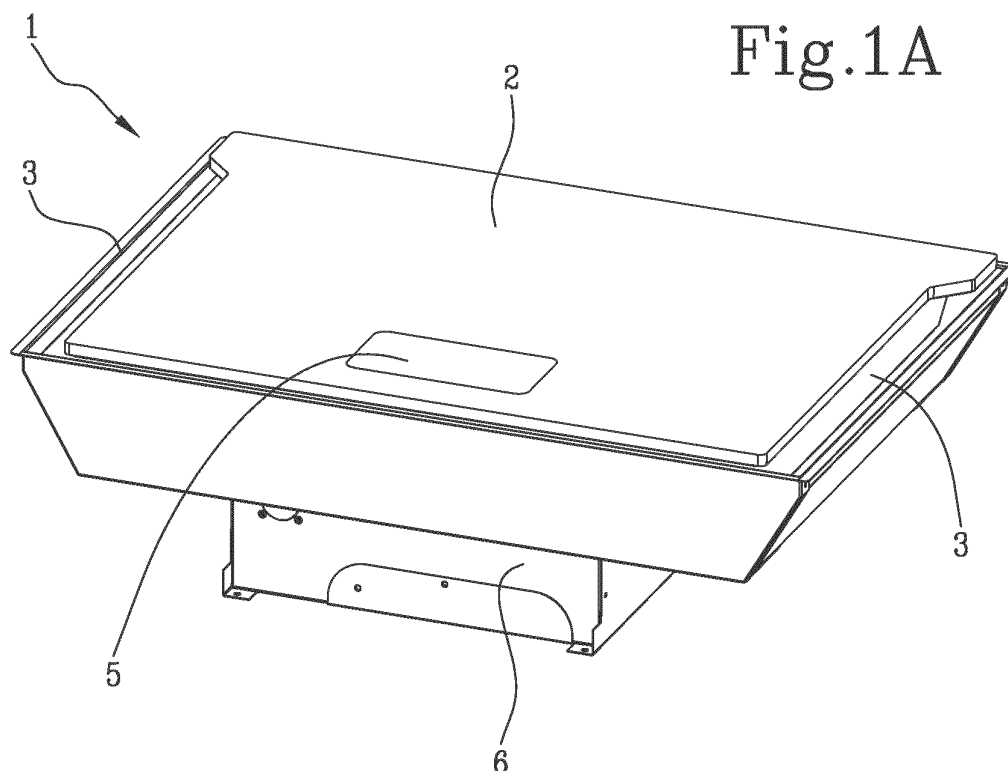


EP 4 542 120 A1

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posed between the suction chamber (6a) and the cooktop (2), configured to define a first configuration of the induction hob (1), in which the suction filter (6b) is covered by the cooktop (2), and a second configuration of the induction hob (1), in which the suction filter (6b) is exposed.



Description

TECHNICAL FIELD OF THE INVENTION

[0001] The present invention relates to an induction hob.

[0002] More particularly, the present invention relates to a worktop for a kitchen in which the aforementioned induction hob is installed and a method for producing the kitchen worktop.

[0003] The present invention is in the field of "invisible" induction hobs.

PRIOR ART

[0004] Nowadays invisible induction hobs are known in which the surface that defines the cooktop (for example made of marble) is integrated into the worktop of a kitchen.

[0005] Glass induction hobs are also known in which the suction hood is integrated into the induction hob and in particular in which the fume suction slits are defined in the cooktop, such as for example EP 3382285.

[0006] Glass induction hobs with integrated suction hood provided with plugs to be removed in case of need to clean the hood are also known.

[0007] The Applicant has observed that the known invisible induction hobs have the disadvantage of using different materials between the cooktop and the worktop, which cause a difference in height between the portion of the cooktop and the portion of the worktop surrounding the cooktop.

[0008] As a result, the known solutions of integrated hoods for invisible induction hobs partly cancel the aesthetic effect of integration of the cooktop with the worktop of the kitchen.

[0009] WO 2021/128961 A1 discloses a kitchen appliance 100 that is inserted into a cooktop 200 through a housing hole 202. This kitchen appliance 100 combines the functions of cooking and smoke extraction. The cooking appliance 100 includes an electromagnetic heating device 30 that heats food. The electromagnetic heating device 30 and an outer upper panel 11 of the apparatus 100 may be lifted by rotation with respect to a casing 10, so as to allow cleaning of the interior of the apparatus 100.

[0010] EP 3382285 A1 discloses an induction cooktop with integrated hood, which comprises an opening system with gas pistons and hinges that allow the ceramic glass cooktop to be lifted. The system includes a lower drawer to collect liquid or solid residues.

[0011] DE 202018105247 U discloses a kitchen cabinet with a body 2 and a drawer 3, in which there is a surface for the burners 4 with a downward ventilation 5 on an upper slab 3 of the body of the cabinet 2. The drawer 3 is positioned below the surface for the burners 4. There is a filtering system 6 in the drawer, with a connecting piece for an air discharge line 11. The drawer 3 can be closed so that the cooking vapours can be guided by the ventilation

5 directly into the filtering system 6.

SUMMARY OF THE INVENTION

[0012] The technical task of the present invention is therefore to provide a worktop for a kitchen and a method for producing the kitchen worktop that are able to overcome the drawbacks arising from the prior art.

[0013] The object of the present invention is therefore to provide a worktop for a kitchen and a method for producing the kitchen worktop that allow effective maintenance of the induction hob itself, i.e. of one or more components of the induction hob.

[0014] A further object of the present invention is therefore to provide a worktop for a kitchen and a method for producing the kitchen worktop that allow an effective integration between the worktop and the induction hob itself.

[0015] The specified technical task and specified aims are substantially achieved by a worktop for a kitchen and a method for producing the kitchen worktop comprising the technical characteristics set out in one or more of the appended claims. The dependent claims correspond to possible embodiments of the invention.

[0016] In particular, the specified technical task and specified aims are substantially achieved by a worktop for a kitchen comprising an induction hob comprising a cooktop, made of a same material as a worktop in which the induction hob is installed or installable, defining at least one suction area configured to suck cooking fumes during use of the induction hob and comprising one or more induction coils.

[0017] The induction hob further comprises a suction system defining a suction chamber arranged, in a use configuration of the cooktop, below the cooktop and communicating with the suction area of the cooktop. The cooktop is configured, in use, to define a suction force suitable to allow the suction of cooking fumes by means of the suction area and comprises a suction filter arranged inside the suction chamber.

[0018] The worktop for the kitchen therefore comprises the induction hob according to the present invention, wherein the cooktop is made of a same material as the worktop.

[0019] In other words, the worktop is made of a specific material, such as marble or stoneware, and the cooktop is made of the same material as the worktop so as to allow the induction hob to be invisible with respect to the rest of the worktop, i.e. without differences in height between the portion of the cooktop and the portion of the worktop surrounding the portion of the cooktop. In addition, the suction area is integrated into the top not generating visual effects that may cancel excessively the invisibility of the induction hob.

[0020] According to one aspect of the present invention, the suction system is made in the form of a suction hood and the suction area is made in the form of one or more slots, slits or openings.

[0021] The induction hob also comprises a movement mechanism interposed between the suction chamber and the cooktop. The movement mechanism is configured to define a first configuration of the induction hob, in which the suction filter is covered by the cooktop, and a second configuration of the induction hob, in which the suction filter is exposed.

[0022] In other words, the movement mechanism is capable of mutually moving the cooktop and the suction chamber so as to allow maintenance of the internal components of the induction hob.

[0023] Advantageously, the suction system does not need plugs or other cleaning elements that would risk cancelling the "invisibility" effect of the induction hob with respect to the rest of the worktop.

[0024] In addition, the movement mechanism allows the different components of the induction hob to be easily accessible for more efficient maintenance and cleaning.

[0025] The specified technical task and specified aims are further achieved by a method for producing a worktop comprising the steps of selecting a slab-shaped element in a specific material and producing a cooktop in a portion of the slab-shaped element defining the worktop.

[0026] The step for producing the cooktop comprises:

- defining on the portion of the slab-shaped element one or more suction areas;
- mounting, in a lower face of the portion of the slab-shaped element, one or more induction coils;
- mounting, in the lower face of the portion of the slab-shaped element, a suction system defining a suction chamber and comprising a suction filter;
- mounting a movement mechanism, interposed between the suction chamber and the lower face of the portion of the slab-shaped element, the movement mechanism being configured to move said induction hob between a first configuration of the induction hob in which said suction filter is covered by said cooktop and a second configuration of the induction hob in which said suction filter is exposed.

[0027] According to one aspect of the present invention, the step of producing the induction hob provides for cutting the portion of the slab-shaped element so as to make a slab adapted to define the cooktop, and comprises mounting the induction hob, subsequently to the producing and mounting steps, on the cut slab-shaped element so as to obtain said worktop.

BRIEF DESCRIPTION OF THE DRAWINGS

[0028] Further features and advantages of the present invention will become more apparent from the indicative and thus non-limiting description of an embodiment of an induction hob, a worktop and a method for producing the worktop.

[0029] Such a description will be set out below with reference to the accompanying drawings, which are pro-

vided solely for illustrative and therefore non-limiting purposes, in which:

- figures 1A and 1B are a schematic representation of an induction hob which is object of the present invention;
- figures 2A, 2B, 3A and 3B are a schematic representation of a worktop according to an embodiment of the present invention;
- figures 4A and 4B are a schematic representation of a worktop according to a further embodiment of the present invention;
- figures 4C, 4D, 4E are a schematic representation of a worktop according to further embodiments of the present invention.

DETAILED DESCRIPTION OF THE INVENTION

[0030] With reference to the appended figures, 1 denotes overall an induction hob. The induction hob 1, which is object of the present invention, is of the invisible type, i.e. an induction hob that blends in with the rest of the worktop 10 of the kitchen.

[0031] The induction hob 1 comprises a cooktop 2 made of a same material as the worktop 10 in which the induction hob 1 is installed or installable.

[0032] In other words, if the worktop 10 is made of glass, also the cooktop 2 is made of glass; if the worktop 10 is made of marble, also the cooktop 2 will be made of marble.

[0033] Preferably, the cooktop 2 is made of glass, metal, concrete, stoneware, ceramic, marble, quartz or derivatives or compounds thereof. Other materials with which the cooktop 2 can be produced are possible, as a function of the material with which the worktop 10 is made.

[0034] The cooktop 2 defines at least one suction area 3 configured to suck cooking fumes during use of the induction hob 1, thus achieving a function of suction hood integrated in the induction hob 1.

[0035] The cooktop 2 comprises one or more induction coils 4. The induction coils 4 are defined in a lower surface of the cooktop 2. The term "lower surface" is intended to mean a face of the cooktop 2 opposite the face normally turned upwards when the induction hob 1 is installed. In other words, the lower surface is the surface opposite the support surface for pots/pans defined by the cooktop 2 itself.

[0036] The cooktop 2 further comprises a user interface panel 5 with which a user can interact to control one or more of the components and/or operations of the induction hob 1.

[0037] Preferably, the suction area 3 is defined by one or more slits or openings. Preferably, the suction area 3 is defined in a perimeter portion, i.e. in a central portion of the cooktop 2.

[0038] The suction area 3 is therefore defined by one or more elements of variable shape that are distributed in

the perimeter of the cooktop 2 and/or in a central portion of the cooktop 2. The distribution and shape of these slits or openings is therefore selected as a function of the dimensions of the cooktop 2 so that they can suck all the fumes generated by the pans and/or by the pots used on the cooktop 2.

[0039] For example, figures 1A to 4B represent suction areas 3 with elongated shape and defined in perimeter portions of the cooktop 2.

[0040] Figure 4C represents a suction area 3 in the form of a round hole defined in a central position of the cooktop 2.

[0041] Figure 4D represents a suction area 3 rectangular in shape defined in an upper perimeter portion of the cooktop 2 and extending parallel to this upper perimeter portion.

[0042] Figure 4E represents a suction area 3 rectangular in shape defined in a central portion of the cooktop 2 and with vertical orientation (with reference to the appended figures).

[0043] The induction hob 1 further comprises a suction system 6 defining a suction chamber 6a arranged, in a use configuration of the cooktop 2, below the cooktop 2. In other words, the suction chamber 6a defines a volume in which, in use, the induction coils 4 are also contained.

[0044] The suction chamber 6a is communicating with the suction area 3 of the cooktop 2: in this way the suction system 6 is configured, in use, to define a suction force suitable to allow the suction of cooking fumes by means of the suction area 3. In other words, the cooktop 2 is able (by means of the suction system 6) to define the aforesaid suction force so as to suck cooking fumes by means of the suction area 3.

[0045] The suction system 6 comprises a suction filter 6b (shown in figure 3b with a grid pattern) arranged inside the suction chamber 6a. The suction filter 6b allows the cooking fumes to be filtered and, should any inconvenience occur, it also allows collecting and blocking solid or liquid residues generated during food preparation and infiltrated into the suction chamber 6a through the suction area 3.

[0046] The suction system 6 further comprises an electric motor positioned in the lower part of the suction chamber 6a; in particular, in figure 3b it can be seen that the electric motor is provided with a suction fan positioned under the suction filter 6b.

[0047] Preferably, the suction filter 6b is a removable type filter.

[0048] Preferably, the suction filter 6b is a grease filter.

[0049] Preferably, the suction filter 6b is positioned in the centre of the suction chamber 6a and is configured to prevent solid or liquid debris or other residues from falling into the electrical components of the suction system 6.

[0050] In other words, the suction system 6 defines, that is comprises, a suction hood integrated in the cooktop 2, that is in the induction hob 1, and provided with an electric motor.

[0051] The suction hood can operate at different

speeds, extracting fumes and/or vapours generated in proximity to the pots during cooking.

[0052] The induction hob 1 further comprises a movement mechanism 7 interposed between the suction chamber 6a and the cooktop 2. The movement mechanism 7 is configured to define a first configuration of the induction hob 1 and a second configuration of the induction hob 1.

[0053] The first configuration of the induction hob 1 is a configuration in which the suction filter 6b is covered by the cooktop 2. In other words, the first configuration is a configuration in which the suction filter 6b is located below the cooktop 2 and is therefore occluded by it.

[0054] The second configuration of the induction hob 1 is a configuration in which the suction filter 6b is exposed. In other words, in the second configuration the suction filter 6b is not arranged below the cooktop 2 and is therefore accessible to a user who intends to clean it or replace it.

[0055] In the second configuration, other components of the induction hob 1 are accessible for maintenance, cleaning and/or replacement reasons.

[0056] In a first non-limiting embodiment, such as for example that of figures 1A, 1B, 2A, 2B, 3A and 3B of the induction hob 1, the movement mechanism 7 comprises a hinge mechanism 7a or other similar lever system installed in a lower perimeter portion of the cooktop 2. The hinge mechanism is provided with special guides and springs to allow a guided and accompanied lifting and lowering of the cooktop 2 in order to prevent damage during opening or closing. The hinge mechanism 7a is configured to realize a tilting movement of the cooktop 2 between the first configuration and the second configuration.

[0057] In the first configuration (figures 2A and 2B), the cooktop 2 is kept flush with a worktop 10 in which the induction hob 1 is installed, and in the second configuration (figures 3A and 3B) the cooktop 2 is lifted so as to make the suction chamber 6a accessible. The term flush means that the cooktop 2 and the worktop 10 lie on a same lying plane.

[0058] Therefore, the hinge mechanism 7a causes the cooktop 2 to move like a door of a cabinet so that the tilting movement easily and effortlessly allows a user to "remove" the cooktop 2 itself to make the suction chamber 6a and therefore the suction filter 6b accessible.

[0059] Advantageously, in this embodiment the hinge mechanism 7a allows the cooktop 2 to be lifted manually and easily to access the lower compartment (suction chamber 6a) where the solid or liquid residues generated during food preparation can fall or settle.

[0060] When the cooktop 2 is opened, it remains alone in a stable position thanks to the force exerted by the hinge mechanism 7a that also accompanies the movement during the closing step of the cooktop 2.

[0061] Advantageously, the hinge mechanism 7a is practical and easy to use so that one can easily access the lower portion of the induction hob 1 so that all cleaning

and maintenance operations can be performed.

[0062] In a further non-limiting embodiment (figures 4A and 4B), the suction chamber 6a is defined by a box-shaped body 8 in which the suction filter 6b is defined. In this embodiment, the movement mechanism 7 is made in the form of a sliding guide inside which the box-shaped body 8 is slidable, in use, between the first configuration and the second configuration.

[0063] In the first configuration (figures 4A and 4B), the box-shaped body 8 is arranged below the cooktop 2, and in the second configuration the box-shaped body 8, i.e. the suction filter 6b is extracted so as to be moved away from the cooktop 2. In other words, in this embodiment the suction chamber 6a is made in the form of a drawer whose opening allows to access to the suction filter 6b by removing it from the portion arranged below the cooktop 2. Therefore, the box-shaped body 8 is preferably provided with a handle 8a or other gripping device that allows it to be grasped by a user so as to slide the box-shaped body 8 itself. Advantageously, this embodiment involves a further facilitation in the passage from the first to the second configuration of the induction hob 1 so as to allow a facilitated cleaning of the suction filter 6b, i.e. of further components of the induction hob 1 itself.

[0064] Advantageously, the present invention allows the opening of the cooktop 2 through manual lifting/sliding without the aid of particular tools. Advantageously, the suction chamber 6a by means of the suction area 3 is also able to collect the liquid and solid residues sucked while cooking the food.

[0065] The present invention also relates to a worktop 10 for a kitchen comprising an induction hob 1 according to any of the embodiments described above.

[0066] In the appended figures, the worktop 10 has been represented as forming part of a module of a kitchen, but other configurations and extensions thereof are possible as a function of the dimensions and type of kitchen (such as, for example, an island configuration).

[0067] The present invention also relates to a method for producing (i.e. a production process) a kitchen worktop 10. The method comprises the steps of selecting a slab-shaped element in a specific material. The slab-shaped element will actually define the support surface of the worktop 10.

[0068] Preferably, the slab-shaped element is made of glass, metal, cement, stoneware, ceramics, marble, quartz or derivatives or compounds thereof.

[0069] The method also provides for producing a cooktop 2, i.e. an induction hob 1 having the cooktop 2, in a portion of the slab-shaped element defining the worktop. Therefore, also the cooktop 2 of the induction hob 1 will be made of glass, metal, cement, stoneware, ceramic, marble, quartz or derivatives or compounds thereof. In this way, an aesthetic continuity is guaranteed between the cooktop 2 and the worktop 10 itself, allowing the induction hob 1 to be invisible with respect to the worktop 10.

[0070] The step for producing the induction hob 1, i.e. the cooktop 2, is carried out by defining on the portion of

the slab-shaped element one or more suction areas 3. This step is also carried out by mounting, in a lower face of the portion of the slab-shaped element, one or more induction coils 4.

5 **[0071]** This step is also carried out by mounting in the lower face a suction system 6 defining a suction chamber 6a and comprising a suction filter 6b.

[0072] This step is also carried out by mounting a movement mechanism 7 interposed between the suction chamber 6a and the lower face of the slab-shaped element portion (i.e. the cooktop 2). The moving mechanism 7 is configured to move the slab between the first configuration and the second configuration of the induction hob 1 as described above.

15 **[0073]** The method described above allows to produce, for example, an induction hob 1, i.e. a worktop 10 as represented in figures 4A and 4B.

[0074] Preferably, the step for producing the cooktop 2 is also carried out by cutting the portion of the slab-shaped element so as to obtain a slab adapted to define the cooktop 2. In this way it is possible to produce an induction hob 1 like the one represented in figures 1A, 1B, 2A, 2B, 3A and 3B.

[0075] Preferably, the step of cutting the slab-shaped element is realized by milling, mechanical cutting, water cutting or laser cutting. In this way, it is possible to obtain a slab in which the difference in texture with the rest of the slab-shaped element is minimal in proximity to the edges of the cooktop 2, thus guaranteeing an aesthetic effect of continuity between the cooktop 2 and the rest of the worktop 10.

25 **[0076]** The step of producing of the cooktop 2 is also carried out by mounting the induction hob 1, subsequently to the producing and mounting steps described above, on the cut slab-shaped element so as to obtain the worktop 10.

[0077] The present invention is able to overcome the drawbacks which have emerged in the prior art.

35 **[0078]** In particular, the movement system 7 allows to obtain a relative movement between the cooktop 2 and the suction chamber 6a so as to obtain a facilitated access to the suction chamber 6a itself in order to be able to clean the suction filter 6b, i.e. to perform maintenance and/or replacement operations on the suction filter 6b or other components of the induction hob 1.

Claims

50 1. Worktop (10) for a kitchen comprising an induction hob (1), the induction hob (1) comprising:

- a cooktop (2) defining at least one suction area (3) configured to suck cooking fumes during use of said induction hob (1), the cooktop comprising one or more induction coils (4);
- a suction system (6) defining a suction chamber (6a) arranged, in a use configuration of the

- cooktop (2), below said cooktop (2) and communicating with said suction area (3) of the cooktop (2), said suction system (6) being configured, in use, to define a suction force adapted to allow the suction of cooking fumes by means of said suction area (3), the suction system comprising a suction filter (6b) arranged inside said suction chamber (6a);
- a movement mechanism (7) interposed between said suction chamber (6a) and said cooktop (2), the movement mechanism being configured to define a first configuration of the induction hob (1) in which said suction filter (6b) is covered by said cooktop (2), and a second configuration of the induction hob (1) in which said suction filter (6b) is exposed; wherein the induction hob (1) is made of a same material as the worktop (10).
2. Worktop (10) according to claim 1, wherein said movement mechanism (7) comprises a hinge mechanism (7a) installed in a perimeter portion of said cooktop (2) and configured to perform a tilting movement of said cooktop (2) between the first configuration, in which said cooktop (2) is kept flush with a worktop (10) in which said induction hob (1) is installed, and the second configuration, in which said cooktop (2) is lifted so as to make said suction chamber (6s) accessible.
3. Worktop (10) according to claim 1, wherein said suction chamber (6a) is defined by a box-shaped body (8) in which said suction filter (6b) is defined and in which said movement mechanism (7) is made in the form of a sliding guide inside which said box-shaped body (8) is slidable, in use, between the first configuration, in which the box-shaped body (8) is arranged below the cooktop (2), and the second configuration in which the box-shaped body (8), i.e. the suction filter (6b) is extracted so as to be moved away from the cooktop (2).
4. Worktop (10) according to any one of the preceding claims, wherein said suction area (3) is defined by one or more slits or openings.
5. Worktop (10) according to one or more of the preceding claims, wherein said suction area (3) is defined in a perimeter portion or in a central portion of said cooktop (2).
6. Worktop (10) according to one or more of the preceding claims, wherein said cooktop (2) is made of glass, metal, cement, stoneware, ceramic, marble, quartz or derivatives or compounds thereof.
7. Method for producing a kitchen worktop (10), the method comprising the steps of:
- selecting a slab-shaped element in a specific material;
 - producing an induction hob (1) having a cooktop (2) in a portion of said slab-shaped element defining the worktop;
- wherein said step of producing the induction hob (1) comprises:
- defining on said portion of the slab-shaped element one or more suction areas (3);
 - mounting, on a lower face of said portion of the slab-shaped element, one or more induction coils (4);
 - mounting, in said lower face, a suction system (6) defining a suction chamber (6a) and comprising a suction filter (6b);
 - mounting a movement mechanism (7) interposed between said suction chamber (6a) and said lower face of the portion of the slab-shaped element, said movement mechanism (7) being configured to move said induction hob (1) between a first configuration, in which said suction filter (6b) is covered by said cooktop (2) and a second configuration, in which said suction filter (6b) is exposed.
8. Production method according to claim 7, wherein said step for producing the induction hob (1) further comprises:
- cutting said portion of the slab-shaped element so as to obtain a slab adapted to define said cooktop (2); and
 - mounting said induction hob (1), subsequent to said producing and mounting steps, on said cut slab-shaped element so as to obtain said worktop (10).
9. Production method according to claim 8, wherein said step of cutting the slab-shaped element is realized by milling, mechanical cutting, water cutting or laser cutting.

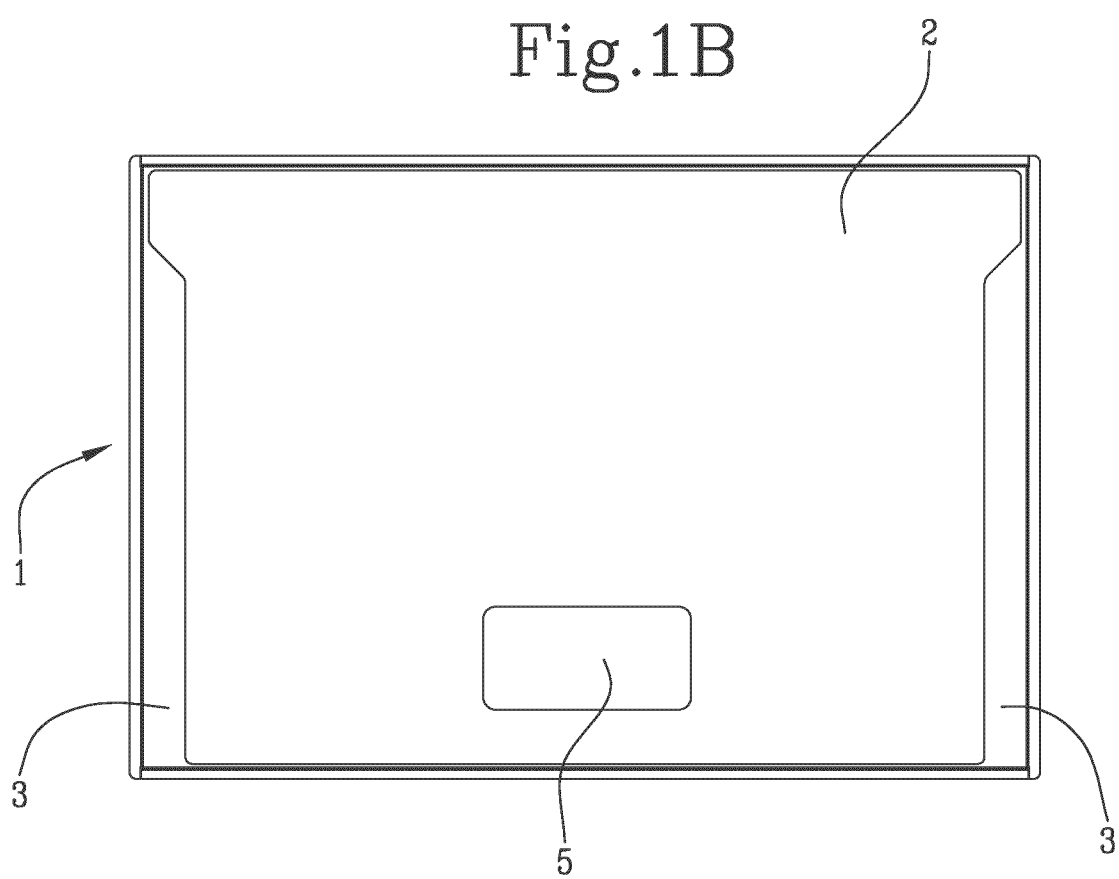
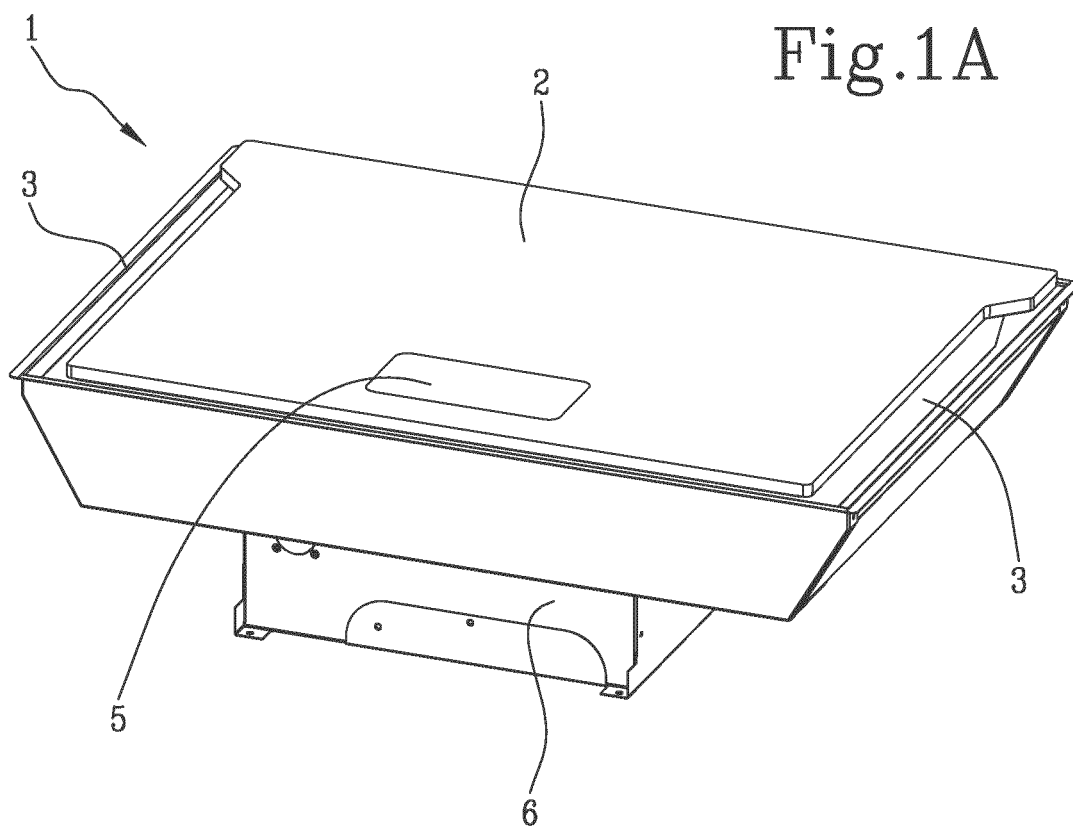


Fig.2A

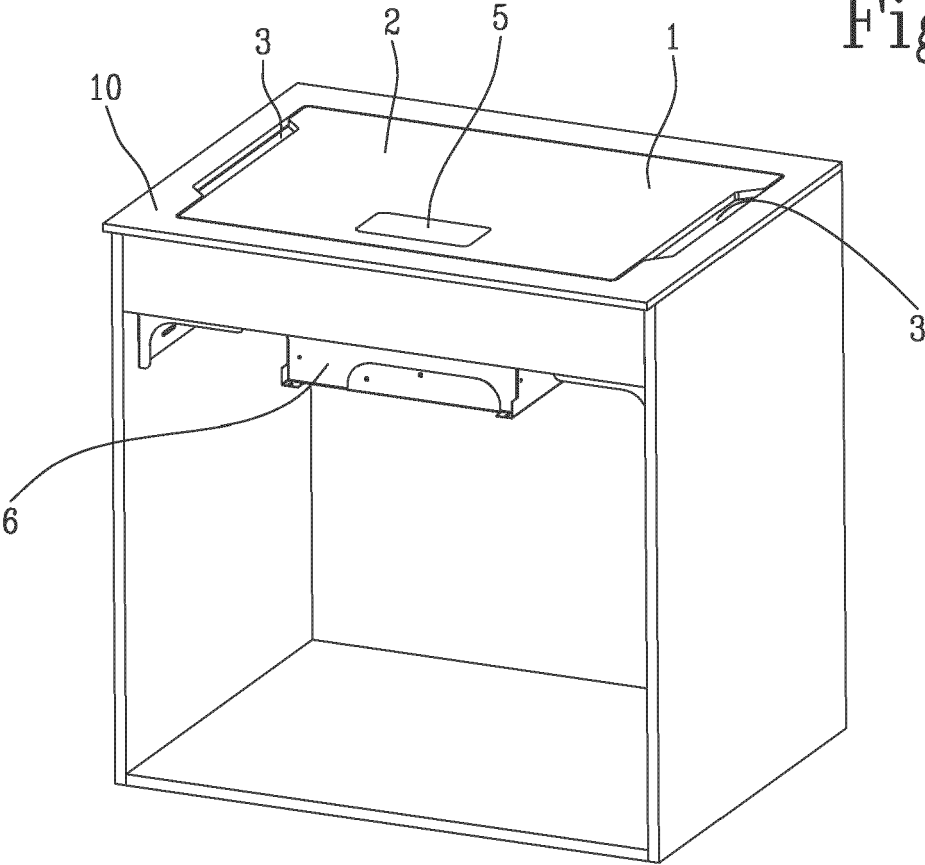


Fig.2B

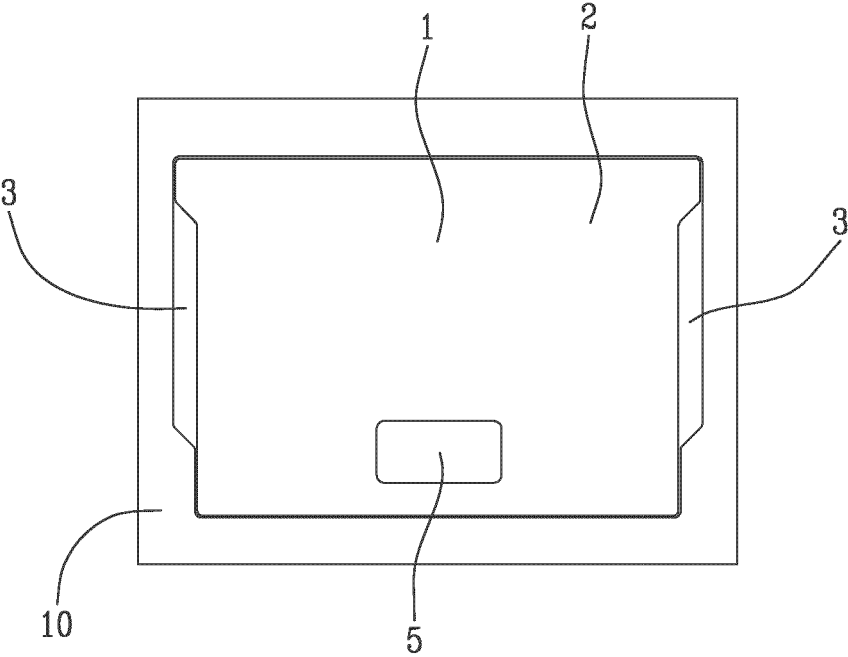


Fig.3A

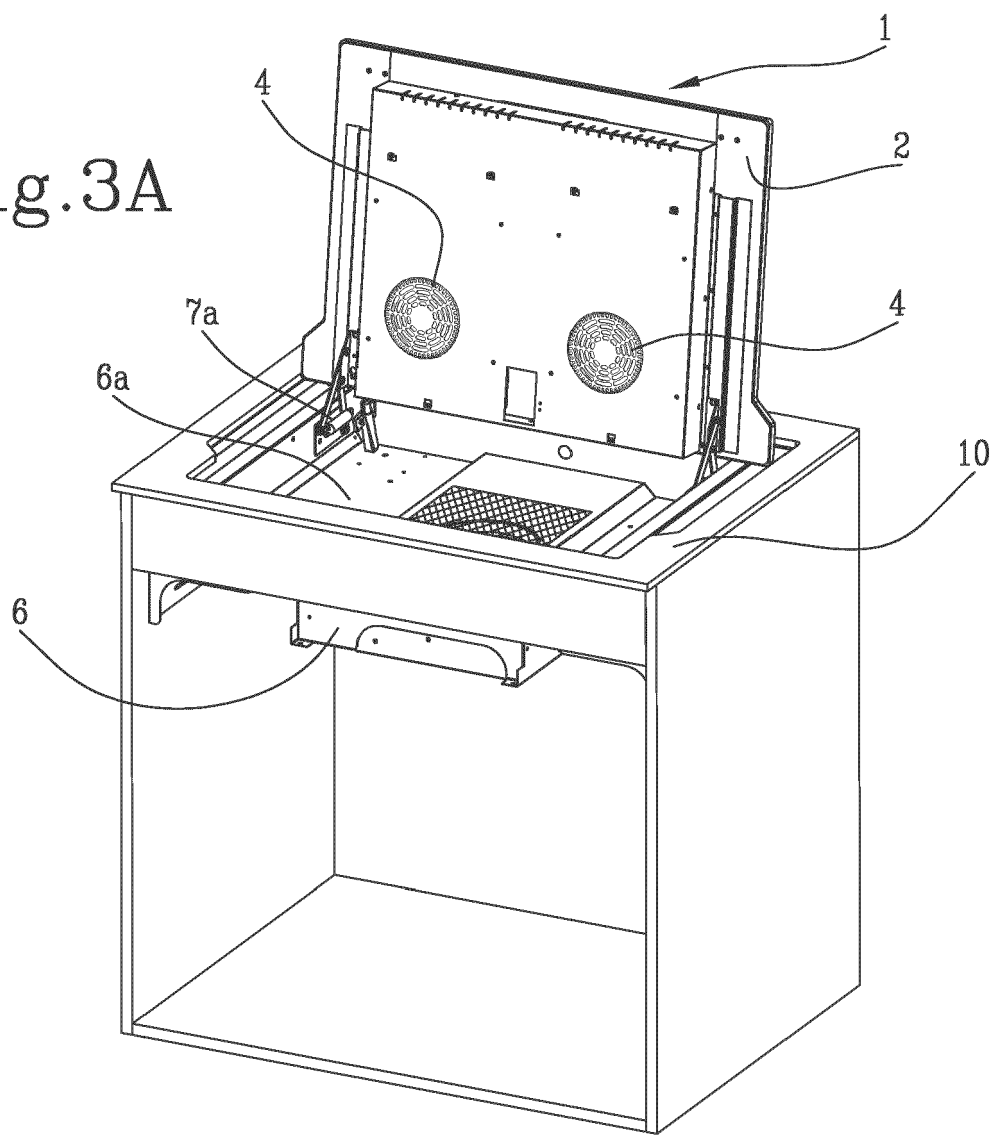


Fig.3B

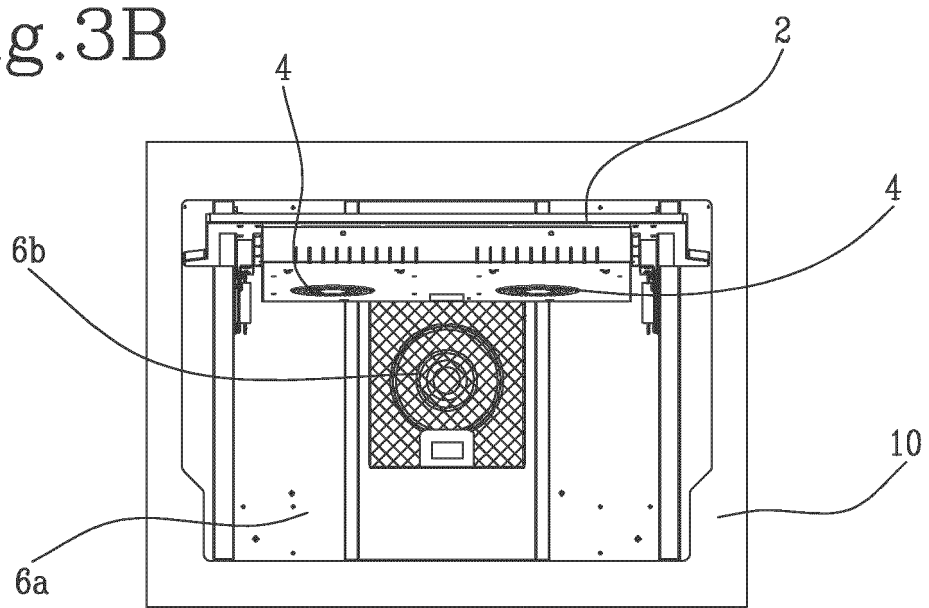


Fig.4A

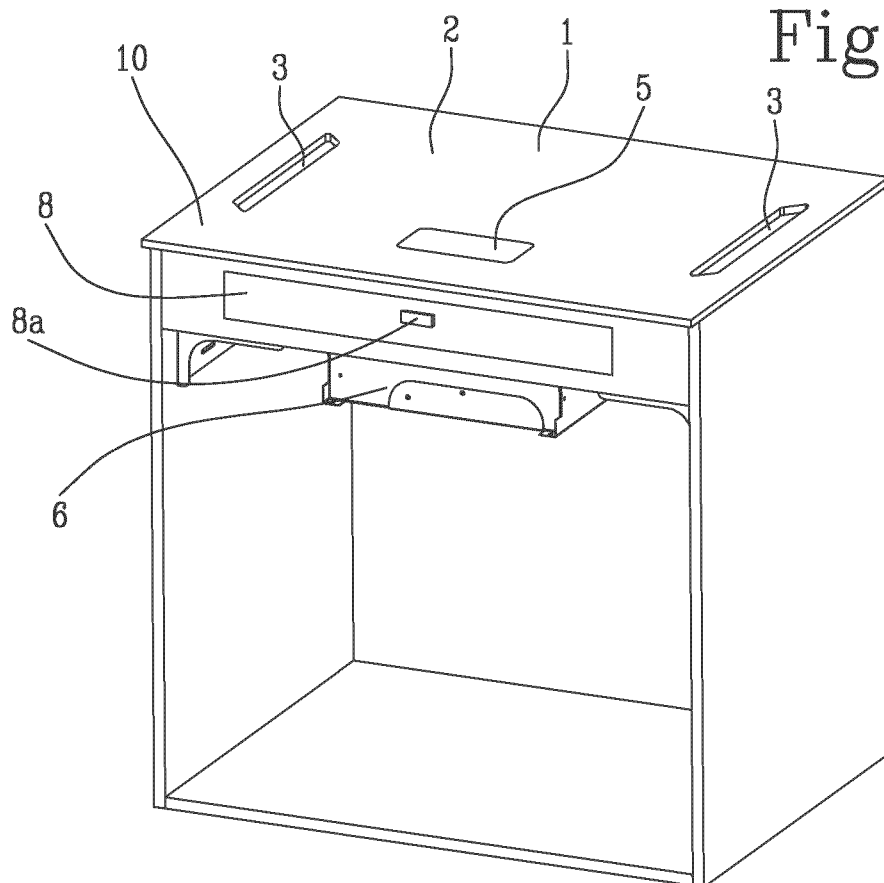


Fig.4B

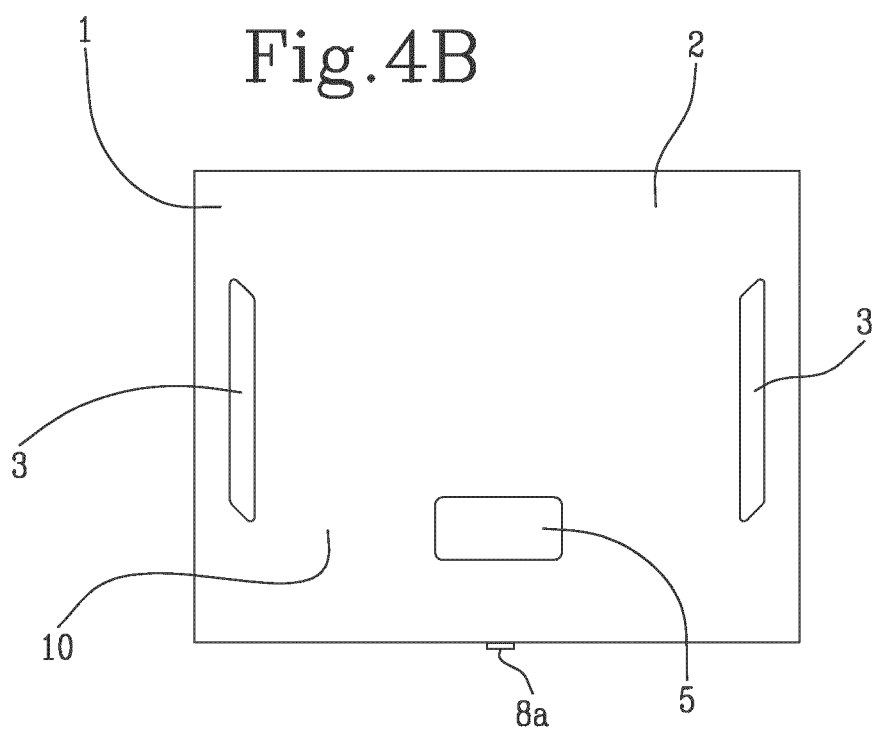


Fig.4C

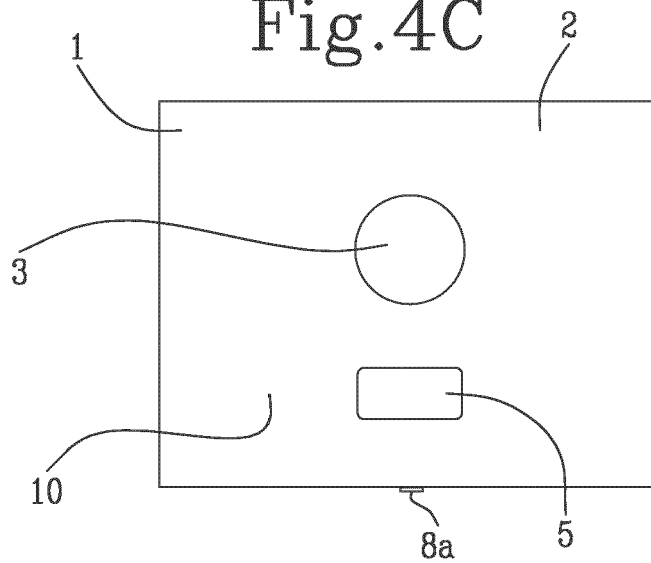


Fig.4D

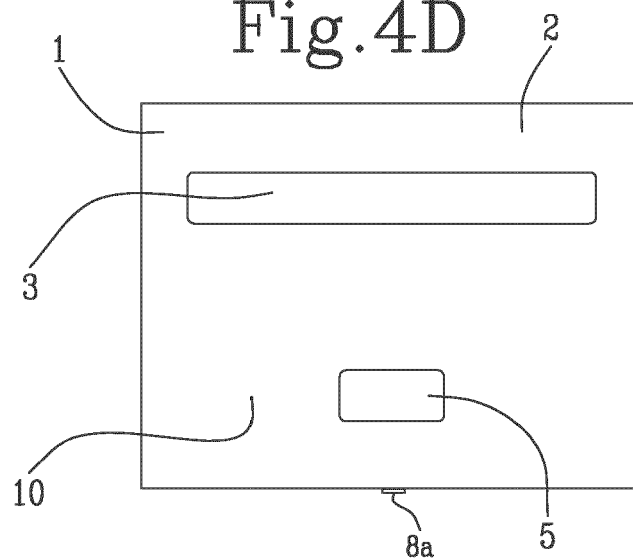
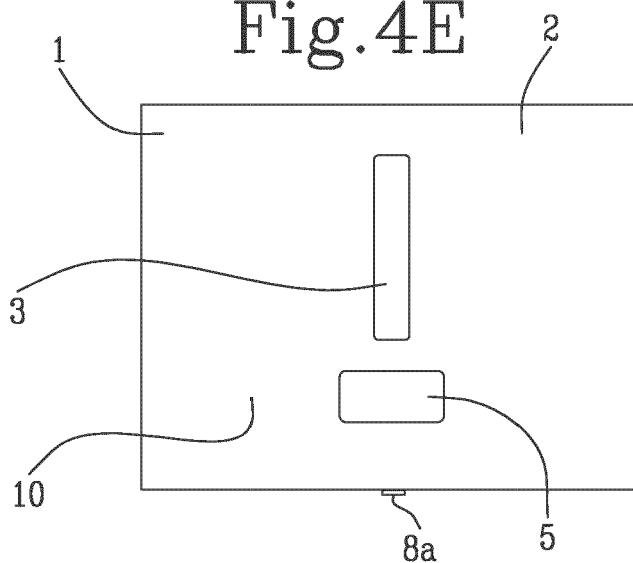


Fig.4E





EUROPEAN SEARCH REPORT

Application Number

EP 24 20 7059

DOCUMENTS CONSIDERED TO BE RELEVANT

| Category | Citation of document with indication, where appropriate, of relevant passages | Relevant to claim | CLASSIFICATION OF THE APPLICATION (IPC) |
|--|---|---|---|
| X,D | WO 2021/128961 A1 (GUANGDONG ARCAIR APPLIANCE CO LTD [CN]) 1 July 2021 (2021-07-01) * figures * | 7 | INV. F24C15/20 F24C15/10 |
| Y | ----- | 1-6,8,9 | |
| Y | ES 2 455 442 A1 (BARBERO GONZALEZ ALBERTO EUGENIO [ES]) 15 April 2014 (2014-04-15) * the whole document * | 1-6,8,9 | |
| Y,D | DE 20 2018 105247 U1 (MINENERGY GMBH [DE]) 28 September 2018 (2018-09-28) * paragraph [0021]; figures * | 3 | |
| Y | DE 20 2023 103030 U1 (LATINI ELIO E C SAS [IT]) 5 July 2023 (2023-07-05) * paragraph [0021]; figures * | 1,6,8,9 | |
| A | EP 2 397 775 A2 (EXKLUSIV HAUBEN GUTMANN GMBH [DE]) 21 December 2011 (2011-12-21) * figures * | 1-9 | |
| A | EP 3 671 046 A1 (BSH HAUSGERAETE GMBH [DE]) 24 June 2020 (2020-06-24) * paragraph [0008] * | 1-9 | TECHNICAL FIELDS SEARCHED (IPC) F24C H05B |
| The present search report has been drawn up for all claims | | | |
| Place of search The Hague | | Date of completion of the search 7 February 2025 | Examiner Verdoodt, Luk |
| 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 | |

EPO FORM 1503 03.82 (P04C01)



Application Number

EP 24 20 7059

CLAIMS INCURRING FEES

The present European patent application comprised at the time of filing claims for which payment was due.

☐ Only part of the claims have been paid within the prescribed time limit. The present European search report has been drawn up for those claims for which no payment was due and for those claims for which claims fees have been paid, namely claim(s):

☐ No claims fees have been paid within the prescribed time limit. The present European search report has been drawn up for those claims for which no payment was due.

LACK OF UNITY OF INVENTION

The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

see sheet B

☐ All further search fees have been paid within the fixed time limit. The present European search report has been drawn up for all claims.

☒ As all searchable claims could be searched without effort justifying an additional fee, the Search Division did not invite payment of any additional fee.

☐ Only part of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the inventions in respect of which search fees have been paid, namely claims:

☐ None of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the invention first mentioned in the claims, namely claims:

☐ The present supplementary European search report has been drawn up for those parts of the European patent application which relate to the invention first mentioned in the claims (Rule 164 (1) EPC).

**LACK OF UNITY OF INVENTION
SHEET B**

Application Number

EP 24 20 7059

The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

1. claims: 1-9

Worktop for a kitchen comprising an induction hob, wherein the induction hob is made of a same material as the worktop.

1.1. claims: 7-9

Method for producing a kitchen worktop.

Please note that all inventions mentioned under item 1, although not necessarily linked by a common inventive concept, could be searched without effort justifying an additional fee.

ANNEX TO THE EUROPEAN SEARCH REPORT ON EUROPEAN PATENT APPLICATION NO.

EP 24 20 7059

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This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on
The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

07-02-2025

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| Patent document cited in search report | Publication date | Patent family member(s) | Publication date |
|---|---------------------|----------------------------|---------------------|
| WO 2021128961 A1 | 01-07-2021 | EP 4063744 A1 | 28-09-2022 |
| | | WO 2021128961 A1 | 01-07-2021 |
| ----- | | | |
| ES 2455442 A1 | 15-04-2014 | NONE | |
| ----- | | | |
| DE 202018105247 U1 | 28-09-2018 | NONE | |
| ----- | | | |
| DE 202023103030 U1 | 05-07-2023 | DE 202023103030 U1 | 05-07-2023 |
| | | IT 202200002270 U1 | 01-12-2023 |
| ----- | | | |
| EP 2397775 A2 | 21-12-2011 | DE 102011008428 A1 | 22-12-2011 |
| | | EP 2397775 A2 | 21-12-2011 |
| ----- | | | |
| EP 3671046 A1 | 24-06-2020 | EP 3671046 A1 | 24-06-2020 |
| | | ES 2768073 A1 | 19-06-2020 |
| ----- | | | |

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35

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45

50

55

EPO FORM P0459

For more details about this annex : see Official Journal of the European Patent Office, No. 12/82

REFERENCES CITED IN THE DESCRIPTION

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Patent documents cited in the description

- EP 3382285 A [0005]
- WO 2021128961 A1 [0009]
- EP 3382285 A1 [0010]
- DE 202018105247 U [0011]