



(12) **EUROPEAN PATENT APPLICATION**

(43) Date of publication:
21.12.2022 Bulletin 2022/51

(51) International Patent Classification (IPC):
H05B 6/12 (2006.01)

(21) Application number: **21179404.5**

(52) Cooperative Patent Classification (CPC):
H05B 6/1263; H05B 2206/022

(22) Date of filing: **15.06.2021**

(84) Designated Contracting States:
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR
Designated Extension States:
BA ME
Designated Validation States:
KH MA MD TN

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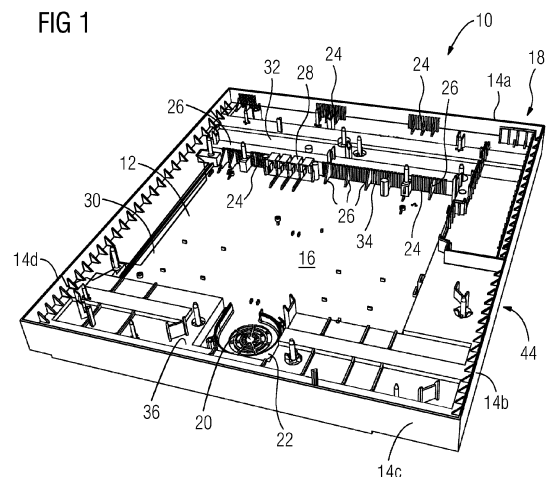
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(54) **COOKING HOB, IN PARTICULAR INDUCTION COOKING HOB, INCLUDING A HOUSING**

(57) Cooking hob, in particular induction cooking hob, including a housing (10) and a cooking hob plate attached to the housing, wherein the housing (10) and the cooking hob plate enclose at least one interior space (16) in which electric and/or electronic components of the cooking hob are arrangeable or arranged, wherein the housing (10) comprises at least one or two or more bottom walls (30, 32, 36) and at least one or two or more side walls (14a-d, 34), wherein at least one or two or more side walls are housing side walls (14a-d) that form the outermost side walls (14a-14d) of the housing and that extend upwards from at least one or two or more of the bottom walls (30, 32, 36) and which are provided to be attached to the cooking hob plate, and wherein at least one or two or more side walls are interior side walls (34) being distanced from the outermost side walls (14a-14d) that extend upwards from at least one or two or more of the bottom walls (30, 32, 36) towards another of the at least one or two or more bottom walls (30, 32, 36), wherein the interior side walls (34) are positioned inside from the at least one or two or more housing side walls (14a-d), wherein at least one of the interior side walls (34) comprises at least one or two or a plurality of air outlets (24).

FIG 1



Description

[0001] The present invention relates to a cooking hob, in particular an induction cooking hob, including a housing.

[0002] Cooking hobs and specifically induction cooking hobs require a cooling arrangement for cooling temperature sensitive electronic components arranged below the cooking hob plate within a space formed by the cooking hob plate and a housing attached to the cooking hob plate.

[0003] DE 10 2018 216 465 A1 discloses a cooking hob having a specific air suction arrangement. The cooking hob has a cooking hob plate, a housing which is arranged below the cooking hob plate, delimiting an accommodation space for functional units of the cooking hob. Within the accommodation space there is an air suction arrangement provided. The fan of the air suction arrangement is provided to generate an air flow flowing towards functional units within the accommodation space, wherein the air flow can leave the accommodation space via air outlets arranged in side walls of the cooking hob housing.

[0004] The object of the present invention is to provide a cooking hob with a housing defining a space for the accommodation of functional units within the space, wherein the cooling capabilities with respect to cooling the functional units shall be improved.

[0005] This object is solved by a cooking hob, in particular an induction cooking hob, including a housing and a cooking hob plate attached to the housing, wherein the housing and the cooking hob plate enclose at least one interior space in which electric and/or electronic components of the cooking hob are arrangeable or arranged, wherein the housing comprises at least one or two or more bottom walls and at least one or two or more side walls, wherein at least one or two or more side walls are housing side walls that form the outermost side walls of the housing and that extend upwards from at least one or two or more of the bottom walls and which are provided to be attached to the cooking hob plate, and wherein at least one or two or more side walls are interior side walls being distanced from the outermost side walls that extend upwards from at least one or two or more of the bottom walls towards another of the at least one or two or more bottom walls, wherein the interior side walls are positioned inside from the at least one or two or more housing side walls, wherein at least one of the interior side walls comprises at least one or two or a plurality of air outlets.

[0006] It shall be understood that side walls are those walls of the housing forming the sides of the housing. In particular, it shall be understood that the side walls can be the lateral side walls, but also can be the rear side wall or the front side wall. It is particular advantageous, if the outermost side walls are the lateral outermost side walls of the housing and/or if the interior side walls are lateral interior side walls, seen from a user's perspective who stands in front of the cooking hob. It shall further be

understood that the interior side walls are side walls that are arranged closer to a center of the housing or a center of a space defined by the housing than the outermost side wall(s). Interior side walls are not mandatorily side walls being arranged within the interior of the housing. At least, the interior side walls can partially form a side wall inside of the interior space defined by the housing, but in any case also define a wall separating the interior space from the exterior of the housing. The cooking hob according to the invention enables two mounting planes arranged above one another, wherein the lower mounting plane can be made subject to a dedicated cooling air flow for which the air outlets in the interior side wall are provided.

[0007] According to an advantageous embodiment the air outlets are formed by a plurality of, in particular rectangular or rounded or elliptical or circular, openings separated by lattice bars or grid bars.

[0008] It has been found that a plurality of air outlets formed to an interior side wall improves the cooling within the housing, since the amount of air able to pass through the air outlets is increased. The lattice bars or the grid bars may be provided as vertical bars or, alternatively, may be provided as cross-wise arranged bars.

[0009] In a advantageous embodiment, the openings are configured such that an object having a diameter of at least 18mm, in particular of at least 14mm, preferably of at least 12mm, more preferably of at least 10mm, cannot pass through the openings, in particular wherein the lattice bars have a distance to each other of less than 18mm, in particular of less than 14mm, preferably of less than 12mm, more preferably of less than 10mm or less than 4mm or ca. 3mm.

[0010] By dimensioning the openings accordingly, it is ensured that objects, e.g. cutlery, are prevented from entering the opening and cause electric shock to the person holding the object. Also a user's finger is, thus, not allowed to pass through the air outlets and is prevented from touching live parts and, thus, from electric shock.

[0011] According to a further advantageous embodiment, at least one of the housing side walls comprises at least one or two or a plurality of air outlets (24).

[0012] Thus, two mounting planes arranged above one another are enabled be made subject to a cooling air flow. In particular, it is enabled that the two mounting planes become flow-coupled and dedicated to two separate cooling air flows having separate air outlets.

[0013] Further advantageously, the housing has a front side configured to be arranged in front of a user of the cooking hob, wherein a housing side wall on the left hand side of the housing and an interior side wall on the left hand side of the housing comprise the air outlets or wherein a housing side wall on the right hand side of the housing and an interior side wall on the right hand side of the housing comprise the air outlets.

[0014] Thus, it is ensured that the heated cooling air leaves the cooking hob housing in a region where an adjacent kitchen cabinet is disposed. Consequently, no

heated cooling air leaves the cooking hob directed towards a user's position or towards a region behind the rear of the cooking hob. Thus, providing the kitchen cabinet with the necessary outlets for forwarding the cooling air is simplified. Additionally, it is possible to provide one or more cooling air flows inside the housing which flow substantially from lateral side to lateral side, which has been found as advantageously with respect to cooling efficiency.

[0015] According to a further advantageous embodiment, at least a first bottom wall of the at least one or two or more bottom walls extends in a different plane than at least a second bottom wall of the at least one or two or more bottom walls, in particular wherein the first bottom wall and/or the second bottom wall extend horizontally and /or wherein the first bottom wall extends parallel to the second bottom wall and/or wherein the first bottom wall extends in a plane below the plane of the second bottom wall.

[0016] Thus, clearly defined mounting planes are created onto which electric and/ or electronic components of the cooking hob can be mounted. Accordingly, each of the two different mounting planes can be cooled by means of a dedicated cooling air flow enabled by corresponding air outlets. Further advantageously, such a design of a housing allows to have different depth of the housing extending vertically into a kitchen cabinet or a kitchen range. In particular, it is possible to have a center of the housing, e.g. defined by the first bottom wall, to extend more vertically downwards compared to peripheral sections of the housing, e.g. defined by the second bottom wall.

[0017] Furthermore advantageously, the housing includes at least one or two or more fans for providing at least one air flow within the interior space, in particular wherein the at least one or two or more fans are flow coupled to at least one or two or more air inlets arranged in the at least one or two or more bottom walls, preferably arranged in the first bottom wall below the second bottom wall.

[0018] Thus, a specific cooling air flow can be provided, wherein cooling air is sucked in through a bottom wall, wherein the cooling air flow flows through the interior space of the housing and leaves through the air outlets in the side walls.

[0019] It is additionally advantageous, if the at least one or two or more fans are placed in a position opposite to the air outlets, in particular adjacent to the housing side wall opposite to the side walls comprising the air outlets, such that an air flow generated by the fan flows through the interior space to the air outlets and leaves at least partially the housing through the air outlets, in particular wherein at least one heat sink is arranged in the interior space, wherein the air flow is directed towards the heat sink to flow along the heat sink towards to the air outlets.

[0020] Thus, it has been found that the resulting cooling air flow cools the interior space and the electric and

electronic disposed therein more efficiently, specifically in an embodiment with two different bottom walls one arranged below the other.

[0021] According to an additionally advantageous embodiment, a heat sink is directly or indirectly mounted above or to the first bottom wall, preferably mounted to a printed circuit board that is mounted above or to the first bottom wall, wherein at least one air flow generated by the at least one or two or more fans flows along surfaces of the heat sink, in particular along surfaces of cooling ribs formed by the heat sink, preferably wherein the cooling ribs are separated by air channels and wherein the air channels extend in a direction from the at least one or two or more fans to the air outlets provided in the interior side wall.

[0022] Thus, the heat sink is arranged to be subject to the cooling air flow for highly efficient cooling, wherein heat from the heat sink is efficiently and rapidly transferred towards the air outlets. This enables to cool electric and/or electronic components that are arranged on a printed circuit board adjacent to or close to the heat sink in a very efficient way.

[0023] Furthermore, it is additionally advantageous that at least one air inlet and/or at least one fan outlet, in particular flow-coupled to the air inlet via the fan, is positioned adjacent to a housing side wall on the left hand side of the housing or to a housing side wall on the right hand side of the housing, in particular adjacent to a middle portion of the housing side wall and/or wherein at least one fan is positioned within a recess at least partially formed by an interior housing side wall, preferably wherein the interior housing side wall is arranged partially circumferentially around the fan.

[0024] Thus, the fan can be arranged to form a compact unit with the cooking hob housing, wherein the air flow generated by the fan can be guided towards the elements to be cooled without any restrictions.

[0025] It may be further advantageous, if there are at least a first air inlet and a second air inlet or a first fan and a second fan, which are positioned adjacent to a housing side wall on the left hand side of the housing or to a housing side wall on the right hand side of the housing, in particular adjacent to a middle portion of the housing side wall and which are positioned distanced to each other, in particular wherein the first fan is configured to generate an air flow towards a first heat sink and the second fan is configured to generate an air flow towards a second heat sink being different from the first heat sink.

[0026] Thus, a highly efficient cooling is generated within the interior space of the housing. In particular, dedicated cooling air flows can be generated and directed towards different and separate components independently.

[0027] According to a further advantageous embodiment of the invention, the front side housing side wall comprises at least one recess in which an operation panel of an oven to be built-in or built-in below the cooking hob is arrangeable or arranged.

[0028] In that way, the cooking hob is optimized for being built-in in a kitchen range in combination with an oven below. E.g. the operation panel of the oven can be advantageously integrated with the cooking hob, when the operation elements of the cooking hob are e.g. arranged on the cooking hob plate, or the oven and the cooking hob may have a common operation panel to be integrated with the cooking hob.

[0029] Furthermore, it may be advantageous, that the air flow generated by the at least one fan is directed at least partially towards the rear side of the front side housing side wall and cools electronic parts comprised by the operation panel. This is made possible by the recess formed to the front side housing side wall and is particularly advantageous when temperature sensitive elements are used within the operation panel.

[0030] According to a further advantageous embodiment, the housing is made, in particular exclusively, of a plastics material, in particular made of polycarbonate, and wherein the housing is formed integrally with the housing side walls and/or the bottom walls and/or the lattice bars of the air outlets and/or at least one stationary fan housing part and/or at least one electric terminal and/or reinforcement elements of the interior side wall.

[0031] Such a fully integral housing can be manufactured by injection moulding in one manufacturing step. Further, such a housing is operably safe, because it electrically isolates the exterior from the live electric and electronic parts provided within the housing.

[0032] The invention will be explained in further detail with reference to the accompanying drawings, in which:

Fig. 1 is a perspective view of an empty housing without any non integral components according to an exemplary embodiment of the invention;

Fig. 2 is a perspective view of the housing according to Fig. 1, including additional functional components; and

Fig. 3 is a side view of a schematic drawing of a cooking hob according to an exemplary embodiment of the invention in combination with an oven adapted for being built-in a kitchen range.

[0033] Fig. 1 illustrates a housing 10 having a housing bottom wall 12 and four housing side walls 14a-14d. The housing bottom wall 12 may comprise at least first, second and third housing bottom walls 30, 32, 36. The housing bottom wall 12 and the housing side walls 14a-14d define an interior space 16 which is fully enclosed by the housing 10 when being attached to a not illustrated cooking hob plate of the cooking hob. The housing 10 has a front side 44 for being arranged on that side of the cooking hob intended to be arranged in front of the user's position when operating the cooking hob.

[0034] The first, second and third housing bottom walls 30, 32, 36 are oriented substantially horizontal, but may

have at least sections, in which they are oriented non-horizontally. A first housing bottom wall 30 may be a center housing bottom wall, wherein second and third housing bottom walls 32, 36 may be peripheral housing bottom walls that may be arranged adjoining to the outermost housing side walls 14a-14d.

[0035] The housing side walls 14a-14d extend substantially vertically and upwards from the adjoining housing bottom walls 30, 32, 36 towards the cooking hob plate. Additionally, the housing 10 comprises interior side walls 34 which are distanced from the outermost side walls 14a-14d. The interior side walls 34 extend substantially vertically from the first bottom wall 30 to the second bottom wall 32 and to the third bottom wall 36. Thus, separate mounting planes are created within the housing 10, wherein the first bottom wall 30 defines a first mounting plane and the second and third bottom wall 32, 36 define a second mounting plane. It shall be acknowledged that all of a plurality of bottom walls may be arranged at a different height level, i.e. one vertically above another, resulting in different mounting planes, each one defined by a respective bottom wall.

[0036] In the illustrated embodiment, the housing side wall 14a which is the right hand housing side wall as seen from a user's perspective standing in front of the cooking hob comprises a plurality of, in the illustrated embodiment, three air outlets 24 for allowing a cooling air flow (indicated by arrows in Fig. 2) to leave the interior space 16 towards the exterior side of the housing 10.

[0037] Additionally, the interior side wall 34 comprises a plurality of similar air outlets 24. Also the interior side wall 34 is a right hand side wall as seen from a user's perspective. Different to the air outlets 24 of the housing side wall 14a, the air outlets 24 of the interior side wall 34 are provided substantially over the full length of the interior side wall 34.

[0038] An electric terminal for contacting electrical mains to the housing can be formed integrally to the housing 10. In the illustrated embodiment, the electrical mains is integrally formed to the interior side wall 34 and separates the air outlets 24 provided in the interior side wall 34.

[0039] In order to structurally reinforce the housing 10, reinforcement elements 26 such as reinforcement ribs are integrally formed to the interior side wall 34 and to the first bottom wall 16. The reinforcement ribs may have a triangular form and may be provided in each corner connection between a bottom wall and a side wall of the housing where found appropriate by the skilled person.

[0040] The air outlets 24, in general, may be formed as openings in a housing side wall 14a-14d or in an interior side wall 34. The openings may be separated by lattice bars forming a grid that is dimensioned such that an object like a human finger is not allowed to pass through an opening. This ensures that electrically live parts inside the housing 10 cannot be touched by a user or another person.

[0041] Furthermore, air inlets 20 may be provided with-

in a bottom wall, e.g. the first bottom wall 30, wherein the air inlets 20 may be arranged close to a stationary fan housing part 22 such that a fan being attached to the stationary fan housing part 22 can suck air into the housing 10 through the air inlets 20. The stationary fan housing part 22 may be formed integrally to the housing 10, e.g. may be formed integrally to the housing 10 and/or to an interior side wall 34 or to a housing side wall 14a-14d. A fan with an attachable fan housing 38 may be attached to the stationary fan housing part 22, e.g. by screw means or snapping means to form a fixed fan for generating the cooling air flow within the housing 10.

[0042] The housing 10 is provided as one piece from plastics material. In other words, the housing 10 may include the bottom walls 30, 32, 34, the housing side walls 14a-14d, the interior side walls 34, optionally the stationary fan part 22, optionally the lattice bars and optionally the electric terminal 28 as integrally formed components. Polycarbonate has been found as specifically advantageous for such a housing 10.

[0043] Fig. 2 illustrates the housing 10 as shown in Fig. 1, wherein additionally a printed circuit board 40 is attached to the housing 10 which is disposed within the interior space 16 mounting to or above the first bottom wall 30. The printed circuit board 40 may be fixed to the housing 10 by screw means or by snapping means.

[0044] The printed circuit board 40 comprises a heat sink 42 that is positioned between a fan outlet of the fan, e.g. formed by the stationary fan housing part 22 and/or by the attachable fan housing part 38 to direct the cooling air flow be generated by the fan towards the heat sink 42. The cooling air flow may be generated to stream along one or more of heat exchange surfaces of the heat sink 42 and towards the air outlets 24 that are arranged in the interior side wall 34 and/or in the housing side wall 14a that are arranged opposite to the fan.

[0045] The fan outlet of the fan may be oriented such that the cooling air flow streams in a direction substantially perpendicular relative to the openings of the air outlets 24 arranged in the interior side wall 34 and/or in the housing side wall 14a. This may be achieved by orienting an opening of the fan outlet substantially parallel to the openings of the air outlets 24 arranged in the interior side wall 34 and/or in the housing side wall 14a.

[0046] The fan outlet may be arranged immediately adjacent or close to the heat sink 42. The heat sink 42 may have heat exchange surfaces with a longitudinal extension and may be arranged in a way that the cooling air flow leaving the fan outlet may immediately touch the heat exchange surfaces and may stream along the longitudinal extension of the heat exchange surfaces.

[0047] Furthermore, the heat sink 42 may form a plurality of cooling ribs forming cooling channels of the heat sink 42. Thus, the overall area of the heat exchange surfaces of the heat sink 42 may be enlarged. The fan outlet may be arranged in a way that the cooling air flow leaving the fan outlet may enter the cooling channels and pass through the cooling channels towards the air outlets 24

being arranged on the in the interior side wall 34 and/or in the housing side wall 14a close to outlets of the cooling channels of the heat sink 42.

[0048] Additionally, the housing may have a seat structure 18 providing a seat for a control unit such as a touch sensitive display within the housing 10.

[0049] Fig. 3 illustrates a schematic drawing of a cooking hob in combination with an oven adapted for being built-in a kitchen range. The cooking and an upper region of the oven are shown from the left. The front side perspective is indicated by 44. The kitchen range is not shown, but the positions of the cooking hob and the oven correspond to the positions in a built-in situation.

[0050] In a built-in situation within a kitchen range, an operation panel 48 of the oven protrudes vertically upwards beyond an upper side of an oven housing 46 of the oven.

[0051] In order to compensate the different height levels defined by the operation panel 48 and the oven housing 46, the housing 10 of the cooking hob defines two different planes. The first plane is defined by the first bottom wall 30 in a center region of the cooking hob. The second plane is defined by the second bottom wall 32 in a front region. A further plane may be defined by the third bottom wall 36 in a rear region which is, in this specific embodiment, the same plane as that defined by the second bottom wall 32. The first bottom wall 30 protrudes vertically further downwards than the second bottom wall 32. Thus, in a built-in situation, the operation panel 48 of the oven is arranged below the second bottom wall 32 and the oven housing 46 is arranged below the first bottom wall 30. This allows to arrange the operation panel 48 properly in front of the built-in oven and the built-in cooking hob.

[0052] Additionally, the front side housing side wall 14b may comprise one or more recesses for insertion of parts of the operation panel 48. E.g. the front side housing side wall 14b may comprise a central recess for insertion of a control unit, in particular comprising a programmable timer, and/or the front side housing side wall 14b may have recesses for, in particular touch-sensitive or rotatable, control elements, e.g. two recesses, one in a left region and one in a right region of the front side housing side wall 14b. The control unit and/or the control element which are placed in the operation panel 48 may protrude into the recesses formed in the front side housing side wall 14b and may connect with connectors inside of the housing 10.

List of reference numerals

[0053]

10	housing
12	housing bottom wall
14a-d	housing side walls
16	interior space
18	seat structure

20 air inlet
 22 stationary fan housing part
 24 air outlet
 26 Reinforcement elements
 28 electric terminal
 30 first bottom wall
 32 second bottom wall
 34 interior side wall
 36 third bottom wall
 38 attachable fan housing part
 40 printed circuit board
 42 heat sink
 44 front side
 46 oven housing
 48 operation panel

Arrows Cooling air flow

Claims

1. Cooking hob, in particular induction cooking hob, including a housing (10) and a cooking hob plate attached to the housing, wherein the housing (10) and the cooking hob plate enclose at least one interior space (16) in which electric and/or electronic components of the cooking hob are arrangeable or arranged, wherein the housing (10) comprises at least one or two or more bottom walls (30, 32, 36) and at least one or two or more side walls (14a-d, 34), wherein at least one or two or more side walls are housing side walls (14a-d) that form the outermost side walls (14a-14d) of the housing and that extend upwards from at least one or two or more of the bottom walls (30, 32, 36) and which are provided to be attached to the cooking hob plate, and wherein at least one or two or more side walls are interior side walls (34) being distanced from the outermost side walls (14a-14d) that extend upwards from at least one or two or more of the bottom walls (30, 32, 36) towards another of the at least one or two or more bottom walls (30, 32, 36), wherein the interior side walls (34) are positioned inside from the at least one or two or more housing side walls (14a-d), wherein at least one of the interior side walls (34) comprises at least one or two or a plurality of air outlets (24).
2. Cooking hob according to claim 1, wherein the air outlets (24) are formed by a plurality of, in particular rectangular or rounded or elliptical, openings separated by lattice bars or grid bars.
3. Cooking hob according to claim 2, wherein the openings are configured such that an object having a diameter of at least 18mm, in particular of at least 14mm, preferably of at least 12mm, more preferably of at least 10mm, cannot pass through the openings, in particular wherein the lattice bars or grid bars have

a distance to each other of less than 18mm, in particular of less than 14mm, preferably of less than 12mm, more preferably of less than 10mm or less than 4mm or ca. 3mm.

4. Cooking hob according to any of the preceding claims, wherein at least one of the housing side walls (14a-d) comprises at least one or two or a plurality of air outlets (24).
5. Cooking hob according to claim 4, wherein the housing (10) has a front side (44) configured to be arranged in front of a user of the cooking hob, wherein a housing side wall (14c) on the left hand side of the housing (10) and an interior side wall (34) on the left hand side of the housing (10) comprise the air outlets (24) or wherein a housing side wall (14a) on the right hand side of the housing (10) and an interior side wall (34) on the right hand side of the housing (10) comprise the air outlets (24).
6. Cooking hob according to any of the preceding claims, wherein at least a first bottom wall (30) of the at least one or two or more bottom walls (30, 32, 36) extends in a different plane than at least a second bottom wall (32) of the at least one or two or more bottom walls (30, 32, 36), in particular wherein the first bottom wall (30) and/or the second bottom wall (32) extend horizontally and /or wherein the first bottom wall (30) extends parallel to the second bottom wall (32) and/or wherein the first bottom wall (30) extends in a plane below the plane of the second bottom wall (32).
7. Cooking hob according to any of the preceding claims, wherein the housing includes at least one or two or more fans for providing at least one air flow within the interior space (16), in particular wherein the at least one or two or more fans are flow coupled to at least one or two or more air inlets (20) arranged in the at least one or two or more bottom walls (30, 32, 36), preferably arranged in the first bottom wall (30) below the second bottom wall (32).
8. Cooking hob according to claim 7, wherein the at least one or two or more fans are placed in a position opposite to the air outlets (24), in particular adjacent to the housing side wall (14a) opposite to the side walls (14c, 34) comprising the air outlets (24), such that an air flow generated by the fan flows through the interior space (16) to the air outlets (14) and leaves at least partially the housing (10) through the air outlets (14), in particular wherein at least one heat sink (42) is arranged in the interior space (16), where-

in the air flow is directed towards the heat sink (42) to flow along the heat sink (42) towards to the air outlets (14) .

9. Cooking hob according to any of the claims 7 or 8, wherein a heat sink (42) is directly or indirectly mounted above or to the first bottom wall (30), preferably mounted to a printed circuit board that is mounted above or to the first bottom wall (30), wherein at least one air flow generated by the at least one or two or more fans flows along surfaces of the heat sink (42), in particular along surfaces of cooling ribs formed by the heat sink (42), preferably wherein the cooling ribs are separated by air channels and wherein the air channels extend in a direction from the at least one or two or more fans to the air outlets (24) provided in the interior side wall (34). 5 10 15
10. Cooking hob according to any of the claims 7 to 9, wherein at least one air inlet (20) and/or at least one fan outlet, in particular flow-coupled to the air inlet via a fan, is positioned adjacent to a housing side wall (14c) on the left hand side of the housing (10) or to a housing side wall (14a) on the right hand side of the housing (10), in particular adjacent to a middle portion of the housing side wall (14a, 14c) and/or wherein at least one fan is positioned within a recess at least partially formed by an interior housing side wall, preferably wherein the interior housing side wall is arranged partially circumferentially around the fan. 20 25 30
11. Cooking hob according to any of the claims 7 to 10, wherein at least a first air inlet (20) and a second air inlet (20) or a first fan and a second fan are provided, which are positioned adjacent to a housing side wall (14c) on the left hand side of the housing (10) or to a housing side wall (14a) on the right hand side of the housing (10), in particular adjacent to a middle portion of the housing side wall (14a, 14c) and which are positioned distanced to each other, in particular wherein the first fan is configured to generate an air flow towards a first heat sink and the second fan is configured to generate an air flow towards a second heat sink being different from the first heat sink. 35 40 45
12. Cooking hob according to any of the preceding claims, wherein the front side housing side wall (14b) comprises at least one recess in which an operation panel of an oven to be built-in or built-in below the cooking hob is arrangeable or arranged. 50
13. Cooking hob according to claim 12, wherein the air flow generated by the at least one fan is directed at least partially towards the rear side of the front side housing side wall (14b) and cools electronic parts comprised by the operation panel. 55

14. Cooking hob according to any of the preceding claims, **characterized in that** the housing (10) is made, in particular exclusively, of a plastics material, in particular made of polycarbonate, and wherein the housing (10) is formed integrally with the housing side walls (14a-d, 34) and/or the bottom walls (30, 32, 36) and/or the lattice bars or grid bars of the air outlets (24) and/or at least one stationary fan housing part (22) and/or at least one electric terminal (28) and/or reinforcement elements (26) of the interior side wall (34).

FIG 1

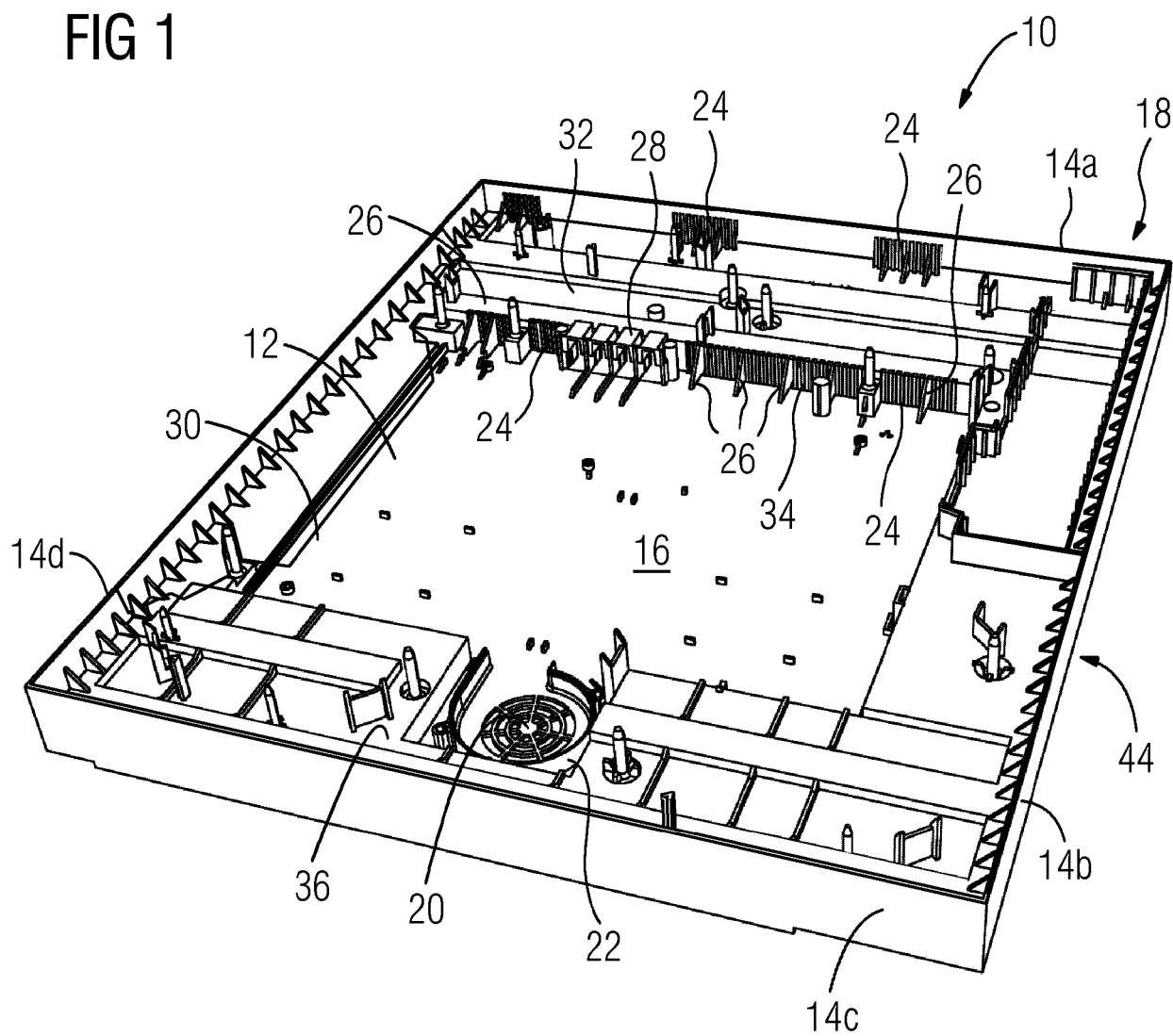


FIG 2

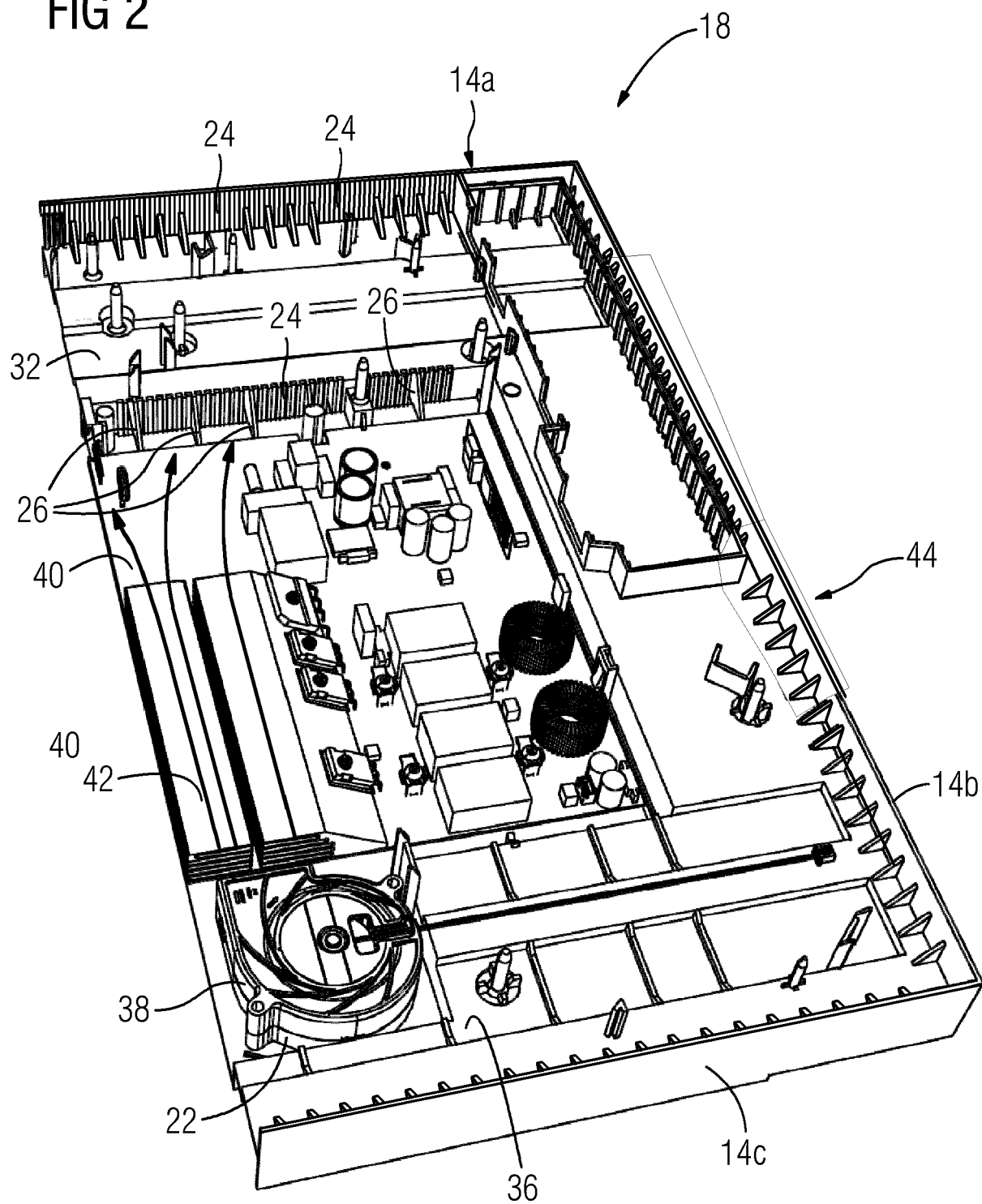
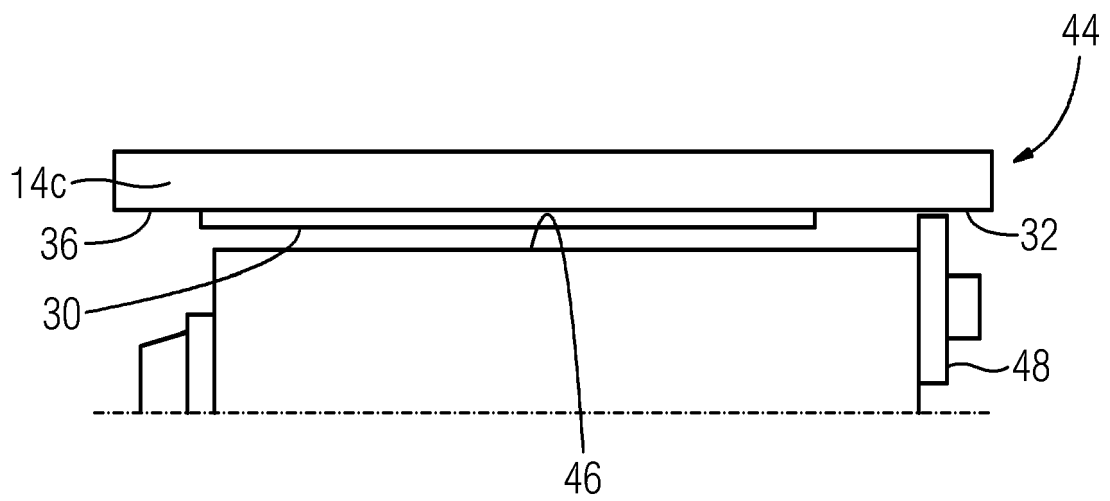


FIG 3





EUROPEAN SEARCH REPORT

Application Number
EP 21 17 9404

5

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DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
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