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(71) Applicant: **BSH Hausgeräte GmbH**
81739 München (DE)

(72) Inventors:
• **Çiçek, Emre Kagan**
Tekirdag (TR)
• **Uzun, Mehmet**
Tekirdag (TR)

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(54) **A PROTECTION UNIT FOR A COOKING APPLIANCE**

(57) The invention relates to a protection unit (1) for cooking appliance (2) configured to prevent access to at least one part of the cooking appliance (2), comprising at least two L-shaped sheets (11) for mounting on the cooking appliance (2) and at least one flat sheet (12) configured to be engaged with the two L-shaped sheet

(11) for adjusting the length of the protection unit (1). As an improvement, at least one hook (114) is provided for assembling on the cooking appliance (2) and a guide (121) is provided for combining the flat sheet (12) with at least one part of the L-shaped sheet (11).

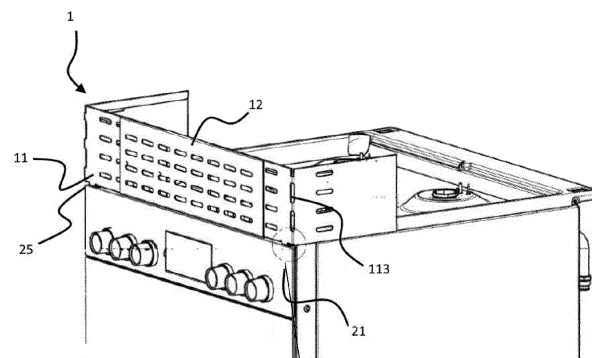


FIG. 2

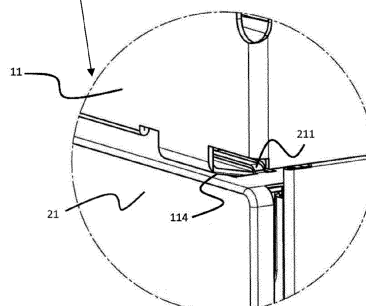


FIG. 3

Description

Technical Field

[0001] The present invention relates to a protection unit for cooking appliances.

Prior Art

[0002] While cooking, users tend to leave the kitchen where the food cooks and the cooking appliances function. Sometimes the small children are present in the household and may tend to interfere with the cooking dish in the kitchen. The child or the pet may reach to the cooking appliance especially to the cooktop. This may cause incredibly harmful accidents and injuries. In order to prevent the access to the cooktop, some blocking covers are invented. However, these solutions lack the robustness and stability. In addition, such items cannot be stored properly after using and cause trouble for the user.

[0003] The document US5813396A discloses a range guard apparatus for preventing hot food splashes from injuring persons, particularly young children, in the vicinity thereof. The apparatus comprises a transverse front wall member and first and second side wall members attached on opposite ends of the front member respectively. In use, the apparatus is attached proximal to the front edge of a range or stove top with each sidewall member extending rearwardly and providing gripping surfaces engageable with confronting side surfaces of the range or stove top to which the apparatus is thusly attached. The front wall extends above the flat stove or range top surface a sufficient distance to deflect hot foods particles emitted during cooking from being projected outwardly beyond the front plane of the stove or range where if undeflected such splattering could cause burns or other injuries to persons in the vicinity of the cooking appliance. In an alternatively preferred embodiment, the side wall members are hinged to the front wall member and are foldable relative thereto to render the apparatus more compact when not in use and during storage.

[0004] The invention provides an additional improvement, an additional advantage or an alternative to the prior art.

Brief Description of the Invention

[0005] An object of the invention is to provide a robust protection unit, which prevents unwanted access to a cooking appliance.

[0006] Furthermore, another object of the invention is to provide an extendible protection unit for variety of cooking appliances.

[0007] In addition, another object of the present invention is to provide a proper storage system for the protection units for cooking appliances.

[0008] In order to achieve the objects, the invention is a protection unit for cooking appliance configured to pre-

vent access to at least one part of the cooking appliance, comprising at least two L-shaped sheets for mounting on the cooking appliance and at least one flat sheet configured to be engaged with the two L-shaped sheet for adjusting the length of the protection unit. As an improvement, at least one hook is provided for assembling on the cooking appliance and a guide provided for combining the flat sheet with at least one part of the L-shaped sheet. Thus, the L-shaped sheet can easily be assembled on the cooking appliance by the hooks. In addition, the hooks on the L-shaped sheet allow easy and simple insertion into a cutout and or a slot of the same size. So that by the hooks, the L-shaped sheets can be hanged into a drawer for storage purposes. Furthermore, the guide formed on the flat sheet will provide the extension for the protection unit. The flat sheet allows length adjustment for the wider cooking appliances. The guides also provide proper hanging on the L-shaped sheets when placed in the drawer of the cooking appliance. This smart storing solution does not require user to allocate additional space for the protection unit.

[0009] In a possible embodiment of the present invention, the L-shaped sheet further comprises a first part and a second part connected via a joint for allowing both parts to be movable and foldable. Thus, when folded the L shape of the sheet becomes a single unit. Therefore, it is easier and simpler for the L-shaped sheet to fit into a drawer of the cooking appliance. In addition, the folded L-shape sheet can easily fit into the guide, which is formed on the flat sheet.

[0010] In a possible embodiment of the present invention, the guide is formed on at least one edge of the flat sheet for confining at least one part of the L-shaped sheet. The guide is formed along at least one edge of the flat sheet. Preferably, both edges of the flat sheet comprise guides along the edge for at least partially covering the L-shaped sheet from its both edges for robust and secure connection. Thus, the guide on the flat sheet allow at least one part of the L-shaped sheet to get in. In this way, the length of the protection unit is expandable in order to fit to the wider cooking appliances. Moreover, while storing, the flat sheet can be hanged by the guides over the L-shaped sheet, which is already, hanged on the drawer of the cooking appliance.

[0011] In a possible embodiment of the present invention, the guide is formed on the L-shaped sheet for slidably engaging with the flat sheet. Thus, the combination of the L-shaped sheet and the flat sheet is provided in a flexible and resilient manner.

[0012] In a possible embodiment of the present invention, the L-shaped sheet and the flat sheet are made of the same material. In another possible embodiment of the invention, the L-shaped sheet and the flat sheet are made of preferably from metal material. Thus, the L-shaped sheet and the flat sheet are produced at the same time with small adjustments to each. This provides cost efficiency to the manufacturer.

[0013] In a possible embodiment of the present inven-

tion, the L-shaped sheet is configured to be mounted at least one corner of the cooking appliance. Thus, more rigid connection of the protection unit is provided. Moreover, the protection unit extends to the sides of the cooking appliance from the corners in the depth direction.

[0014] In a possible embodiment of the present invention, the cooking appliance comprises a slot on a front surface for engaging with the hook of the protection unit. In a possible embodiment of the present invention, the cooking appliance comprises a slot between the front surface and a cooktop for engaging with the hook of the protection unit. Thus, rigid and stable assembly of the protection unit is provided. When assembled, the protection unit stands steady before the cooktop for preventing access especially child access.

[0015] In a possible embodiment of the present invention, a cooking appliance comprises a drawer configured to be a storing space for the protection unit. In another possible embodiment of the invention, the drawer comprises at least one cut-out on at least one edge for receiving the hook of the L-shaped sheet. Thus, the elements of the protection unit are stored in a proper and decent manner. The hooks, which are provided on the L-shaped sheet, are inserted into the cut-outs formed on the edge of the drawer of the cooking appliance. Then, the flat sheet is hanged on the L-shaped sheet by the guide. So that the protection unit is stored and put away in the drawer as a whole. If wanted, it is easy to bring out both of the sheets and assemble on the cooking appliance for the prevention of the reach and interference especially for blocking child access to the cooking appliance.

[0016] In a possible embodiment of the present invention, the cooking appliance is a standing oven with a cooktop or a gas cooktop. Thus, by the assembly of the protection unit, the concern of a child reaching over the cooking item on a burner of the cooktop or the gas cooktop is eliminated. The child protection is provided by building a blockade before the cooking item.

[0017] In this context, the term "the open position" of the drawer is in particular to be understood as the drawer is pulled away from the cooking appliance for loading items inside. In this context, the term "the open position" of the drawer is in particular to be understood as the drawer is pushed into the housing of the cooking appliance after loading is completed. In particular, the term tray encompasses food trays, which are used to carry food in the cooking appliances such as ovens.

[0018] In this context, with the indications "top", "bottom", "front", "rear", "horizontal", "vertical", "upward", "downward", "inner", "outer", "inward", "outward" etc. the positions and orientations given for intended use and intended arrangement of the cooking appliance and for a user then standing in front of the cooking appliance in a closed position and viewing in the direction of the appliance are indicated.

[0019] Each possible embodiment disclosed in this text can be combined with the other possible embodiments

disclosed in this text if there is no any technical constraint.

Explanation of Figures

[0020] The figures, whose brief explanations are here-with provided, are solely intended for providing a better understanding of the present invention and are as such not intended to define the scope of protection or the context in which said scope is to be interpreted in the absence of the description.

Fig. 1 is an isometric view of the cooking appliance according to the present invention.

Fig. 2 is an isometric view of the protection unit assembled on the cooking appliance according to the present invention.

Fig. 3 is a detailed view of the protection unit assembling on the cooking appliance according to the present invention.

Fig. 4 is an upside down view of the L-shaped sheet according to the present invention.

Fig. 5 is a view of the flat sheet according to the present invention.

Fig. 6 is a view of the L-shaped sheet and the flat sheet combined according to the present invention.

Fig. 7 is a detailed view of the L-shaped sheet and flat sheet assembling on the drawer according to the present invention.

Fig. 8 is a view of the drawer comprising the L-shaped sheet and the flat sheet in an open position according to the present invention.

Detailed Description of the Figures

[0021] In this detailed description, the subject matter is explained with references to examples without forming any restrictive effect only in order to make the subject more understandable.

[0022] The directions are given on the figures numbered 1,2,6,8. X-axis, corresponds to a width direction (x) of the cooking appliance (2) mentioned in this document. Y-axis corresponds to a height direction (y) of the cooking appliance (2) mentioned in this document. Z-axis corresponds to a depth direction (z) of the cooking appliance (2) mentioned in this document.

[0023] As seen on the Fig.1, the present invention relates to a cooking appliance (2) comprising a housing (24) forming the structure, a door (not shown in the figures) hinged to the housing (24) allowing access to a cooking chamber (not shown in the figures) and a cooktop (22) having at least one burner (221) for placing pots and

pans (not shown in the figures) and a drawer (23) configured to provide a storing space for items such as trays (not shown in the figures). The drawer (23) is usually found in the composition of the cooking appliance (2) preferably placed under the cooking chamber (not shown in the figures) for storage purposes. The cooktop (22) can comprise 2-6 burners (221) depending on the width of the cooking appliance (2).

[0024] Fig 2 illustrates the cooking appliance (2) comprising a protection unit (1) configured to prevent unwanted access to the burner (221) placed on the cooktop (22). The protection unit (1) is constituted of at least one L-shaped sheet (11) and a flat sheet (12). Ideally, the protection unit (1) comprises two L-shaped sheets (11) configured to be assembled on corners (25) of the cooking appliance (2). Ideally, the L-shaped sheets are placed on the corners (25) which face the user when standing in front of the cooking appliance (2) for preventing the access to the cooktop (22). The L-shaped sheet (11) is assembled on the cooking appliance (2) by means of at least one hook (114). The L-shaped sheet (11) may comprise two hooks (114) for assembling on the cooking appliance (2). As illustrated in detail on Fig.3, at least one slot (211) is formed on a front surface (21) of the cooking appliance (2) for receiving the hook (114) of the L-shaped sheet (11). The size of the slot (211) corresponds to the size of the hook (114) for insertion. The number of the slots (211) formed on the front surface (21) correspond to the number of the hooks (114).

[0025] Fig. 4 shows the L-shaped sheet (11) formed of a first part (111) and a second part (112) combined by a joint (113) which provides bendability for the L-shaped sheet (11). The first part (111) and the second part (112) are movable around the joint (113) and can be folded to be a one piece for storing purposes. The first part (111) comprises at least one hook (114) configured to be inserted to a slot (211) or a cut-out (2321) of the same size. The second part (112) at least partially extends to depth direction (z) of the cooking appliance (2). The first part (111) at least partially extends along the width direction (x) of the cooking appliance (2).

[0026] Fig. 5 illustrates the flat sheet (12) comprising a guide (121) configured to confine at least one part of the L-shaped sheet (11) for assembling on to. The guide (121) is horizontally disposed along at least one edge of the flat sheet (12). The guide (121) can be formed on both edges of the flat sheet (12). The guide (121) is formed in a curving manner so as to partially hug the L-shaped sheet (11) for providing extension on the length of the protection unit (1). The flat sheet (12) is able to slide on the first part (111) of the L-shaped sheet (11) for arranging the size of the protection unit (1) depending on the width of the cooking appliance (2).

[0027] The L-shaped sheet (11) and the flat sheet (12) are made of the same material, preferably from metal material.

[0028] As seen on the Fig. 6, the flat sheet (12) is assembled on two L-shape sheet (11) configured combine

them in order to create the protection unit (1). The height direction (y) of both the flat sheet (12) and the L-shaped sheet (11) are in correspondence for providing proper blocking of the cooktop (22).

[0029] Fig.7 and Fig. 8 illustrate the storing away of the protection unit (1). The drawer (23) provides a storing space inside the housing (24) of the cooking appliance (2). The user extracts the drawer (23) in to an open position to load or retrieve objects and pushes the drawer (23) into a closed position in the depth direction (z) of the cooking appliance. Thanks to the foldable nature, the L-shaped sheet (11) is folded into one piece by bringing first part (111) on top of the second part (112). Then, by the hook (114) which is formed on the first part (111), the L-shaped sheet (11) is hanged on a cut-out (2321) formed on an edge (232) of the drawer (23). The edge (232) is disposed towards the inside of the drawer (23) in the depth direction (z) as an elongation of a front plate (231) of the drawer (23). The size of the cut-out (2321) is the is in correspondence to the size of the hook (114) for insertion. After hanging the L-shaped sheet (11) on the edge (232) of the drawer (23), the flat sheet (12) is hanged on the L-shaped sheet (11) by the guide (121). After hanging both of the sheets (11, 12), the drawer (23) is pushed into the closed position into the depth direction (z).

Reference List

- [0030]**
- | | |
|----|---------------------|
| 1 | Protection Unit |
| | 11 L-shaped sheet |
| | 111 First Part |
| 35 | 112 Second Part |
| | 113 Joint |
| | 114 Hook |
| | 12 Flat sheet |
| | 121 Guide |
| 40 | 2 Cooking Appliance |
| | 21 Front Surface |
| | 211 Slot |
| | 22 Cooktop |
| | 221 Burner |
| 45 | 23 Drawer |
| | 231 Front Plate |
| | 232 Edge |
| | 2321 Cut-out |
| 50 | 24 Housing |
| | 25 Corner |
| X | Width Direction |
| Y | Height Direction |
| Z | Depth Direction |

Claims

1. A protection unit (1) for cooking appliance (2) con-

figured to prevent access to at least one part of the cooking appliance (2), comprising at least two L-shaped sheets (11) for mounting on the cooking appliance (2) and at least one flat sheet (12) configured to be engaged with the two L-shaped sheet (11) for adjusting the length of the protection unit (1) **characterized in that** at least one hook (114) is provided for assembling on the cooking appliance (2) and a guide (121) is provided for combining the flat sheet (12) with at least one part of the L-shaped sheet (11).

2. The protection unit (1) according to the claim 1, wherein the L-shaped sheet (11) further comprise a first part (111) and a second part (112) connected via a joint (113) for allowing both parts (111, 112) to be movable and foldable.
3. The protection unit (1) according to any one of the preceding claims, wherein the guide (121) is formed on at least one edge (232) of the flat sheet (12) for confining at least one part of the L-shaped sheet (11).
4. The protection unit (1) according to any one of the preceding claims, wherein the guide (121) is formed on the L-shaped sheet (11) for slidably engaging with the flat sheet (12).
5. The protection unit (1) according to any one of the preceding claims, wherein the L-shaped sheet (11) and the flat sheet (12) are made of the same material.
6. The protection unit (1) according to any one of the preceding claims, wherein the L-shaped sheet (11) is configured to be mounted at least one corner (25) of the cooking appliance (2).
7. A cooking appliance (2), comprises a drawer (23) configured to be a storing space for the protection unit (1) according to any of the claim 1-6.
8. The cooking appliance (2) according to the claim 7, wherein the drawer (23) comprises at least one cut-out (2321) on at least one edge (232) for receiving the hook (114) of the L-shaped sheet (11).
9. The cooking appliance (2) according to any of the claim 7-8, wherein the cooking appliance (2) comprises a slot (211) on a front surface (21) for engaging with the hook (114) of the protection unit (1).
10. The cooking appliance (2) according to any of the claim 7-9, wherein the cooking appliance (2) comprises a slot (211) between the front surface (21) and a cooktop (22) for engaging with the hook (114) of the protection unit (1).
11. The cooking appliance (2) according to the claim 7 or 10, wherein the cooking appliance (2) is a standing

oven with a cooktop (22) or a gas cooktop.

12. A system comprising a cooking appliance (2) according to the claims 7-11 and a protection unit (1) according to the claims 1-6.

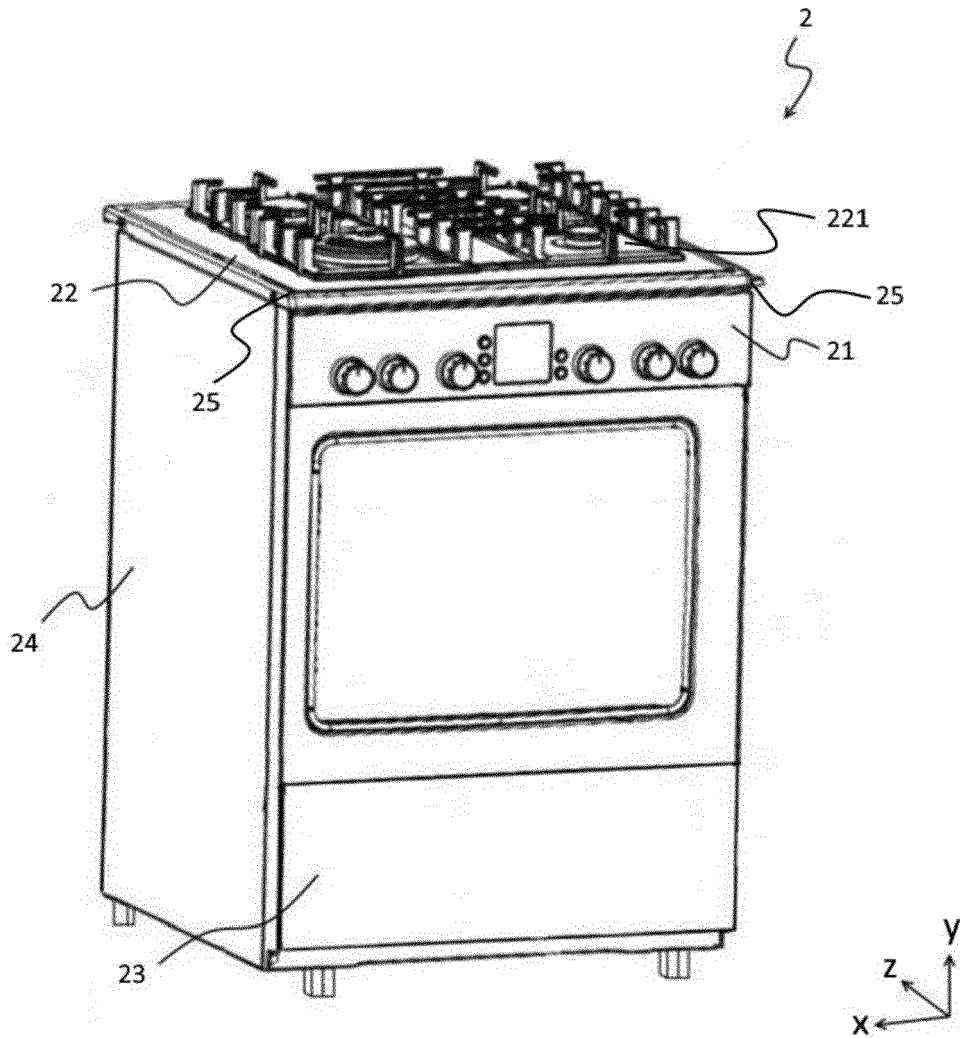


FIG. 1

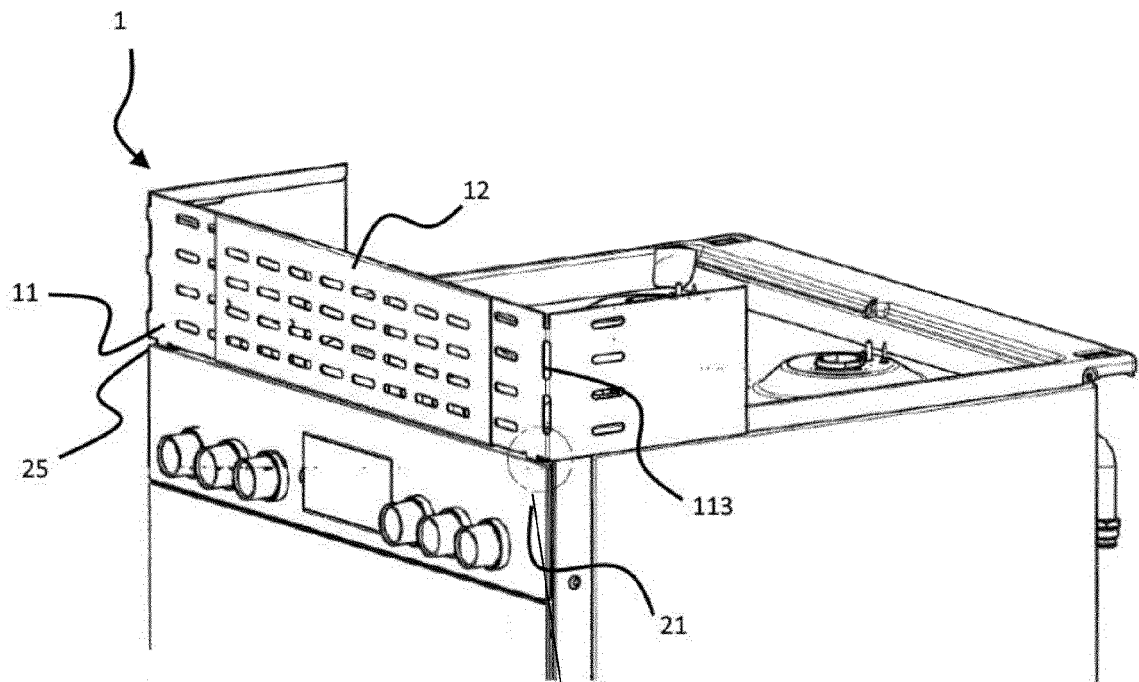


FIG. 2

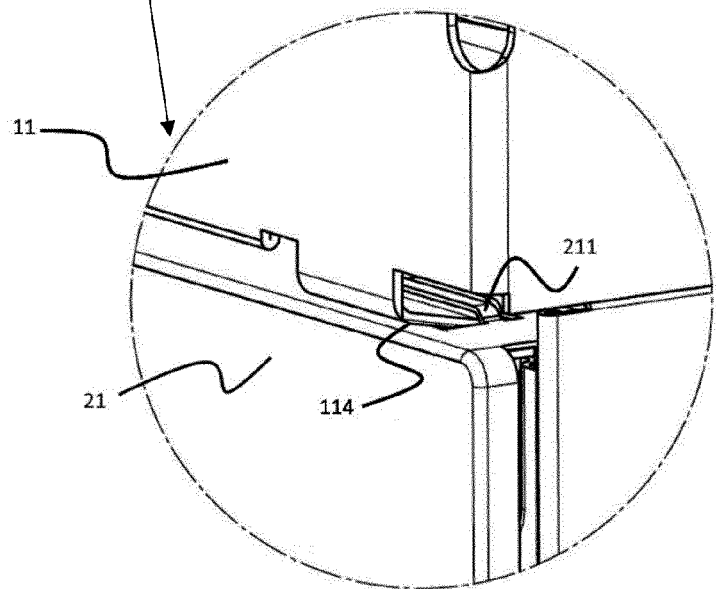
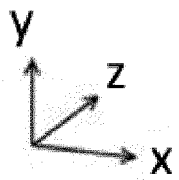


FIG. 3

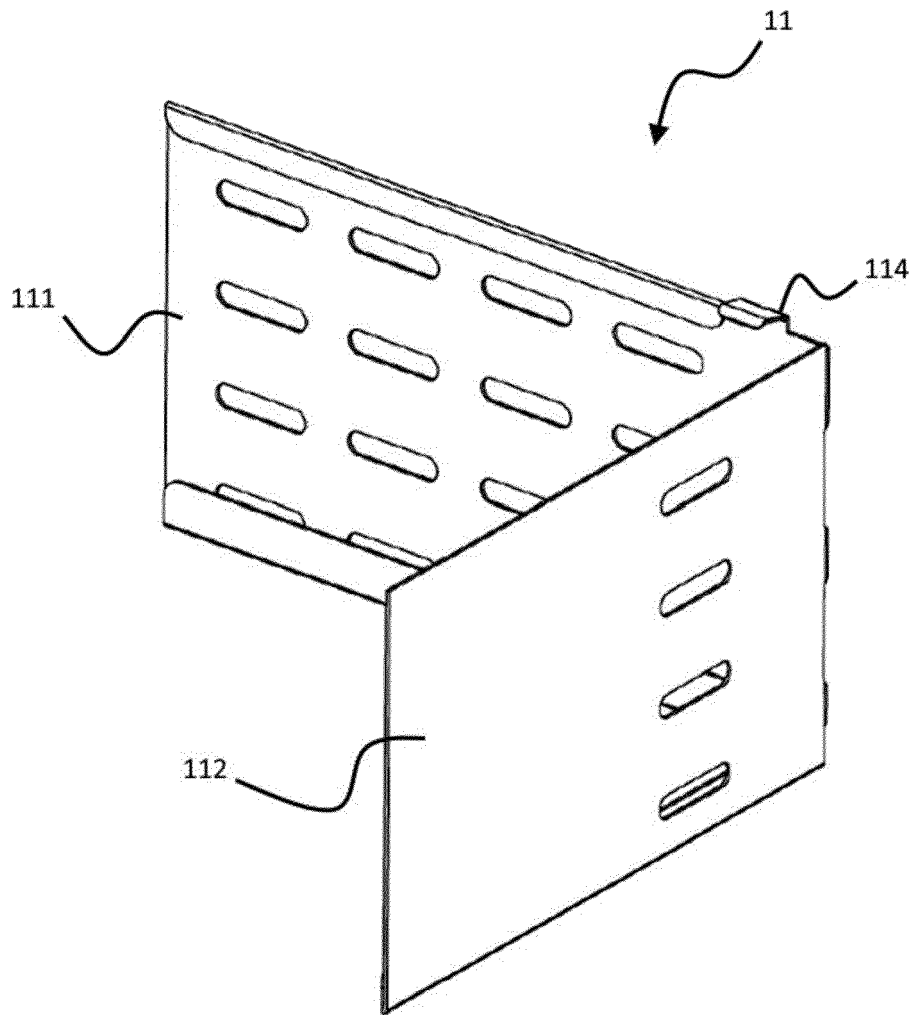


FIG. 4

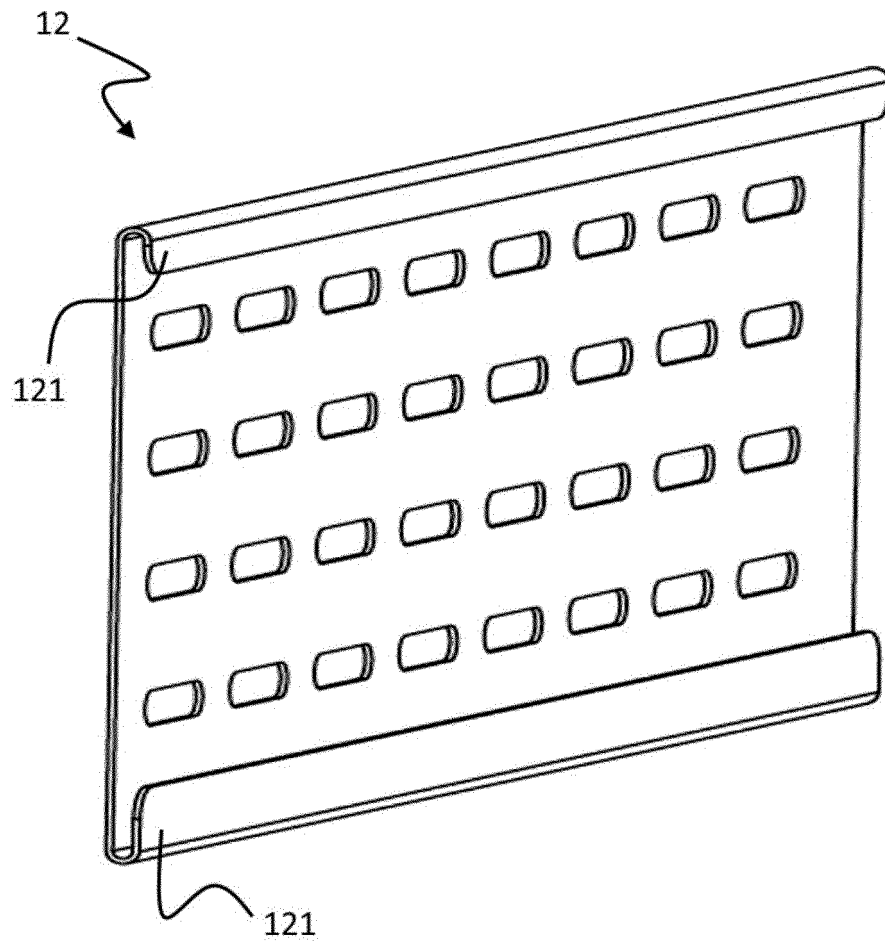


FIG.5

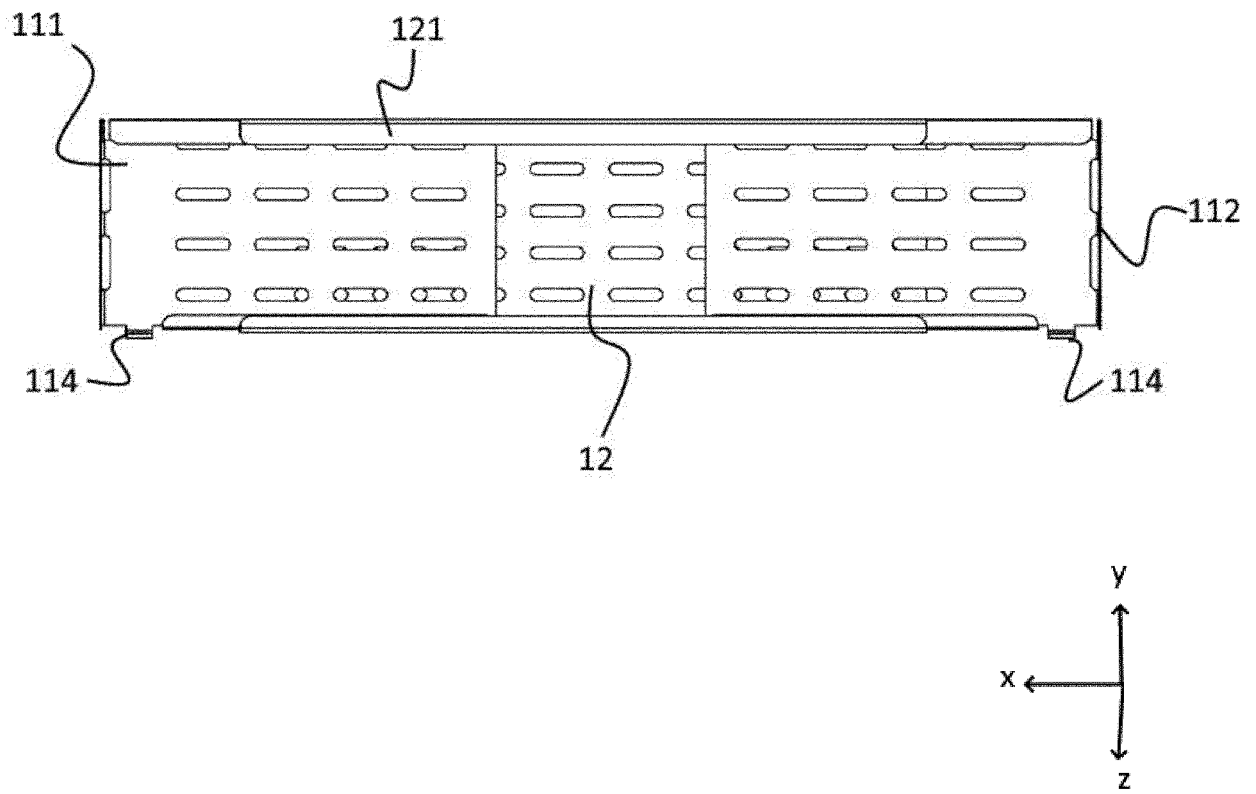


FIG.6

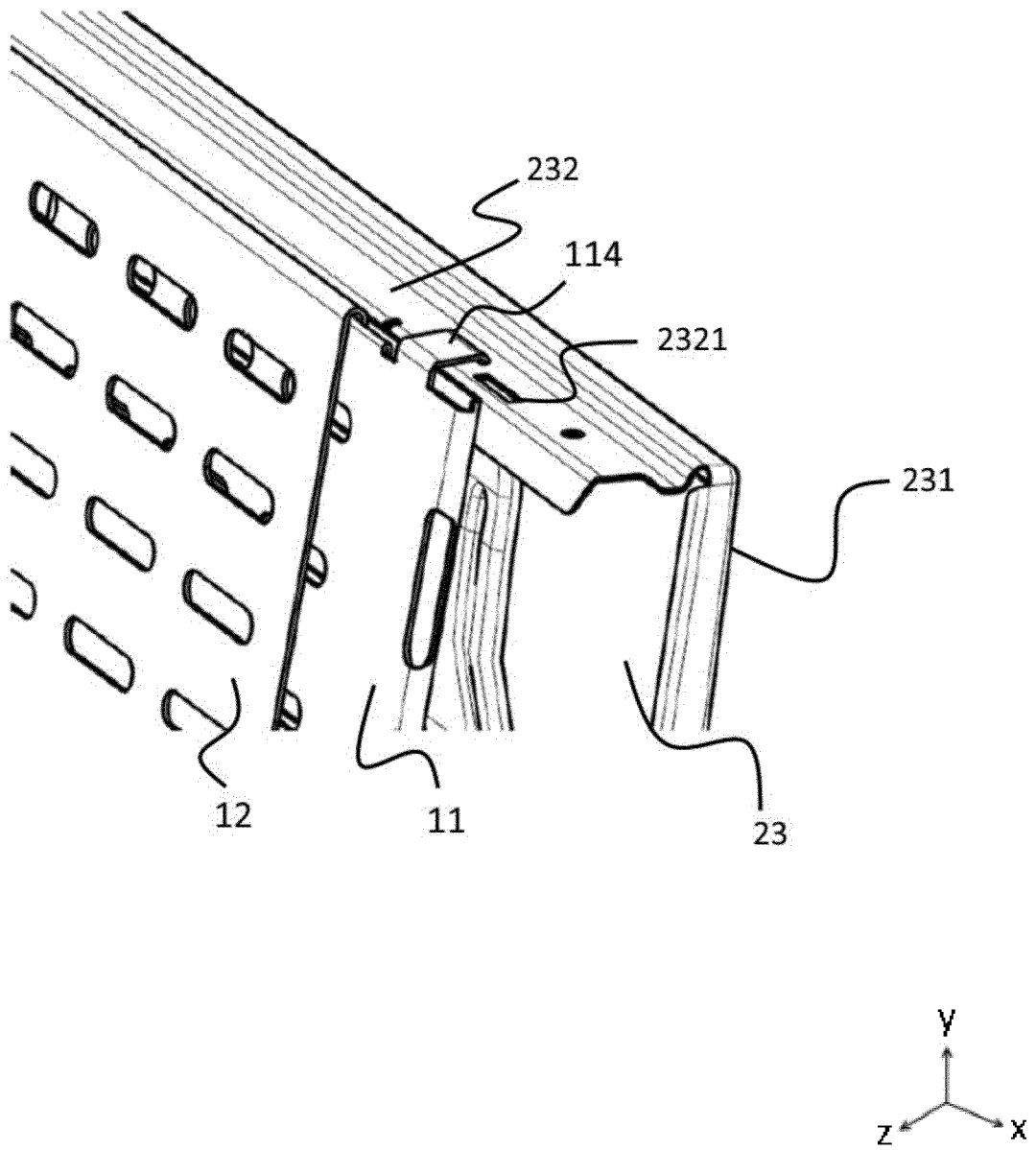


FIG.7

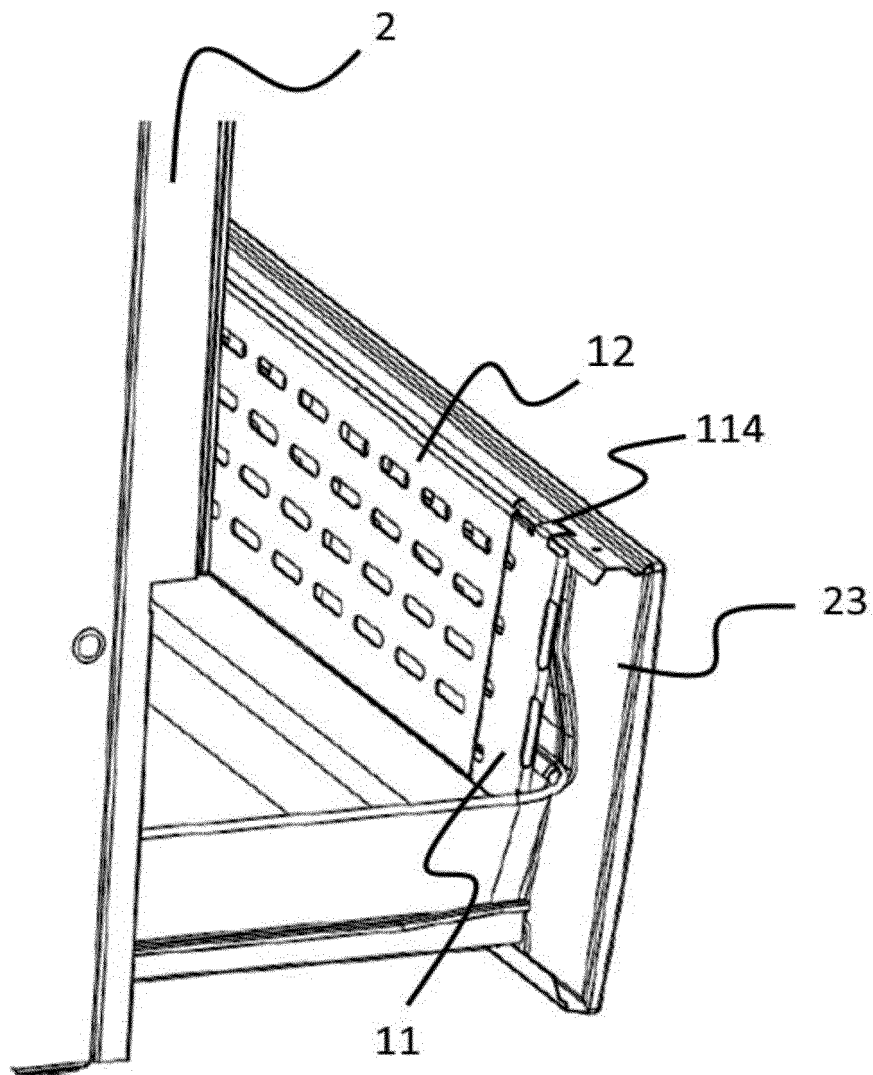


FIG. 8

REFERENCES CITED IN THE DESCRIPTION

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Patent documents cited in the description

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