



(11) **EP 4 414 517 B1**

(12) **EUROPEAN PATENT SPECIFICATION**

- (45) Date of publication and mention of the grant of the patent:
16.04.2025 Bulletin 2025/16

(21) Application number: **24154487.3**

(22) Date of filing: **29.01.2024**
- (51) International Patent Classification (IPC):
E04F 10/06 (2006.01)

(52) Cooperative Patent Classification (CPC):
E04F 10/0607

(54) **CANOPY WITH AWNING**
SONNENSEGEL MIT MARKISE
AUVENT AVEC MARQUISE

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| <p>(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 ME MK MT NL NO PL PT RO RS SE SI SK SM TR</p> <p>(30) Priority: 09.02.2023 BE 202305093</p> <p>(43) Date of publication of application:
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Description

[0001] The present invention relates to a canopy with awning.

[0002] In particular, the invention is intended for a canopy with a load-bearing structure, with at least four beams, usually in the form of a rectangular frame, whereby the load-bearing structure is typically supported by posts in the corners of the frame.

[0003] Where reference is made to a canopy in this document, this also relates, inter alia, to pergolas, verandas and the like.

[0004] Typically, the load-bearing structure of the canopy is provided with an awning, sometimes also referred to as a canvas roof. Such awning can usually be horizontally rolled up or folded up and can cover all or part of the opening in the frame of the load-bearing structure for blocking bright sunshine, for example, or stopping and running off precipitation.

[0005] In the case of a fold-up awning, said awning is folded up or retracted into a pack, such that different strips of the awning hang in loops next to each other.

[0006] When the awning is fully extended, the roof is more or less flat, but this has the disadvantage that it interferes with the rainwater runoff and certain areas of the awning will soon sag and so-called "pooling" occurs such that water accumulates in said areas and does not run off.

[0007] Another disadvantage is the required space of the opening in the frame that is taken up to store the folded pack of the awning.

[0008] A certain height of the beams of the load-bearing structure is also necessary to be able to store the folded pack. Preferably, the beams are higher than the length of the loops.

[0009] Another disadvantage is that the awning cannot be made in one piece. Indeed, different profiles are needed to each of which a piece of awning is attached. This is expensive due to the need for multiple stock sizes of the awning and many profiles and end bars.

[0010] Roll-up awnings are also known, whereby a first side of the awning is typically secured to a rotatable roller in a screen casing arranged in one of the beams.

[0011] Canopies whereby vertical openings of the canopy, or rather, the open space between the posts are provided with a vertical roll-up awning, are also known. Such vertical awnings protect the surface under the canopy against wind, bright sunshine or precipitation. Such awning rolls out from one of the four beams of the frame toward the ground or vice versa when rolling up the awning.

[0012] Document BE 1026 974 A1 shows a canopy with awning according to the preamble of claim 1.

[0013] A disadvantage of such canopy is that the horizontal roll-up awning is incorporated in a first of the four beams of the frame and one or more vertical roll-up awnings are provided in as many of the other three beams. Consequently, the wall or space between the

posts extending under the first beam cannot be covered by a vertical roll-up awning.

[0014] The purpose of the present invention is to provide a solution to at least one of the aforementioned and other disadvantages.

[0015] To this end, the invention relates to a canopy with awning, whereby the canopy comprises a load-bearing structure with at least four beams, whereby in at least a first beam a first roller is provided to which one end of a first awning is attached and whereby at the facing end of the first awning a first end bar is provided, the ends of which are guided using guides provided to a second beam and a third beam that are connected to the first beam, said guides guiding the first end bar from the first beam to a facing fourth beam upon rolling out and rolling up the first awning and whereby in the first beam a second roller is provided to which one end of a second awning is attached and whereby on the facing end a second end bar is provided which rolls out from the first beam toward the ground or the other way around when rolling up the awning.

[0016] This has the advantage that the vertical opening or space under the first beam can also be covered with an awning. A canopy according to the invention allows both the roof or the horizontal opening as well as all vertical openings or walls to be covered with an awning.

[0017] There is no need for a separate screen casing that is mounted against one of the four beams and in which a roller is provided. The space in the beams is utilised optimally and this also has aesthetic advantages of course.

[0018] Preferably, the first roller is positioned vertically above the second roller in the first beam.

[0019] This has the advantage that the available height H between the first awning and the underside of the first beam can be utilised for rolling out the first awning at a pitch. To this end precipitation falling on the first awning can always run off and so-called "pooling" is prevented. This also implies that preferably the aforementioned guides extend at a pitch relative to the horizontal, such that the first awning is indeed located at a pitch when wholly or partly rolled out.

[0020] Said height H also allows a gutter to be provided around the canopy on or against the inside of the four beams.

[0021] In a preferred embodiment the first beam is also provided with a removable cover plate through which the first roller and/or the second roller are accessible for inspection or maintenance.

[0022] With the intention of better showing the characteristics of the invention, a few preferred embodiments of a canopy according to the invention are described hereinafter by way of an example, without any limiting nature, with reference to the accompanying drawings, wherein:

figure 1 schematically shows a perspective view of a canopy according to the invention;

figure 2 shows a cross-section according to line II-II of figure 1;
 figure 3 shows a detail of the part indicated in figure 2 by F1;
 figure 4 shows a variant of a canopy according to the invention;
 figure 5 shows a cross-section according to line V-V in figure 4.

[0023] The canopy 1, as schematically shown in figure 1, is freestanding in this example, but can also be mounted against or to a façade of a building.

[0024] Said canopy 1 comprises a load-bearing structure 2 with in this case four beams, i.e. a first beam 3A, a second beam 3B, a third beam 3C and a fourth beam 3D. In this example, said beams 3A, 3B, 3C, 3D are arranged in the form of a rectangular frame 4 and in the corners, where the beams meet, are supported by posts 5.

[0025] Although in this case the invention shows four beams 3A, 3B, 3C and 3D and four posts 5 the invention is not limited to this.

[0026] In this case, the canopy 1 also comprises two awnings 6A and 6B, i.e. a first awning 6A extending horizontally or at a slight pitch and covering the horizontal opening in the frame and a second awning 6B extending vertically and covering the vertical opening between the posts 5 on which the first beam 3A is resting.

[0027] The first awning 6A rolls out from the first beam 3A toward the facing fourth beam 3D. The second awning 6B rolls out from the first beam 3A toward the ground. Both awnings 6A and 6B roll up again toward the first beam 3A.

[0028] It is not excluded that vertical awnings are also provided which roll out from the second beam 3B, third beam 3C or fourth beam 3D toward the ground.

[0029] More alternatively, it is not excluded that the canopy is equipped with two horizontal roll-out awnings, for example an awning provided in the first beam 3A and an awning provided in the facing fourth beam 3D, which roll out toward each other and meet in the middle of the load-bearing structure 2.

[0030] At its free ends, the first awning 6A is provided with an end bar 7, the ends of which are guided using guides 8 provided for this purpose in the second beam 3B and third beam 3C. Said guides 8 are located at a slight pitch relative to the horizontal, such that the first awning 6A also extends at the same pitch when wholly or partly rolled out.

[0031] The pitch of the first awning 6A is more visible in figure 2. Said pitch simplifies the rainwater runoff from precipitation falling on the first awning 6A and prevents so-called "pooling" of the awning 6A.

[0032] At its free ends, the second awning 6B is also provided with an end bar 7, the ends of which are guided using guides 8 provided for this purpose in the posts 5 supporting the first beam 3A.

[0033] Alternatively, said end bar 7 can also not be guided, but the second awning 6B is kept tight by means

of the dead weight of the end bar 7.

[0034] In the detail F1 of figure 2, as shown in figure 3, it is clearly visible that the first awning 6A is rolled up on a first roller 9A and the second awning 6B on a second roller 9B.

[0035] One end of both respective awnings 6A and 6B is attached or secured to their respective rollers 9A and 9B.

[0036] Said rollers 9A and 9B are applied in the first beam 3A. In this example said first beam 3A is provided with a removable cover plate 10 through which the first roller 9A and/or the second roller 9B is accessible.

[0037] In this case, said first beam 3A is also executed in two halves 11A and 11B, whereby the first roller 9A is provided in a first half 11A and the second roller 9B is applied in a second half 11B.

[0038] Two halves 11A and 11B are understood to mean two parts that when composed, substantially form the first beam 3A. The first roller 9A is positioned vertically above the second roller 9B. This allows the available or free height H between the underside of the first beam 3A and the first awning 6A to be utilised for rolling out the first awning 6A at the aforementioned pitch.

[0039] Said height H also allows a gutter 12 to be provided around the canopy 1 at the bottom against the inside of the four beams 3A, 3B, 3C, 3D as shown in figure 3.

[0040] Figures 4 and 5 show a variant of the canopy, the difference being that in this case the first awning 6A extends horizontally and thus is not located at a slight pitch like the embodiment of figures 1 to 3.

[0041] The present invention is by no means limited to the embodiments described as an example and shown in the drawings, but a canopy according to the invention can be realised in all kinds of forms and dimensions, without departing from the scope of the invention as defined by the appended claims.

Claims

1. Canopy with awning, whereby the canopy (1) comprises a load-bearing structure (2) with at least four beams (3A, 3B, 3C, 3D), wherein in at least a first beam (3A) a first roller (9A) is provided to which one end of a first awning (6A) is attached and whereby at the facing end of the first awning (6A) a first end bar (7) is provided, the ends of which are guided using guides (8) provided on or in a second beam (3B) and a third beam (3C) that are connected to the first beam (3A), said guides (8) guiding the first end bar (7) from the first beam (3A) to a facing fourth beam (3D) upon rolling up and rolling out the first awning (6A),
characterised in that
 in the first beam (3A) a second roller (9B) is provided to which one end of a second awning (6B) is attached and whereby on the facing end a second end bar (7) is provided which rolls out from the first beam (3A)

toward the ground or the other way around when rolling up the second awning (6B).

2. Canopy according to claim 1, **characterised in that** the first beam (3A) is provided with a removable cover plate (10) through which the first roller (9A) and/or the second roller (9B) are accessible. 5
3. Canopy according to any one of the previous claims, **characterised in that** the first beam (3A) is executed in two halves (11A, 11B), whereby the first roller (9A) is provided in a first half (11A) and the second roller (9B) is provided in a second half (11B). 10
4. Canopy according to any one of the previous claims, **characterised in that** the first roller (9A) and the second roller (9B) are positioned above each other in the first beam (3A). 15
5. Canopy according to claim 4, **characterised in that** the first roller (9A) is positioned vertically above the second roller (9B). 20
6. Canopy according to any one of the previous claims, **characterised in that** the second beam (3B) and/or the third beam (3C) and/or the fourth beam (3D) are provided with one or two rollers. 25
7. Canopy according to any one of the previous claims, **characterised in that** a gutter (12) for rainwater runoff is provided around the canopy (1), which is applied against or on the inside of the four beams (3A, 3B, 3C, 3D). 30
8. Canopy according to any one of the previous claims, **characterised in that** the aforementioned guides (8) are located at a pitch such that the first awning (6A) is arranged at a pitch relative to the horizontal when the first awning (6A) is wholly or partly rolled out. 35
9. Canopy according to any one of the previous claims, **characterised in that** one of the four beams (3A, 3B, 3C, 3D) of the canopy is mounted against or on the façade of a building. 40

Patentansprüche

1. Vordach, das mit einer Markise ausgestattet ist, wobei das Vordach (1) eine lasttragende Struktur (2) umfasst, die mindestens vier Träger (3A, 3B, 3C, 3D) umfasst; wobei in mindestens einem ersten Träger (3A) eine erste Rolle (9A) vorgesehen ist, an der ein Ende einer ersten Markise (6A) befestigt ist; und wobei an dem gegenüberliegenden Ende der ersten Markise (6A) eine erste Endstange (7) vorgesehen ist, deren Enden unter Verwendung von 50

Führungen (8) geführt werden, die an oder in einem zweiten Träger (3B) und einem dritten Träger (3C) vorgesehen sind, die mit dem ersten Träger (3A) verbunden sind; wobei die oben genannten Führungen (8) die erste Endstange (7) vom ersten Träger (3A) in Richtung eines gegenüberliegenden vierten Trägers (3D) während des Aufrollens und Abrollens der ersten Markise (6A) führen; **dadurch gekennzeichnet, dass** in dem ersten Träger (3A) eine zweite Rolle (9B) vorgesehen ist, an der ein Ende einer zweiten Markise (6B) befestigt ist; und wobei an dem gegenüberliegenden Ende eine zweite Endstange (7) vorgesehen ist, die aus dem ersten Träger (3A) in Richtung Boden herausrollt, oder umgekehrt bei dem Aufrollen der zweiten Markise (6B).

2. Vordach nach Anspruch 1, **dadurch gekennzeichnet, dass** der erste Träger (3A) mit einer abnehmbaren Abdeckplatte (10) ausgestattet ist, durch die die erste Rolle (9A) und/oder die zweite Rolle (9B) zugänglich sind.
3. Vordach nach einem der vorhergehenden Ansprüche, **dadurch gekennzeichnet, dass** der erste Träger (3A) in der Form von zwei Hälften (11A, 11B) ausgeführt ist; wobei die erste Rolle (9A) in einer ersten Hälfte (11A) und die zweite Rolle (9B) in einer zweiten Hälfte (11B) vorgesehen ist.
4. Vordach nach einem der vorhergehenden Ansprüche, **dadurch gekennzeichnet, dass** die erste Rolle (9A) und die zweite Rolle (9B) jeweils übereinander in dem ersten Träger (3A) angebracht sind.
5. Vordach nach Anspruch 4, **dadurch gekennzeichnet, dass** die erste Rolle (9A) vertikal über der zweiten Rolle (9B) angebracht ist.
6. Vordach nach einem der vorhergehenden Ansprüche, **dadurch gekennzeichnet, dass** der zweite Träger (3B) und/oder der dritte Träger (3C) und/oder der vierte Träger (3D) mit einer oder zwei Rollen ausgestattet sind.
7. Vordach nach einem der vorhergehenden Ansprüche, **dadurch gekennzeichnet, dass** eine Regenrinne (12) für den Ablauf des Regenwassers um das Vordach (1) herum vorgesehen ist, die an vier Trägern (3A, 3B, 3C, 3D) oder an der Innenseite derselben anliegt.
8. Vordach nach einem der vorhergehenden Ansprüche, **dadurch gekennzeichnet, dass** die oben erwähnten Führungen (8) so in einem Abstand entsprechend einer Neigung so angebracht sind, dass die erste Markise (6A) mit einer Neigung zu der Horizontalen angebracht ist, wenn die erste Markise (6A) vollständig oder teilweise ausgerollt wird.

9. Vordach nach einem der vorhergehenden Ansprüche, **dadurch gekennzeichnet, dass** einer der vier Träger (3A, 3B, 3C, 3D) an einem Gebäude oder an der Fassade eines Gebäudes angebracht ist.

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Revendications

1. Auvent équipé d'une marquise, dans lequel l'auvent (1) comprend une structure supportant la charge (2) qui comprend au moins quatre poutrelles (3A, 3B, 3C, 3D) ; dans lequel, dans au moins une première poutrelle (3A), on prévoit un premier rouleau (9A) auquel est fixée une extrémité d'une première marquise (6A) ; et dans lequel, à l'extrémité opposée de la première marquise (6A), on prévoit une première barre terminale (7) dont les extrémités sont guidées en utilisant des guides (8) qui sont prévus sur ou dans une deuxième poutrelle (3B) et une troisième poutrelle (3C) qui sont reliées à la première poutrelle (3A) ; dans lequel lesdits guides (8) guident la première barre terminale (7) à partir de la première poutrelle (3A) dans la direction d'une quatrième poutrelle opposée (3D) au cours de l'enroulement vers le haut et du déroulement vers le bas de la première marquise (6A) ; **caractérisé en ce que**, dans la première poutrelle (3A), on prévoit un deuxième rouleau (9B) auquel est fixée une extrémité d'une deuxième marquise (6B) ; et dans lequel, à l'extrémité opposée, on prévoit une deuxième barre terminale (7) qui quitte la première poutrelle (3A) par déroulement dans la direction du sol ou à l'inverse lors de l'enroulement vers le haut de la deuxième marquise (6B).
2. Auvent selon la revendication 1, **caractérisé en ce que** la première poutrelle (3A) est équipée d'une plaque de recouvrement amovible (10) à travers laquelle le premier rouleau (9A) et/ou le deuxième rouleau (9B) sont accessibles.
3. Auvent selon l'une quelconque des revendications précédentes, **caractérisé en ce que** la première poutrelle (3A) est réalisée sous la forme de deux moitiés (11A, 11B) ; dans lequel le premier rouleau (9A) est prévu dans une première moitié (11A) et le deuxième rouleau (9B) est prévu dans une deuxième moitié (11B).
4. Auvent selon l'une quelconque des revendications précédentes, **caractérisé en ce que** le premier rouleau (9A) et le deuxième rouleau (9B) sont disposés respectivement l'un au-dessus de l'autre dans la première poutrelle (3A).
5. Auvent selon la revendication 4, **caractérisé en ce que** le premier rouleau (9A) est disposé en position verticale au-dessus du deuxième rouleau (9B).

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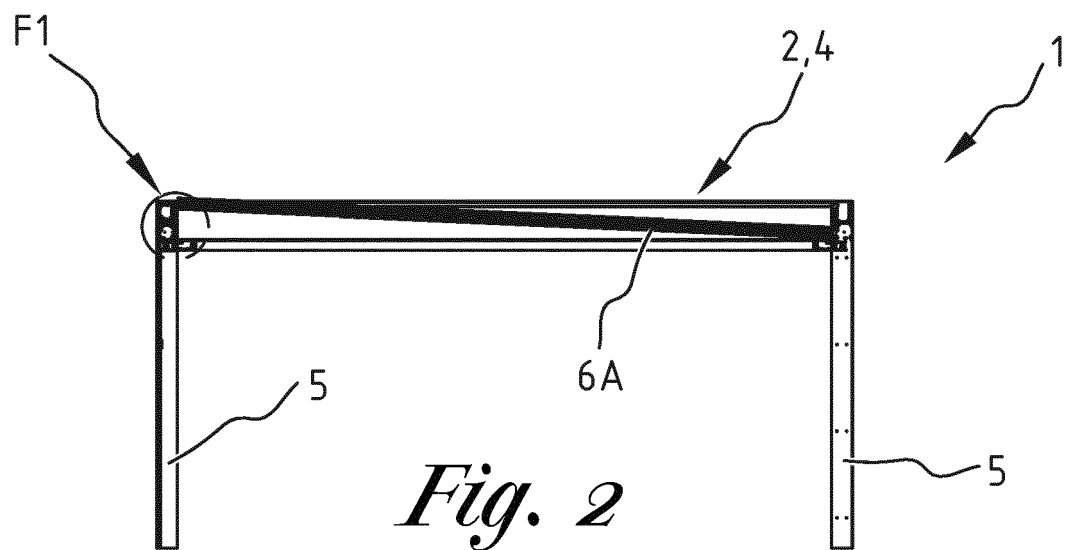
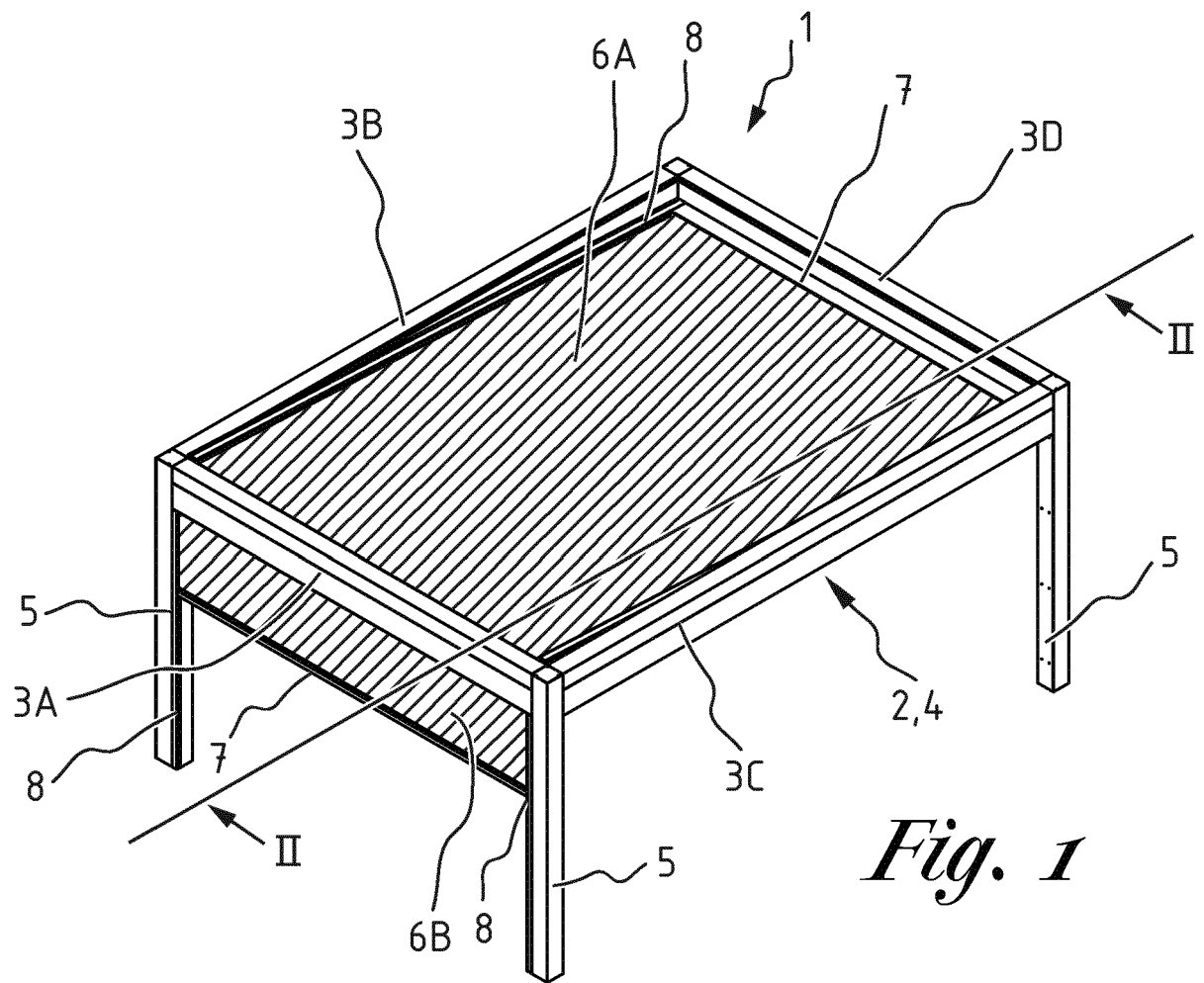
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6. Auvent selon l'une quelconque des revendications précédentes, **caractérisé en ce que** la deuxième poutrelle (3B) et/ou la troisième poutrelle (3C) et/ou la quatrième poutrelle (3D) sont équipées d'un ou de deux rouleaux.

7. Auvent selon l'une quelconque des revendications précédentes, **caractérisé en ce que** l'on prévoit une gouttière (12) pour l'écoulement de l'eau de pluie autour de l'auvent (1), qui vient s'appliquer contre quatre poutrelles (3A, 3B, 3C, 3D) ou sur le côté interne de ces dernières.

8. Auvent selon l'une quelconque des revendications précédentes, **caractérisé en ce que** les guides (8) qui ont été mentionnés ci-dessus, sont situés à une distance correspondant à une pente d'une manière telle que la première marquise (6A) est disposée en formant une pente par rapport à l'horizontale lorsque la première marquise (6A) est complètement ou partiellement déroulée.

9. Auvent selon l'une quelconque des revendications précédentes, **caractérisé en ce qu'une** des quatre poutrelles (3A, 3B, 3C, 3D) est montée contre un bâtiment ou sur la façade d'un bâtiment.



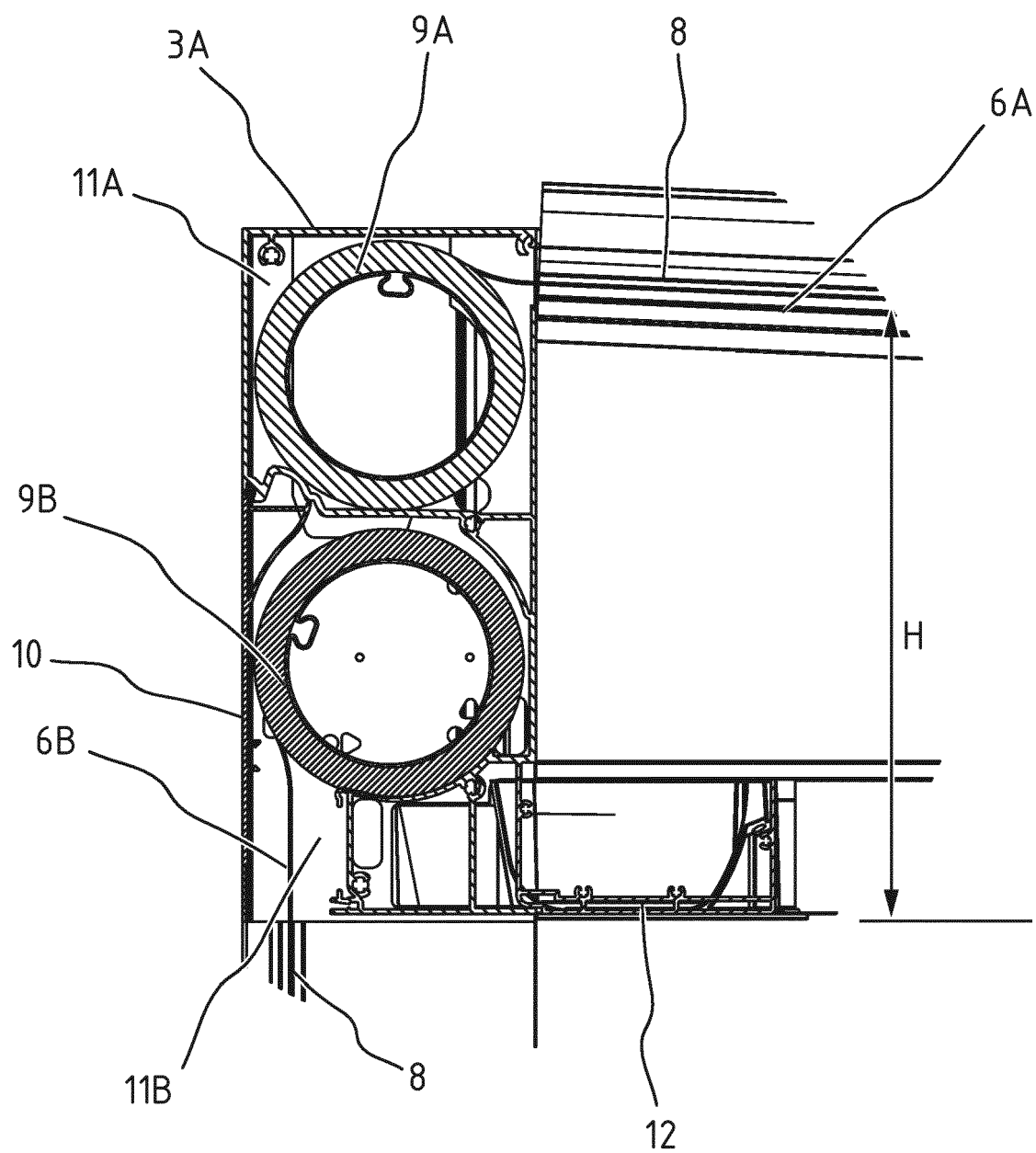
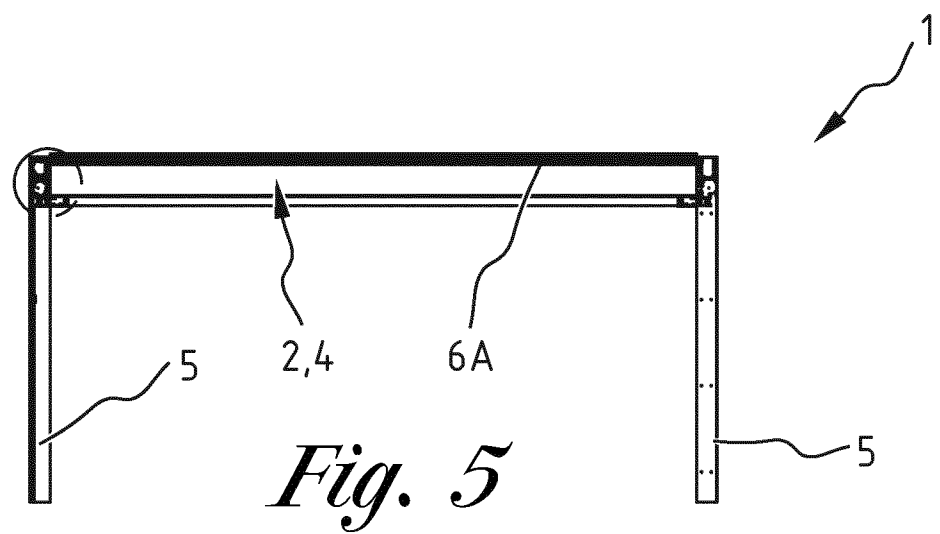
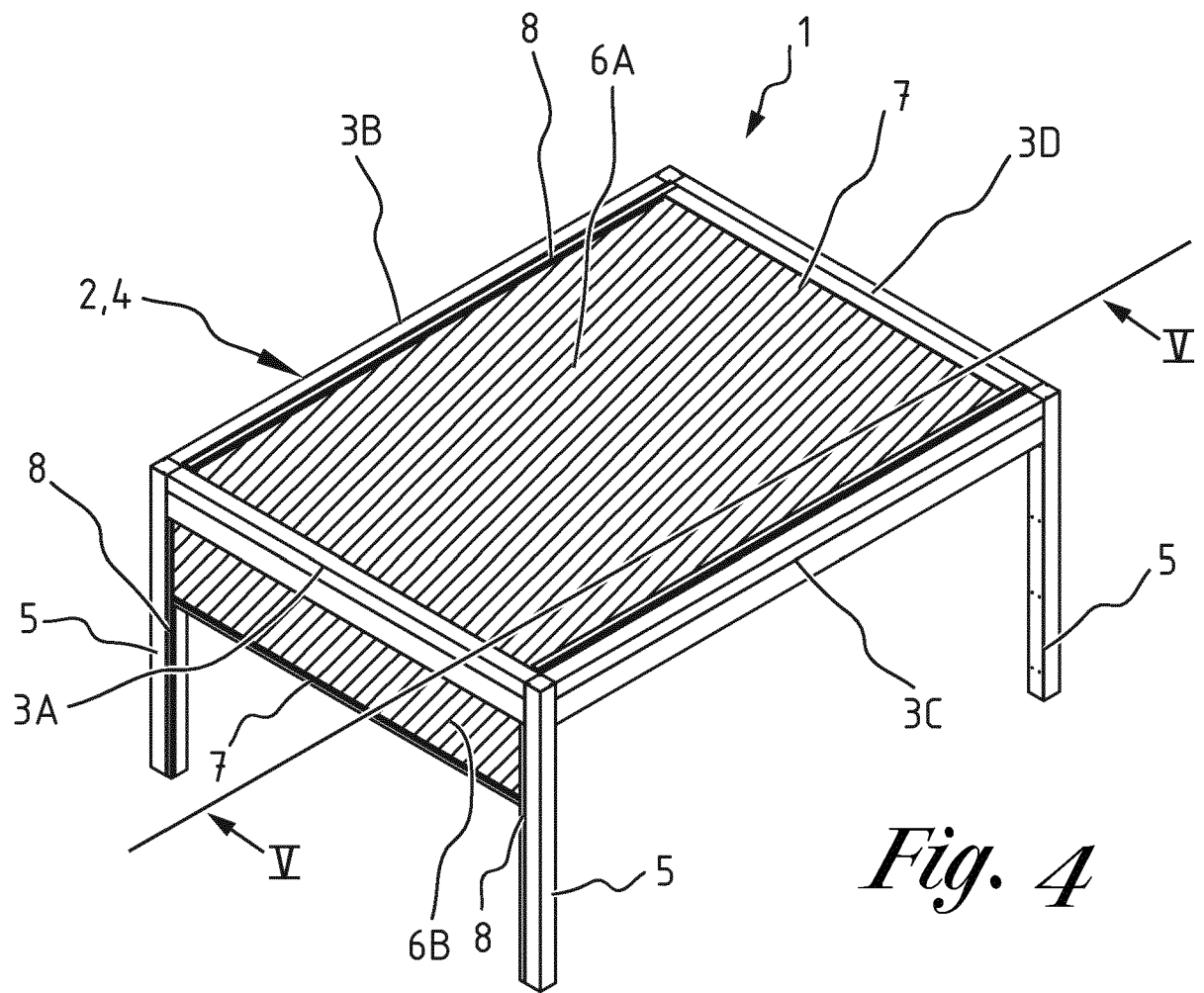


Fig. 3



REFERENCES CITED IN THE DESCRIPTION

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