



(11)

EP 3 437 509 A1

(12)

EUROPEAN PATENT APPLICATION

(43) Date of publication:
06.02.2019 Bulletin 2019/06

(51) Int Cl.:
A45C 9/00 (2006.01)

(21) Application number: **18186841.5**

(22) Date of filing: **01.08.2018**

(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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(30) Priority: **01.08.2017 NL 2019383**

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(54) **BAG WITH FOLDABLE BACK SUPPORT**

(57) A bag comprises a portable container, comprising an envelope with at least one opening, where at least part of the container is arranged to form a bottom and a back support. In this bag, the back support is hingedly provided in the container relative to the bottom, and the back support is arranged to be fixated relative to the bottom. In the bag, no external parts are provided at the outside of the bag. The back support may be a rigid rec-

tangular plate-shaped member, hingedly connected at or near a short edge of the member to the bottom provided in the envelope. The plate-shaped member may be provided as part of the envelope or within the envelope as a distinct member. This applies to the bottom as well, noted that the bottom is not necessarily a rigid member; it may also be a part of an optionally highly flexible envelope.

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Description

TECHNICAL FIELD

[0001] The various aspects of the invention relate to a container with a back support.

BACKGROUND

[0002] Back supports are often used when e.g. going to the beach or when having a picnic in the park to provide a more comfortable seating or lying position compared to sitting or lying in the sand or on grass supported by one's arms.

[0003] Portable back supports may be foldable to increase portability, but are still relatively large and require one full hand for carrying. The present invention comprises a combination of a foldable back support with a carrying container for e.g. food and/or drinks. In known combinations of a back support and carrying container, the back support is provided on the outside of the container with a large rigid frame.

SUMMARY

[0004] It is preferred to provide a more handy portable back support. An aspect provides a bag with foldable back support. The bag comprises a portable container, comprising an envelope with at least one opening, where at least part of the container is arranged to form a base, a bottom of the container in particular, and a back support. In this bag, the back support is hingedly provided in the container relative to the base, and the back support is arranged to be fixated relative to the base.

[0005] By providing the back support in the bag, no external parts are provided at the outside of the bag. The back support may be a rigid rectangular plate-shaped member, hingedly connected at or near a short edge of the member to the bottom provided in the envelope. The plate-shaped member - or other type of back support may be provided as part of the envelope or within the envelope as a distinct member. This applies to the bottom as well, noted that the bottom is not necessarily a rigid member; it may also be a part of an optionally highly flexible envelope.

[0006] An embodiment of the bag comprises an additional support. In this embodiment, the additional support is hingedly provided in the container relative to the bottom; and at least a part of the back support, at least a part of the additional support, and at least a part of bottom are arranged to form a closed shape.

[0007] In this embodiment, the bottom may be a flexible part of the envelope, for example the bottom of the bag. The back support and the back support may be provided in sidewalls of the envelope. Alternatively, either one of the supports or both are provided as distinct, preferably rigid and preferably rectangular plate-shaped members that are at or near their short edges hingedly connected

at or near short edges of the bottom of the bag. Having said that, alternative implementations may also be possible for more specific implementation of this embodiment. An advantage of this embodiment is that with the supports folded down or otherwise folded away, preferably flush against the envelope, almost the full space within the envelope may be used for carrying goods and no external members are required. On the other hand, the back support may be conveniently set up for providing a back rest.

[0008] In another embodiment, the back support comprises one or more abutments, where the additional support is arranged to abut to for forming the closed shape. This embodiment allows to adapt the back rest to the desires of the user.

[0009] In a further embodiment, the back support is bendable such that the back support may form a curved shape such that the back support may be fixated relative to the bottom. Depending on the material used, an advantage of this embodiment may be that the back support may provide certain resilience which may be experienced as enhanced comfort.

[0010] Again another embodiment of the bag comprises a first compartment where at least part of the back support may be placed in and withdrawn from. A first advantage is that this allows to put the bag in the washing machine. Another advantage is that this allows the bag to be folded away in a very small package, without an optionally rigid back support member.

BRIEF DESCRIPTION OF THE DRAWINGS

[0011] The various aspects and embodiments thereof will now be discussed in further detail in conjunction with drawings. In the drawings:

Figure 1: shows schematic isometric view of a bag with a back support folded at the bottom;

Figure 2 A: shows schematic side view of a bag with a back support and an additional support both folded at the bottom of the bag;

Figure 2 B: shows a schematic side view of a bag with a back support supported by an additional support hinged at a corner at the bottom of the bag;

Figure 3 A: shows a schematic side view of a bag with a back support and an additional support connected to the back support folded at the bottom;

Figure 3 B: shows a schematic side view of a bag with a back support and an additional support connected to the back support folded to a support position;

Figure 4 A: shows a schematic side view of a bag with a back support bent over the bottom of the bag;

Figure 4 B: shows a schematic side view of a bag with a back support and an additional support bent over the bottom of the bag;

Figure 4 C: shows a schematic side view of a bag with a back support supported by a bent additional

support;

Figure 5: shows a schematic side view of a bag with a back support and fabric of the bag shaped to the position of the bag support;

Figure 6: shows a schematic side view of a bag with an inner bag; and

Figure 7: shows a schematic side view of a bag with substantially rigid support members provided in sleeves that are arranged to hinge relative to the bottom of the bag.

DETAILED DESCRIPTION

[0012] Figure 1 shows a bag 100 with foldable back support 112, comprising a container 110, one or more handles 111, and a back support 112. At least part of the inside 130 of the container 110 forms a base, in this case the bottom 113 of the container 110, or alternatively, e.g., a part of or an entire sidewall of the container 110. The bottom 113 in this case is rectangular shaped with two short and two long sides. The back support 112 is hingedly attached to an inside surface of the container 110, preferably to a short side of the bottom 113, or alternatively to a wall or corner of the container 110, and is arranged to hinge inside the container 110.

[0013] Figure 2A shows the bag 100 with foldable back support 112, comprising an additional support 114 that is hingedly attached to the inside surface of the container 110, preferably to the bottom 113. Figure 2B shows the back support 112 and the additional support 114 both at an angle relative to the bottom 113, such that at least part of the back support 112, the additional support 114 and at least a part of the container 110, preferably the bottom 113, form a closed shape. The back support 112 may comprise one or more abutments 115 against which the additional support 114 may be placed. These abutments 115 may be provided on the back support 112 at pre-determined positions relative to the hinging point of the back support 112 to the container, as such to place and hold the back support 112 under pre-determined angles with respect to the bottom 113.

[0014] Figure 3A shows the bag 100 with foldable back support 112, comprising an additional support 114 that is hingedly attached to the back support 112. Figure 3B shows the additional support 114 hinged at an angle with respect to the back support 112, such that at least part of the back support 112, the additional support 114 and at least a part of the container 110, preferably the bottom 113, may form a closed shape. The inside surface of the container 110 may be provided with one or more abutments 115 to which the additional support 114 may be placed. These abutments 115 may be provided at the inside surface of the container 110 at pre-determined distances with respect to the hinging point of the additional support 114 relative to the bottom 113 as such to place and hold the back support 112 under pre-determined angles with respect to the bottom 113.

[0015] Figure 4A shows the bag 100, comprising the

flexible back support 112, where the back support 112 is bent such that it may form a closed curve with at least a part of the inside surface of the container 110, preferably with the bottom 113. The inner surface of the container 110 may be provided with one or more abutments 115 to which the bent back support 112 may be placed. Figure 4B shows the bag 100, comprising the flexible back support 112 and the flexible additional support 114. The additional support 114 is hingedly attached to the inside of the container 110. The back support 112 and the additional support 114 are flexible such that when either the back support 112 or the additional support 114 or both are bent, at least part of the back support 112, at least part of the additional support 114 and at least part of the container 110, preferably the bottom 113, may form a closed shape. The back support 112 and additional support 114 may be locked to each other by means of e.g. a clamping mechanism, one or more screws or bolts, friction, hooks and loops fasteners, or any other fastening mechanism, or any combination thereof.

[0016] Figure 4C shows the bag 100, comprising the back support 112 and the flexible additional support 114, where the additional support 114 is hingedly supported on the inside of the container 110. The additional support 114 may be bent in such a way that it may form a closed shape with the inside of the container 110, preferably with the bottom 113, such that the back support 112 may be placed and held against this closed shape. The back support 112 may be locked to each other by means of e.g. a clamping mechanism, one or more screws or bolts, friction, hooks and loops fasteners, or any other fastening mechanism, or any combination thereof. The inside of the container 110, preferably the bottom 113, may comprise one or more abutments 115 to which the additional support 114 may be placed.

[0017] Figure 5 shows the bag 100 with the back support 112 in a position at an angle with respect to the bottom 113, where the container 110 predominantly comprises one or more materials with a stiffness so low, that the container 110 may roughly follow the contour of the back support 112, the materials being e.g. a woven fabric comprising cotton, linen, wool, a nonwoven material such as a plastic, any other material, or any combination thereof.

[0018] To provide a smooth surface on the back support 112, the top of the back support, opposite to the hinging connection, may be connected to the top of the bag 112, at this inside of the bag. The connection may be provided by means of a hooks-and-loops fastener or equivalent, by providing an envelope at the inside of the bag for receiving the top of the back support 112. The additional support may be connected to the inside of the bag in a similar way, at the opposite inside of the bag.

[0019] Figure 5 also shows a sheet 116 which may be used to form a lounge bed in combination with the bag 100 with foldable back support 112, where the sheet 116 is sufficiently large to provide cover from the ground for the person using the lounge bed.

[0020] Figure 6 shows the bag 100 with foldable back support 112 comprising an additional bag 117, which may be placed inside the container 110 and may be taken out of the container 110 following the direction of the arrows. The additional bag 117 may comprise an insulating material, as it may function as a cooler bag for insulating the contents of the additional bag 117, e.g. food and drinks, from the ambient temperature. The measurements of the additional bag 117 are preferably smaller than the measurements of the bag 100 to ensure that the additional bag 117 fits completely in the bag 100.

[0021] Figure 7 shows the bag 100 with foldable back support 112, comprising a first compartment 118 which may hold at least part of the back support 112 and is hingedly attached to the inside of the container 110, preferably to the bottom 113, a second compartment 119 which may hold at least part of the additional support 114 and is hingedly attached to the inside of the container 110, preferably to the bottom 113, and one or multiple abutments 115, preferably placed on the back support 112.

[0022] The first compartment 118 may comprise a first flap 120 which may be used to hold the back support 112 inside the first compartment 118, whereas the second compartment 119 may comprise a second flap 121 which may be used to hold the additional support 114 inside the second compartment 119. The flaps may be secured for closing the compartment by means of button-and-hole connections, hooks-and-loops fasteners or equivalent, zippers, other, or a combination thereof.

[0023] The first compartment 118 may provide the hinging functionality for the back support 112 with respect to the inside of the container 110, and the second compartment 119 may provide the hinging functionality for the additional support 114 with respect to the inside of the container 110.

[0024] Another embodiment of the bag with foldable back support is presented where the back support and/or the additional support comprise a material with high thermal capacity. When cooled to a temperature below ambient temperature, the back support and/or additional support may provide cooling capacity for the contents of the bag, which may be e.g. food or drinks.

[0025] Another embodiment of the bag with foldable back support comprises the container with a triangular shaped base, preferably a triangular based bottom, the back support with a triangular shape, and optionally one or more triangular shaped additional supports. The back support, part of the container, preferably the bottom, and optionally one or more additional supports may be locked with respect to each other such to place and hold the back support at an angle with respect to the bottom inside the container. Instead of being triangular shaped, the container base, back support and one or more additional supports may also be shaped as any other polygon.

[0026] In the embodiments discussed so far, the back support and the additional support have been discussed as being distinct from an envelope of the bag as a con-

tainer. In other embodiments that may comprise any feature discussed above, at least one of the back support and the additional support are incorporated, either fixed or releasably, in a part of the envelope of the bag. Such part may be all or part of the bottom of the bag or a side part of the envelope of the bag. Preferably, the support or supports are incorporated in the envelope such that the back support and the additional support are hingedly connected to one another.

[0027] In the description above, it will be understood that when an element such as layer, region or substrate is referred to as being "on" or "onto" another element, the element is either directly on the other element, or intervening elements may also be present. Also, it will be understood that the values given in the description above, are given by way of example and that other values may be possible and/or may be strived for.

[0028] Furthermore, the invention may also be embodied with less components than provided in the embodiments described here, wherein one component carries out multiple functions. Just as well may the invention be embodied using more elements than depicted in the Figures, wherein functions carried out by one component in the embodiment provided are distributed over multiple components.

[0029] It is to be noted that the figures are only schematic representations of embodiments of the invention that are given by way of non-limiting examples. For the purpose of clarity and a concise description, features are described herein as part of the same or separate embodiments, however, it will be appreciated that the scope of the invention may include embodiments having combinations of all or some of the features described. The word 'comprising' does not exclude the presence of other features or steps than those listed in a claim. Furthermore, the words 'a' and 'an' shall not be construed as limited to 'only one', but instead are used to mean 'at least one', and do not exclude a plurality.

[0030] A person skilled in the art will readily appreciate that various parameters and values thereof disclosed in the description may be modified and that various embodiments disclosed and/or claimed may be combined without departing from the scope of the invention.

[0031] It is stipulated that the reference signs in the claims do not limit the scope of the claims, but are merely inserted to enhance the legibility of the claims.

Claims

1. A bag with foldable back support, comprising:

- A portable container, comprising an envelope with at least one opening, where at least part of the container is arranged to form a bottom of the container; and
- A back support;

Wherein:

- The back support is hingedly provided in the container relative to the bottom, and
 - The back support is arranged to be fixated relative to the bottom.
2. The bag with foldable back support according to claim 1, comprising an additional support, wherein:
- the additional support is hingedly provided in the container relative to the bottom; and
 - At least a part of the back support, at least a part of the additional support, and at least a part of bottom are arranged to form a closed shape.
3. The bag with foldable back support according to claim 2, wherein the back support comprises one or more abutments, where the additional support is arranged to abut to for forming the closed shape.
4. The bag with foldable back support according to claim 1, comprising an additional support, wherein:
- the additional support is hingedly connected to the back support; and
 - At least a part of the back support, at least a part of the additional support, and at least a part of the bottom may form a closed shape.
5. The bag with foldable back support according to claim 4, wherein the container comprises one or more abutments where the additional support is arranged to abut to for forming the closed shape.
6. The bag with foldable back support according to claim 1, wherein the back support is bendable such that the back support may form a curved shape such that the back support may be fixated relative to the bottom.
7. The bag with foldable back support according to claim 6, wherein the inside of the container comprises one or more abutments to which the back support is arranged to be placed.
8. The bag with foldable back support according to claim 6, comprising an additional support, wherein:
- the additional support is hingedly provided in the container relative to the bottom, and
 - the additional support may be fixed with respect to the back support, such that at least part of the additional support, at least part of the back support, and at least part of the bottom may form a closed shape.
9. The bag with foldable back support according to any
- of the preceding claims, wherein at least part of the bottom is provided by at least part of a bottom of the container.
10. The bag with foldable back support according to any of the preceding claims, comprising a first compartment where at least part of the back support may be placed in and withdrawn from.
11. The bag with foldable back support according to any of the claims 2-5,8-10, further comprising a second compartment where at least part of the additional support may be placed in and withdrawn from.
12. The bag with foldable back support according to any of the preceding claims, comprising an additional container, wherein:
- The additional container may be placed inside the container through one of the openings of the container, and
 - The additional container may be withdrawn from the container through one of the openings of the container.
13. The bag with foldable back support according to any of the preceding claims, wherein the container comprises one or more materials with a stiffness so low that the container may roughly follow the contour of the back support.

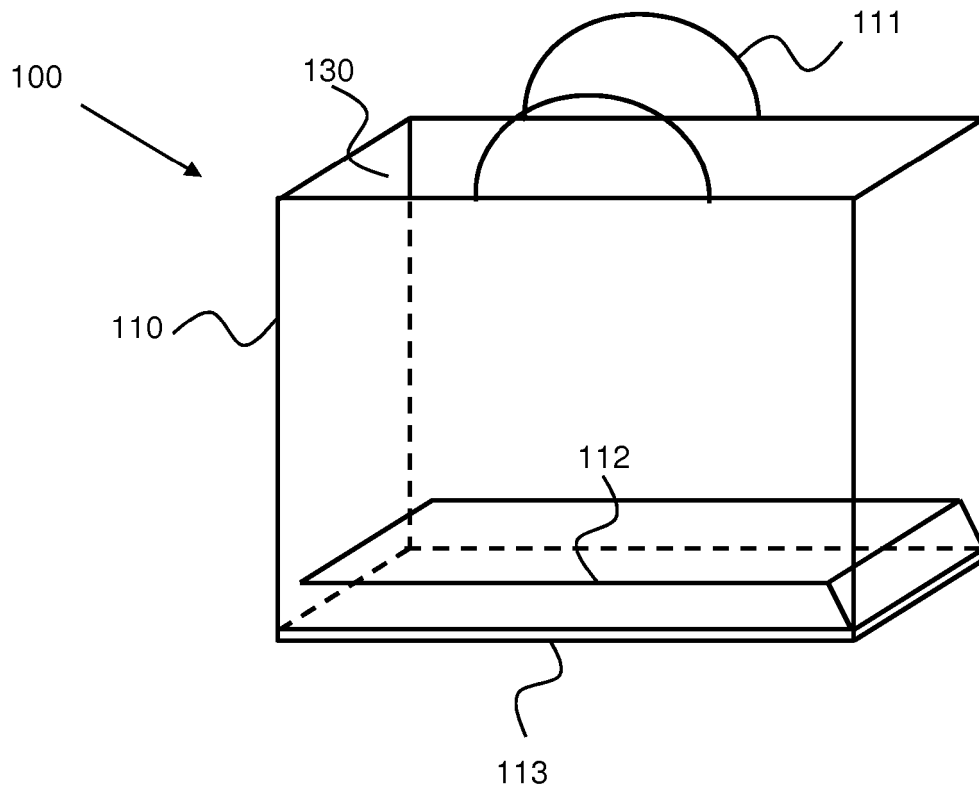


Fig. 1

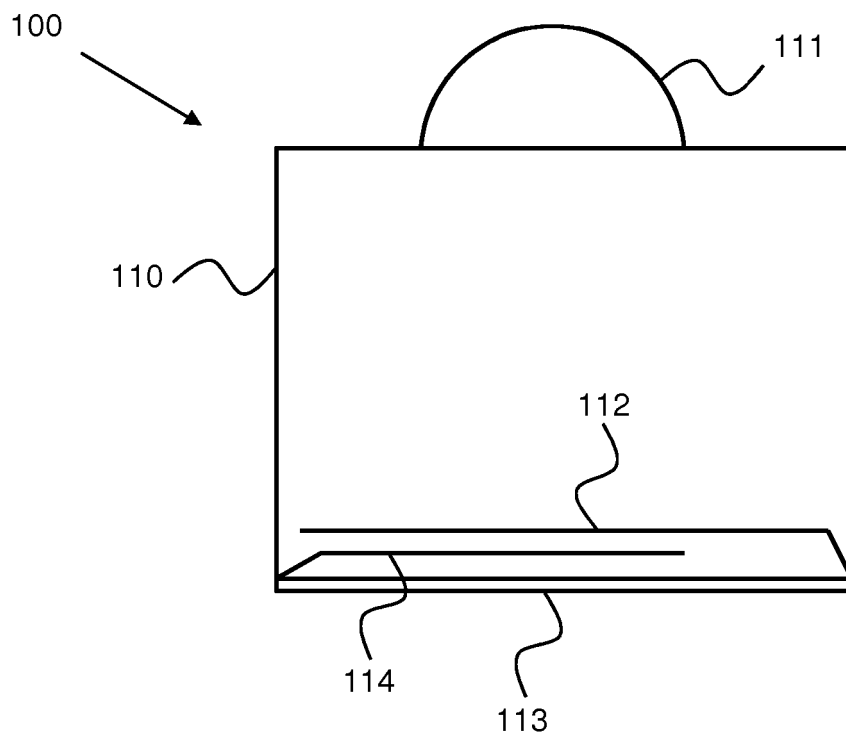


Fig. 2 A

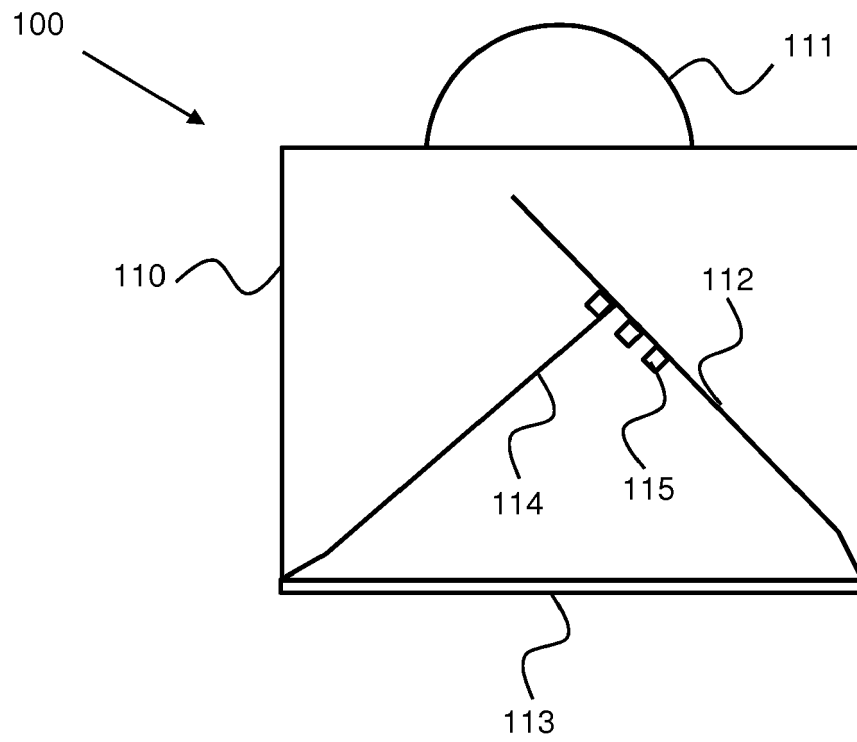


Fig. 2 B

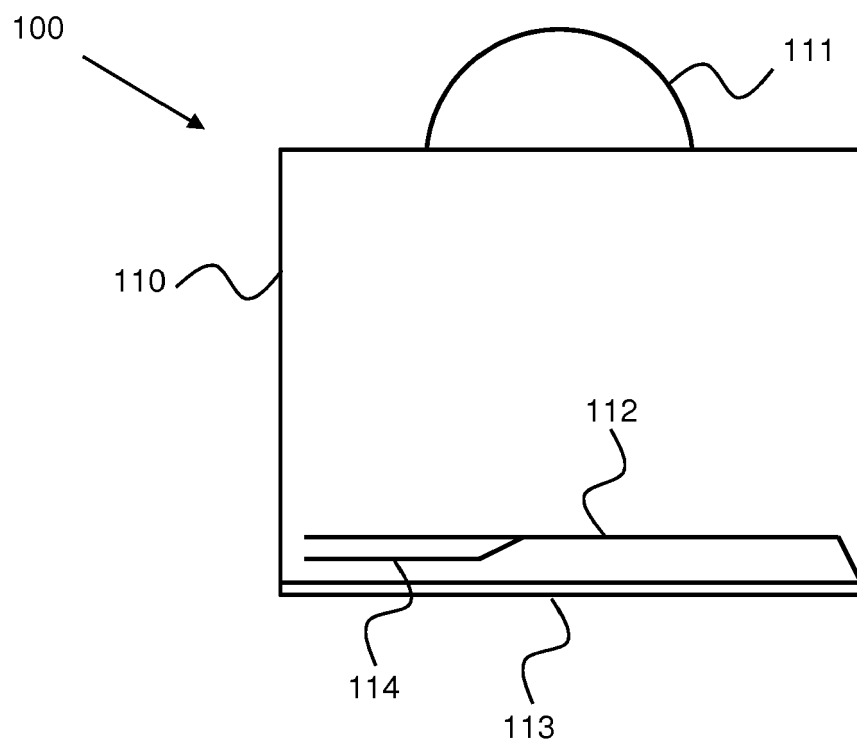


Fig. 3 A

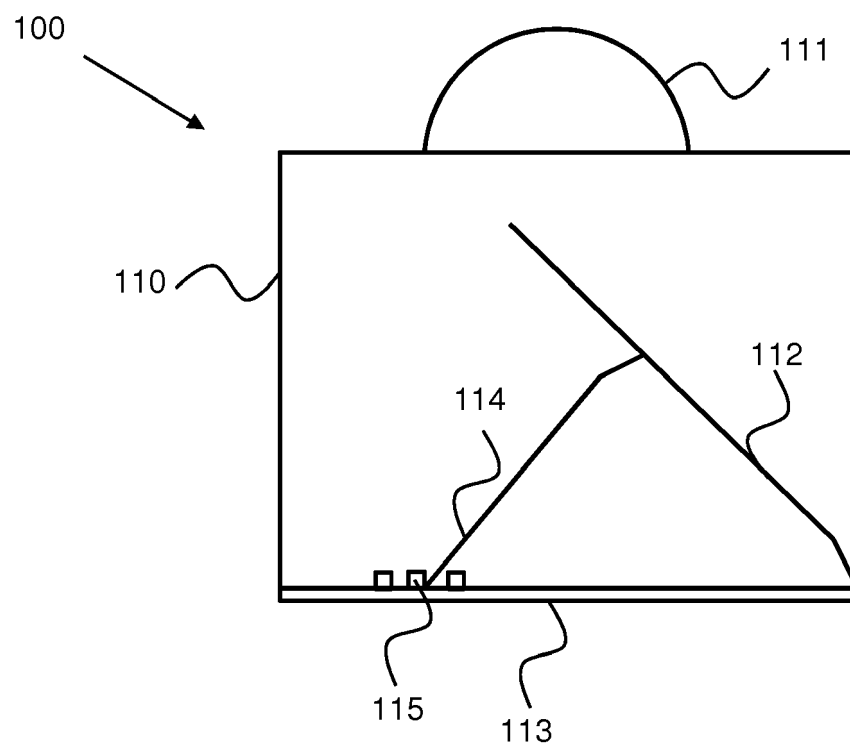


Fig. 3 B

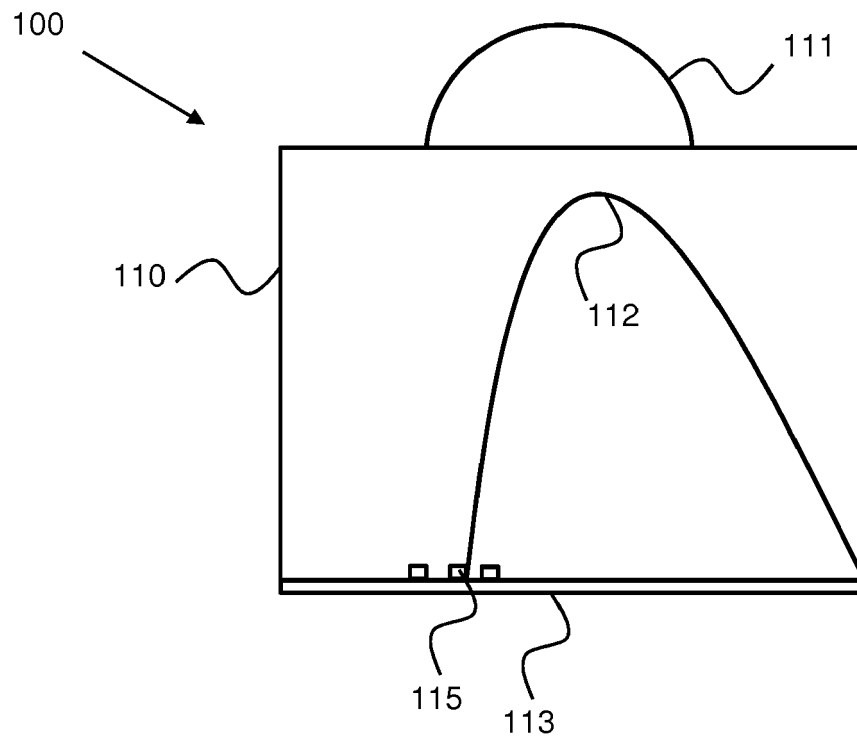


Fig. 4 A

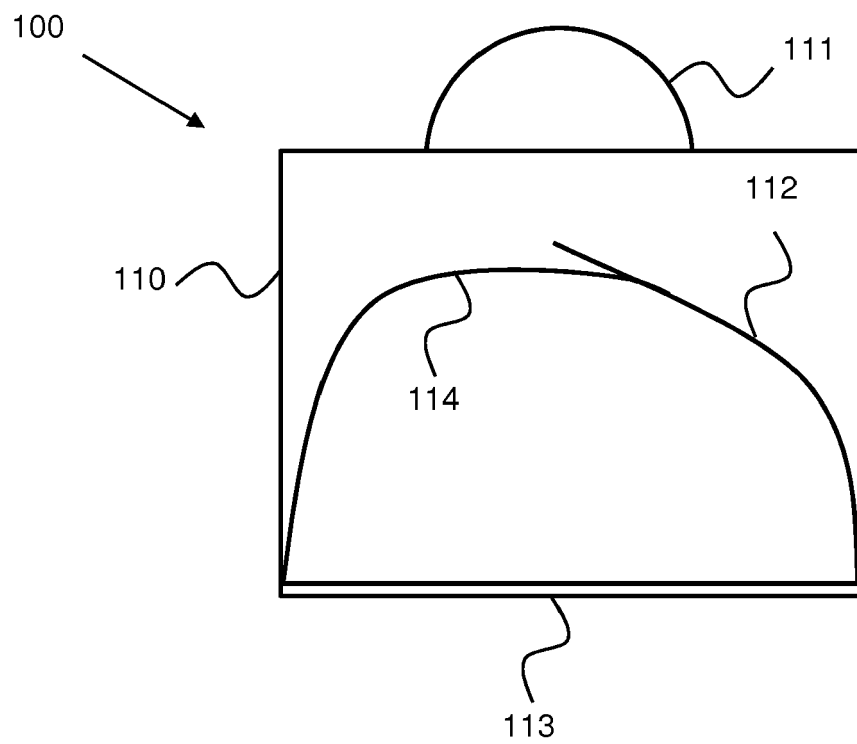


Fig. 4 B

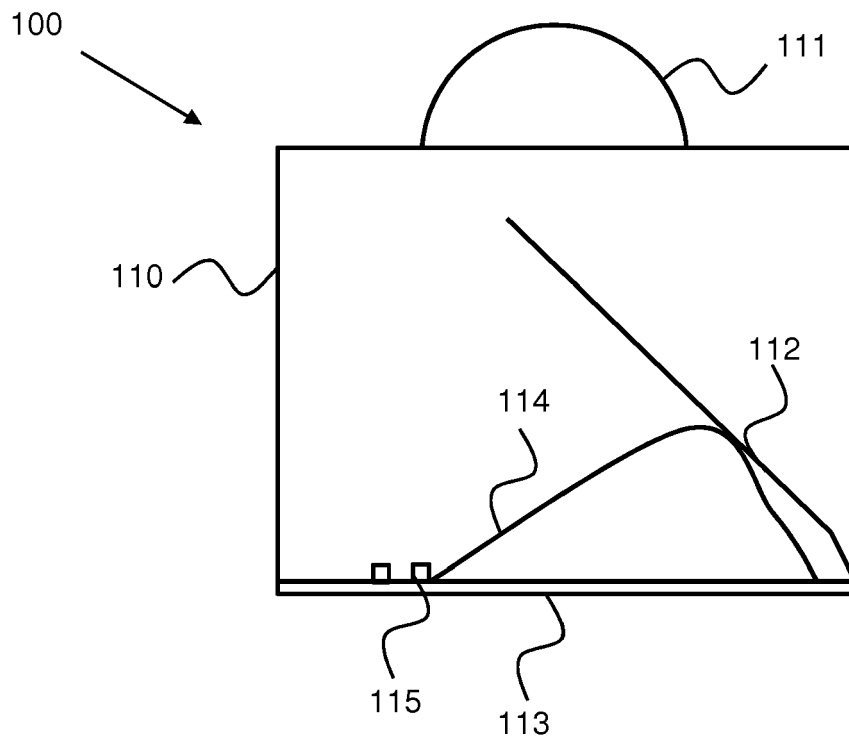


Fig. 4 C

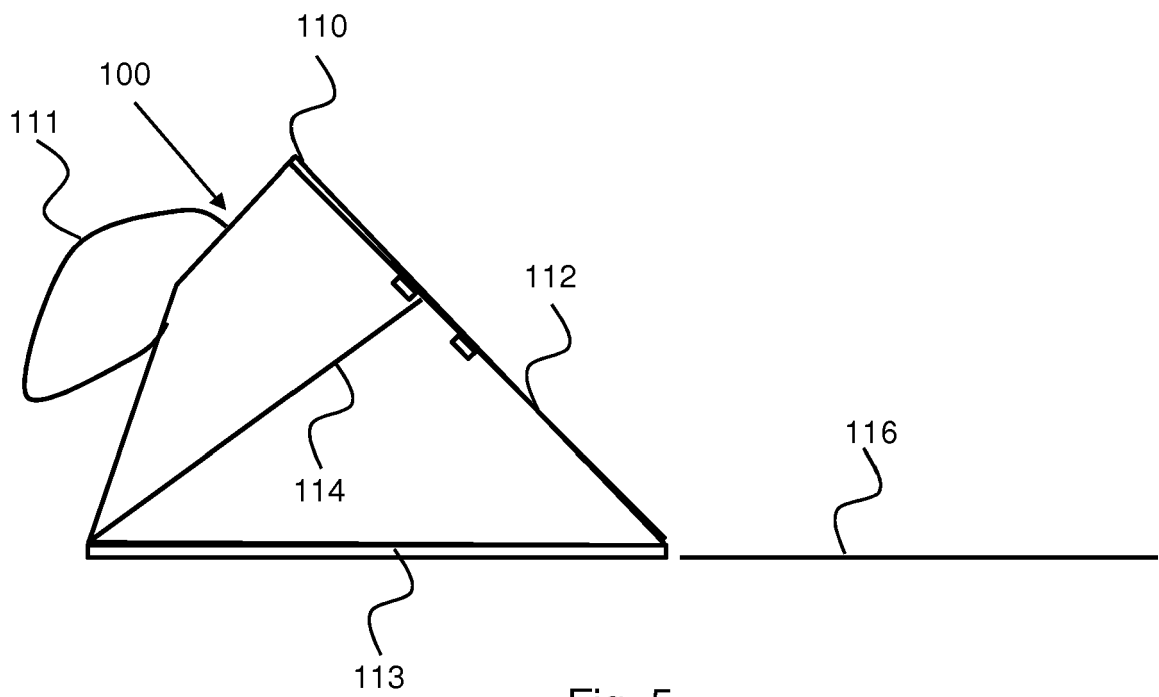


Fig. 5

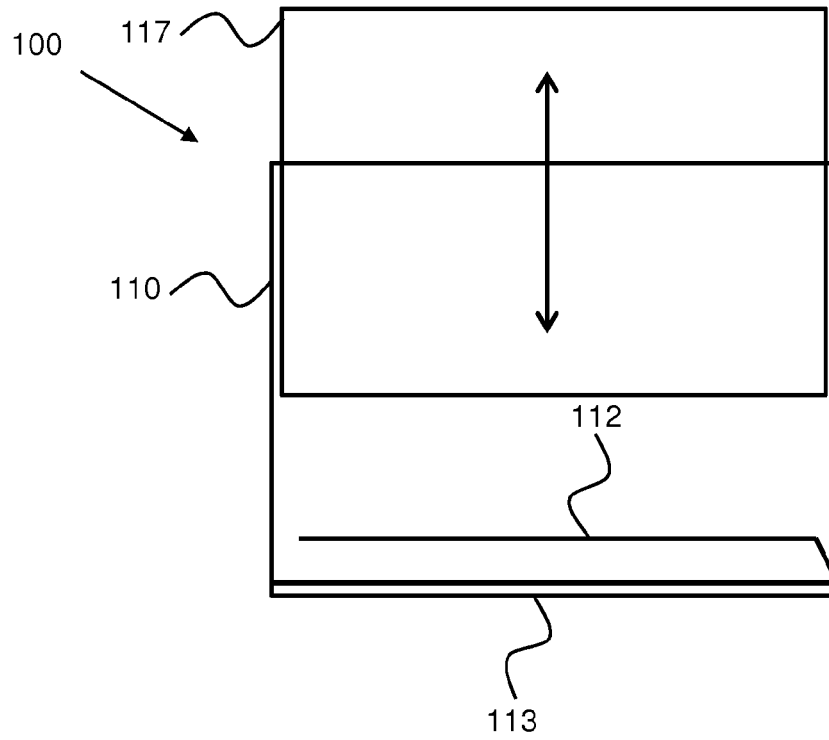


Fig. 6

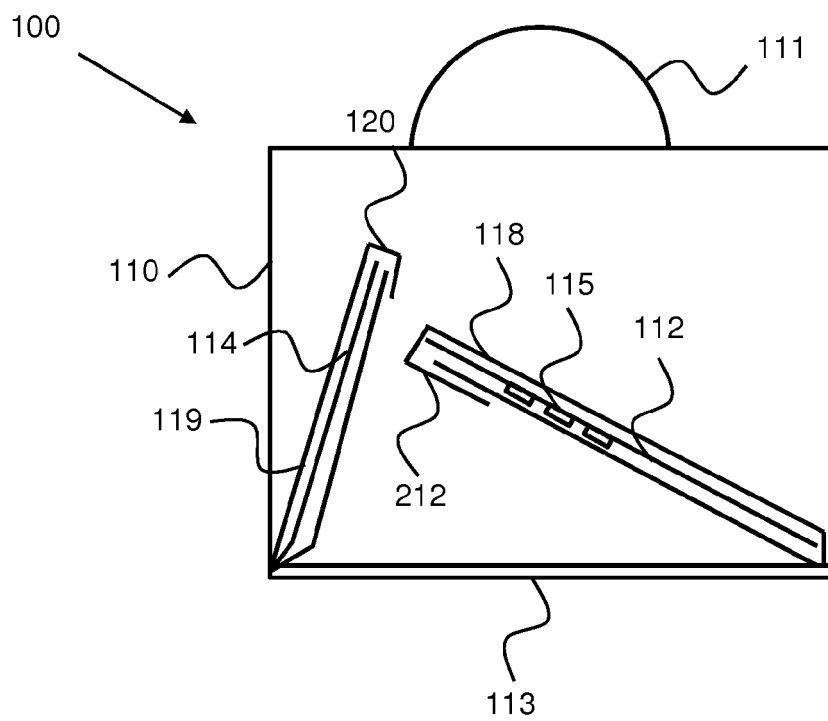


Fig. 7



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Application Number
EP 18 18 6841

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			TECHNICAL FIELDS SEARCHED (IPC)
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The present search report has been drawn up for all claims			
Place of search The Hague		Date of completion of the search 30 October 2018	Examiner Fidalgo Marron, B
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