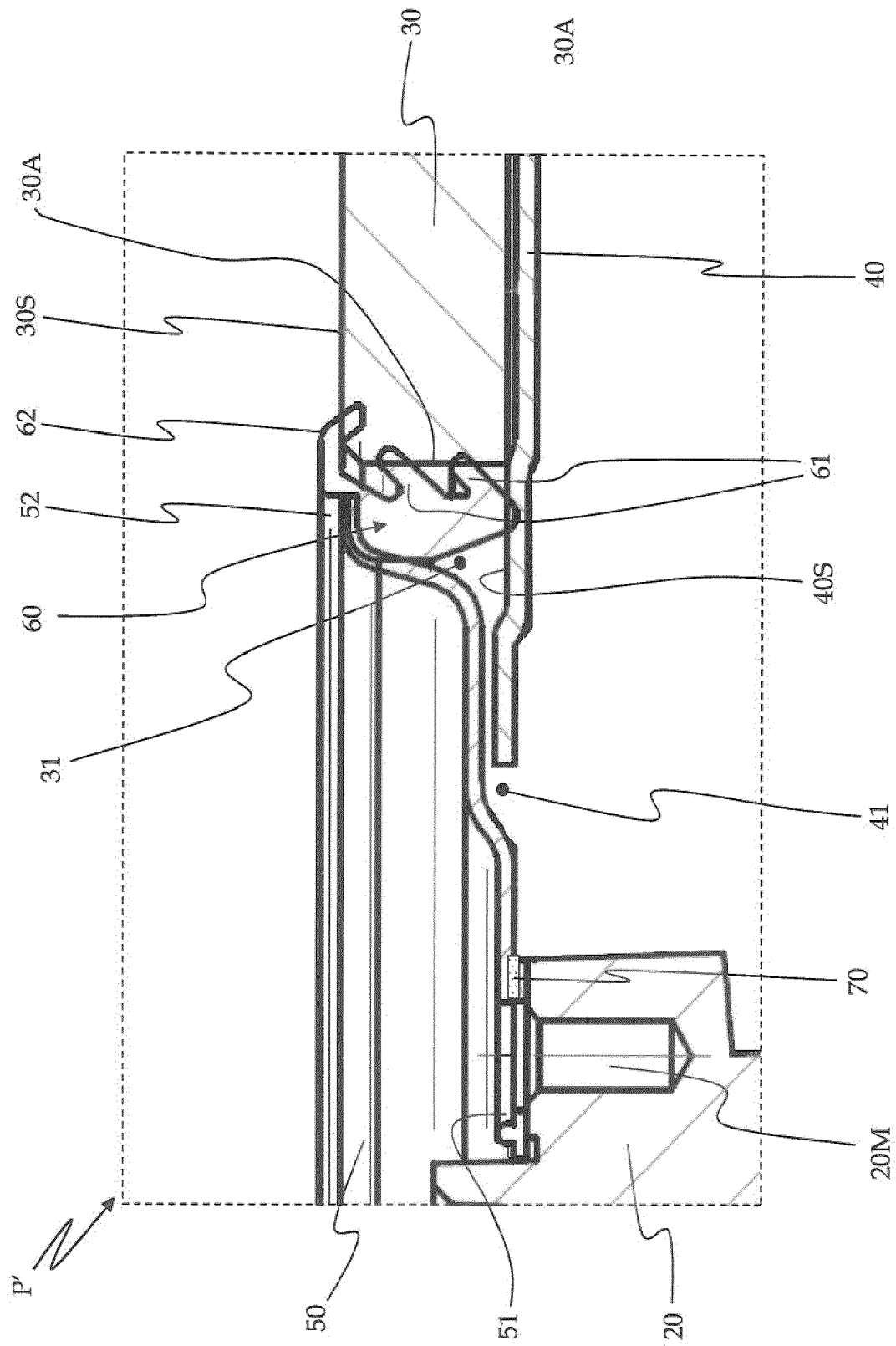


Fig. 6

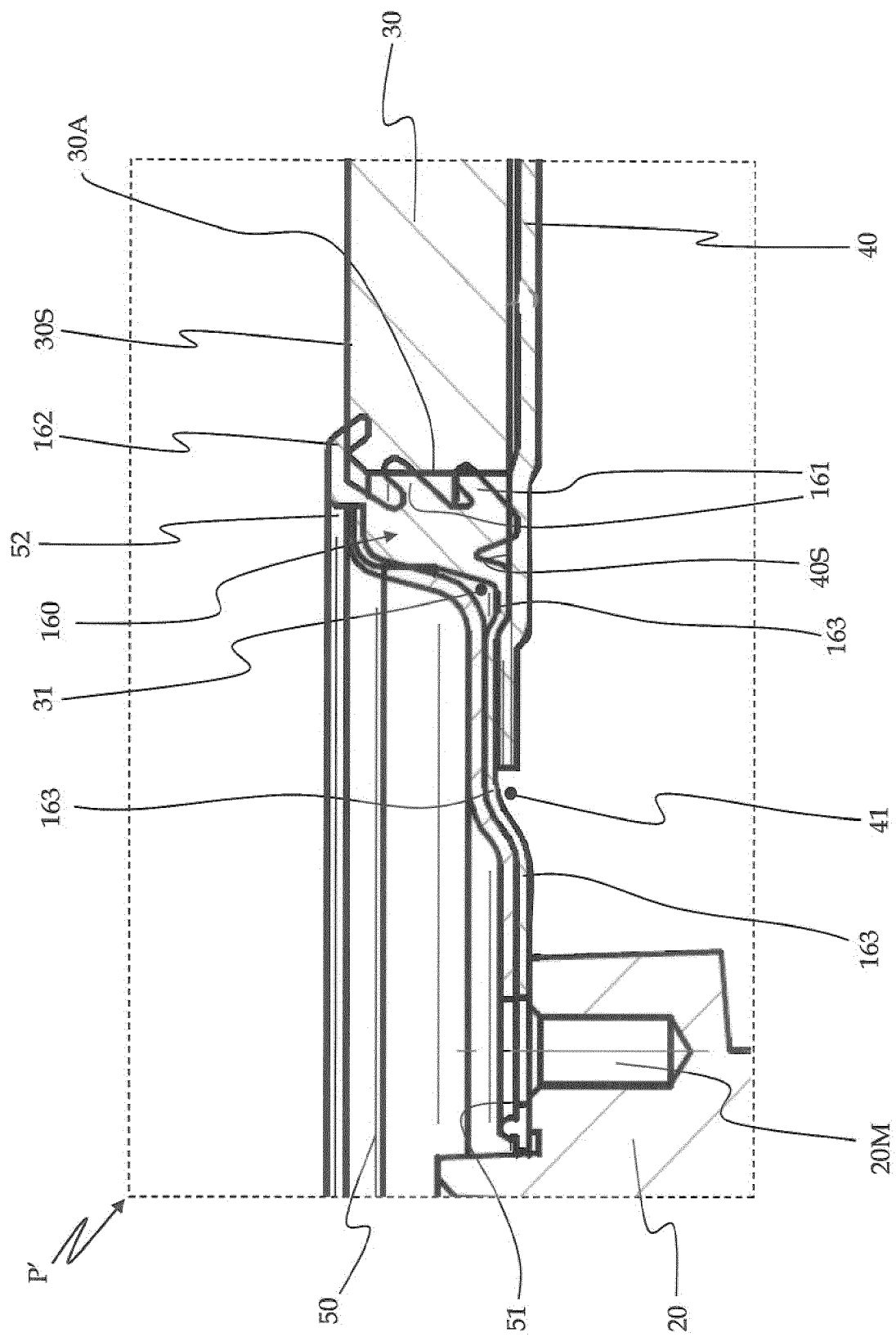


Fig. 7

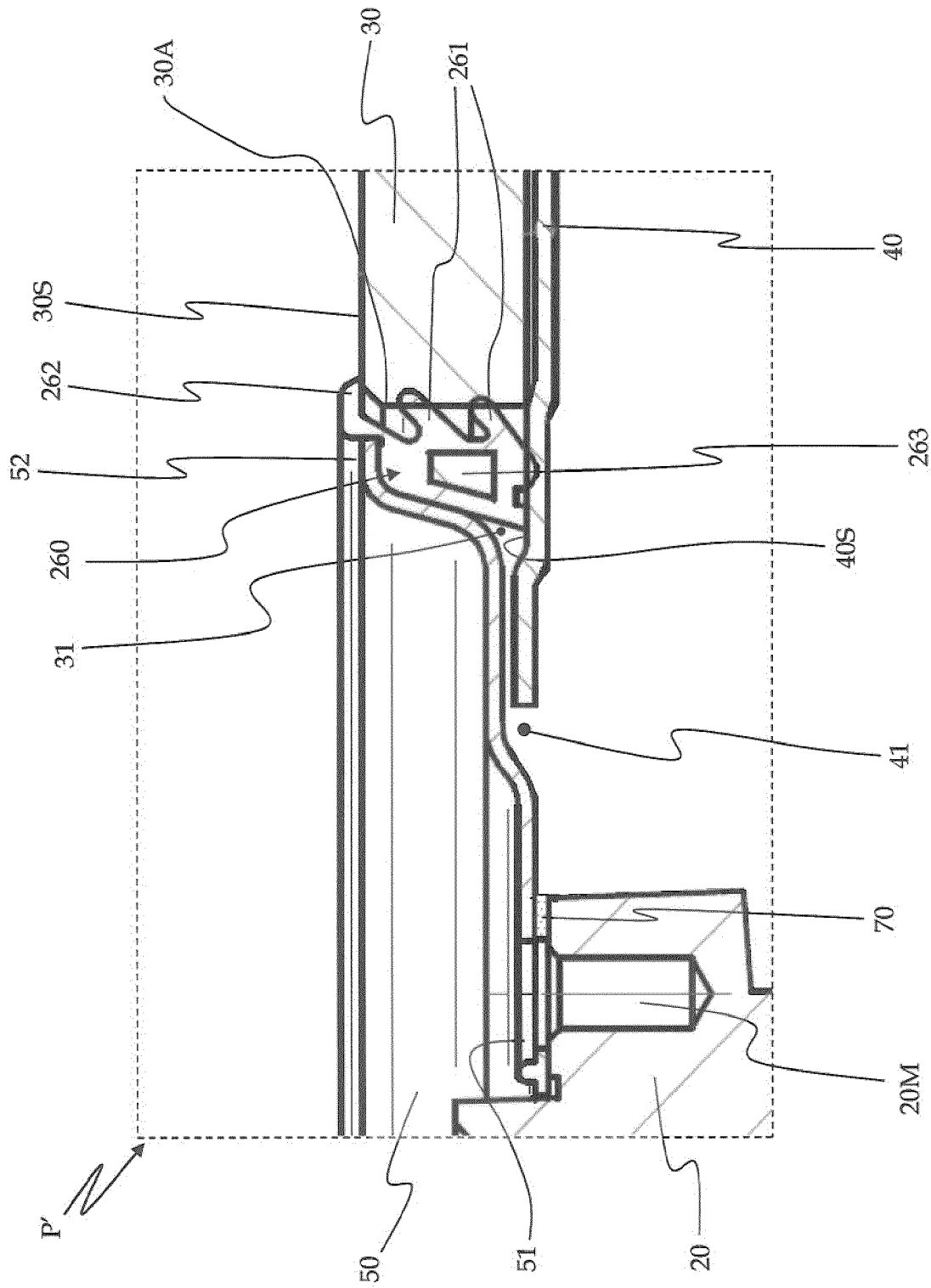


Fig. 8

REFERENCES CITED IN THE DESCRIPTION

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