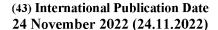
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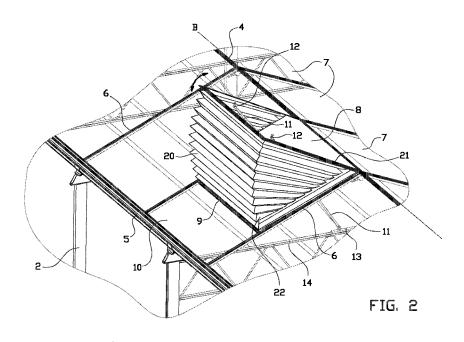
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(54) Title: INSECT NETTING FOR A GREENHOUSE



(57) **Abstract:** The invention relates to an insect netting (22) for a greenhouse (1), comprising a front panel (23) merging into two side panels, wherein the insect netting (22) is pleated in a bellow configuration to collapse in a stacked manner, wherein the bellow configuration is formed with bellow sections (26), wherein each of the bellow sections (26) has two parallel side bellow portions (27) and a front bellow portion (28), wherein each of the side bellow portions (27) comprises a first side gauze web (29) and a second side gauze web (32) connected to each other at a longitudinal side thereof and each having a first short side configured for facing towards the hinging axis, and a second short side, opposite to the first web end (33, 39), configured for facing away from the hinging axis, wherein each of the front bellow portions (26, 28) comprises a first front gauze web (35) and a second front gauze web (38) connected to each other a longitudinal side thereof, and wherein the second short side of the first and second side gauze webs (29) of the side

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bellow portions (27) is connected to the longitudinal side of the first and second front gauze webs (35) facing towards the hinging axis of the ventilation panel, respectively.

5 INSECT NETTING FOR A GREENHOUSE

10 BACKGROUND

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The invention relates to an insect netting for a greenhouse. Furthermore, the invention relates to a netting system having an insect netting, and to a greenhouse comprising an insect netting, or a netting system.

Such an insect netting is known. The known insect netting has a bellow shaped insect netting comprising a front panel that merges into two side panels, wherein the side panels have the shape of a circle section. The insect netting collapses in a stacked manner when the glass panel is swung into its closed position. The bellow sections of the side panels extend in radial direction. In the side panels, the bellow sections extend symmetrically from the front panel towards the middle to merge into each other at the ends about half the height of the side panels.

SUMMARY OF THE INVENTION

At the known insect netting, each of the two side panels and the front panel comprises a number of bellow sections. Each of the bellow sections of a first one of the two side panels merges into a bellow section of the front panel at a first corner of the insect netting, and subsequently each of the bellow sections of the front panel merges into a bellow section of the second one of the two side panels at a second corner of the insect netting. Each bellow section comprises two elongated gauze webs with a

WO 2022/245215 PCT/NL2022/050278

first longitudinal side along which the gauze webs are interconnected to each other in order to form the respective bellow section, and a second longitudinal side, opposite to the first longitudinal side, along which the gauze webs are interconnected to gauze webs of adjacent bellow sections.

Each of the gauze webs of the two side panels has a first end facing towards the hinging axis of the glass panel, and a second end, opposite to the first end, facing away from the hinging axis. At the second end, the gauze 10 webs of the two side panels are interconnected to the gauze web of the front panel. In order to connect each of the gauze webs of the side panels to a corresponding one of the gauze webs of the front panel, the second end of the respective gauze web is overlapping with an end of the 15 gauze web of the front panel, such that the second end is positioned at the longitudinal side of the gauze web of the front panel facing away from the hinging axis of the glass panel, also called the outer longitudinal side of the front panel. The gauze web of the side panel and the gauze web of 20 the front panel by stitching along the sides of the overlapping area.

The inventors have found that a disadvantage of the known insect netting is that a glass panel at which the insect netting is provided closes unevenly. In particular, when seen in a direction perpendicular to the front panel, the glass panel or the surrounding framework thereof is warped when closed, wherein the center of the glass panel or the surrounding framework thereof is resting onto a window profile where the outer ends of the glass panel or the surrounding framework thereof are located above the window profile. This may result in broken glass panels, such that the greenhouse owner or the installer of the insect netting has to replace the broken glass panels.

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Furthermore, the inventors have found that the glass panel or the surround framework thereof being warped when closed, results in undesired draught occurring at or

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near the outer ends of the glass panel or the surrounding framework thereof.

It is an object of the present invention to ameliorate or to eliminate one or more disadvantages of the known prior art, to provide an improved insect netting or to at least provide an alternative insect netting.

According to a first aspect, the invention provides an insect netting for a greenhouse, wherein the insect netting is configured to be secured to a ventilation panel that is hingeable around a hinging axis, wherein in an open position of the ventilation panel, the insect netting at least extends between an opening edge extending parallel to the hinging axis of the ventilation panel, and a ventilation panel edge extending parallel to the hinging axis of the ventilation panel,

the insect netting comprising a front panel merging into two side panels, wherein the insect netting is pleated in a bellow configuration to collapse in a stacked manner, wherein the bellow configuration is formed with bellow sections, wherein each of the bellow sections has two parallel side bellow portions and a front bellow portion,

bellow portions wherein each of the side 25 comprises a first side gauze web and a second side gauze web connected to each other at a longitudinal side thereof and each having a first short side configured for facing towards the hinging axis, and a second short side, opposite to the first web end, configured for facing away from the hinging axis, wherein each of the front bellow portions comprises a first front gauze web and a second front gauze web connected to each other a longitudinal side thereof, and

wherein the second short side of the first and second side gauze webs of the side bellow portions is connected to the longitudinal side of the first and second front gauze webs facing towards the hinging axis of the

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ventilation panel, respectively.

The insect netting according to the invention, thus, has a number of bellow sections. Each bellow section has two parallel side bellow portions and a front bellow 5 portions. Each of the side bellow portions has a first side end configured to be facing towards a hinging axis of a ventilation panel, and a second side end configured to be facing away from the hinging axis of the ventilation panel, when the insect netting is installed in a greenhouse. The second side end of the side bellow portions is connected to 10 the longitudinal side of the front bellow portion, particular the front web gauzes thereof, that is facing towards the hinging axis, when the insect netting installed in the greenhouse. The front gauze webs may be connected to each other at the longitudinal side thereof 15 that is facing away from the hinging axis ventilation panel, for example by stitching. By connecting the second side end of the side gauze webs longitudinal side of the front gauze webs facing towards the hinging axis, the amount of overlap between the side 20 gauze webs and the front gauze webs is reduced to a It, therewith, is prevented that minimum. multiple stitchings are placed on top of each other, as is this case in the known insect netting. As a result, the thickness of 25 the insect netting at the mergers from the side bellow portions to the front bellow portions is reduced comparison with the known insect netting. The inventors have surprisingly found that a reduced thickness at the mergers from the side bellow portions to the front bellow portions results advantageously in a reduced or in the ideal case eliminated warp of the ventilation panel, when the ventilation panel is in the closed position.

Additionally, the reduced thickness of the insect netting at the mergers from the side bellow portions to the front bellow portions may result in that the framework surrounding the glass panel is resting onto a window profile over its complete width, when seen in a direction

WO 2022/245215

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PCT/NL2022/050278

perpendicular to the front panel. Advantageously, this may reduce or in the ideal case eliminate draught occurring at or near the outer ends of the glass panel or the surrounding framework thereof.

Furthermore, the reduced thickness of the insect netting at the mergers from the side bellow portions to the front bellow portions may result in a reduced loss of light in comparison to the insect netting according to the prior art.

In the context of the present patent application, a ventilation panel has to be understood to be selected from a group including, but not limited to, a tempered glass panel, a glass panel, an ETF foil, a honeycomb panel, a polycarbonate panel, a sandwich panel, or a combination thereof.

In an embodiment, each of the first and second front gauze webs has a first web end and a second web end, opposite to the first web end in the longitudinal direction thereof, wherein the second short side of the first and second side gauze webs of the side bellow portions is connected to the longitudinal side of the first and second front gauze webs facing towards the hinging axis of the ventilation panel, respectively, at or near the first or second web end thereof.

In an embodiment, the first and second front gauze webs are connected to each other at the first and second web ends thereof. By closing the first and second web ends of the front bellow portions, the insect netting is closed completely such that it prevents insects from entering or leaving a greenhouse via a ventilation opening associated with the ventilation panel.

In an embodiment, the second short side of the first and second side gauze webs of the side bellow portions is fused to the longitudinal side of the first and second front gauze webs facing towards the hinging axis of the ventilation panel, respectively. In an alternative embodiment, the second short side of the first and second

WO 2022/245215 PCT/NL2022/050278

side gauze webs of the side bellow portions is welded to the longitudinal side of the first and second front gauze webs facing towards the hinging axis of the ventilation panel, respectively. By welding or fusing the side gauze webs to the front gauze webs, the side gauze webs and the front gauze webs melt together at least partially. This is advantageous, as the thickness of the bellow section is kept to a minimum at the position where the side gauze webs and the front gauze webs meet.

In an embodiment, the second short side of the first and second side gauze webs of the side bellow portions is stitched to the longitudinal side of the first and second front gauze webs facing towards the hinging axis of the ventilation panel, respectively.

In an embodiment, the longitudinal side of the first and second front gauze web facing away from the hinging axis, is spaced apart from the first and second web end of the first and second side gauze web, respectively.

In an embodiment, the longitudinal side of the 20 first and second front gauze webs facing away from the hinging axis is free from the first and second side gauze webs.

In an embodiment, the gauze webs of the web sections are connected to each other at a first longitudinal side thereof, and wherein the web sections are connected to each other at a second longitudinal side, opposite to the first longitudinal side, of the gauze webs.

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In an embodiment, the gauze webs comprise a woven textile with warp threads and crossing weft threads that alternatingly go over and under the consecutive warp threads, wherein the warp threads and the weft threads each comprise at least one strand.

In an embodiment, the strand is formed with a plastic resin or fiberglass.

In an embodiment, the plastic resin is a polyolefin.

In an embodiment, the plastic resin is

WO 2022/245215 PCT/NL2022/050278

polyethylene, polypropylene or polyester.

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In an embodiment, at least one of the side panels has a substantially triangular shape, when the ventilation panel is in the open position. In an embodiment thereof, 5 mating ends of a pair of bellow sections facing away from the front panel are located further away from the front panel than mating ends of a further pair of bellow sections facing away from the front panel, wherein the further pair of bellow sections is located between the pair of bellow sections.

In an embodiment, the side panels comprise an outermost bellow section and multiple intermediate bellow are connected to sections that each other longitudinal inner edges of their gauze webs, wherein the bellow sections all have their front side merging into the 15 front panel, wherein of each intermediate bellow section the gauze webs are connected to each other at the opposite back end, wherein the opposite back end of the outermost bellow section is configured to be located at or close to 20 the hinging axis, and wherein the back ends of the consecutive intermediate bellow sections are adjacent to and spread along the outermost bellow section.

According to a second aspect, the invention provides a netting system for a greenhouse, wherein the 25 netting system comprises a framework for securing the netting system to a ventilation panel that is hingeable around a hinging axis, and an insect netting according to the first aspect of the invention.

30 The netting system according to the invention has at least the same technical advantages as described in relation to the insect netting according to the first aspect of the invention.

In an embodiment, the insect netting is secured to the framework by means of stitching, in particular to a 35 stitching web that is oriented downwards from the framework. The stitching web, for example, may be made of

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rubber, EPDM, or the like.

In the context of the application, it has to be understood that the insect netting and the netting system each are also suitable to used at sales areas, stables, 5 garden centers, etc.

According to a third aspect, the invention provides a greenhouse, wherein the greenhouse comprises a roof construction having a slanting upper surface with an opening and a rectangular glass panel that covers the opening, wherein at its upper edge the glass panel is hingeably connected with a part of the roof construction to hinge around a hinging axis between a closed position in which the glass panel extends substantially parallel to the upper surface and an open position in which the glass panel is oriented oblique with respect to the upper surface to form a ventilation passage,

wherein the greenhouse further comprises an insect netting according to the first aspect of the 20 invention, or a netting system according to the second aspect of the invention.

The greenhouse according to the invention has at least the same technical advantages as described in relation to the insect netting according to the first aspect of the invention.

According to a fourth aspect, the invention provides a method for manufacturing bellow sections for an insect netting according to the first aspect of the invention, the method comprising the steps of:

- providing two or more side gauze webs and two or more front gauze webs;
- connecting two side gauze webs to each other along a longitudinal side thereof;
- connecting two front gauze webs to each other along a longitudinal side thereof; and
 - securing the two connected gauze webs to the

two connected front gauze webs by arranging and connecting the second short side of the side gauze webs at and to the longitudinal side of the front gauze webs that is configured to face towards a hinging axis of a ventilation panel during use.

The method according to the invention has at least the same technical advantages as described in relation to the insect netting according to the first aspect of the invention.

In an embodiment, the side gauze webs are connected to the front gauze webs by means of welding, fusing or stitching.

The various aspects and features described and shown in the specification can be applied, individually, wherever possible. These individual aspects, in particular the aspects and features described in the attached dependent claims, can be made subject of divisional patent applications.

20 BRIEF DESCRIPTION OF THE DRAWINGS

The invention will be elucidated on the basis of an exemplary embodiment shown in the attached drawings, in which:

Figure 1 is an isometric view of a greenhouse with a roof construction having glass panels with a netting system having an insect netting;

figure 2 is an isometric view of one of the glass panels with the netting system having a front panel of 30 figure 1;

figure 3 is a more detailed view of the insect netting of the netting system of figure 2;

Figure 4 shows a detail of the insect netting of figure 3 according to prior art;

Figure 5 shows a detail of the insect netting of figure 3 according to an embodiment of the invention;
Figure 6 shows a front view in a direction

perpendicular to the front panel of the glass panel of figure 2 with a netting system according to an embodiment of the invention; and

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Figure 7 shows a front view in a direction 5 perpendicular to the front panel of the glass panel of figure 2 with a netting system according to the prior art.

DETAILED DESCRIPTION OF THE INVENTION

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A greenhouse 1 of the Venlo type is shown in figures 1 and 2. The greenhouse 1 comprises multiple rows of vertical columns 2 for supporting a roof construction 3. The roof construction 3 includes a framework with multiple parallel roof ridge profiles 4 and lower rain gutter profiles 5. Adjacent roof ridge profiles 4 and rain gutter profiles 5 are connected to each other by means of slanting window profiles 6. The roof ridge profiles 4, the rain gutter profiles 5 and the window profiles 6 are made of a metal, in particular aluminum, and form rectangular rabbets for fixed glass panels 7.

The roof construction 3 further includes a number of regularly distributed glass panels 8, such as tempered glass panels 8, also called ventilation panels. Each of the glass panels 8 is hingeably connected to the adjacent roof ridge profile 4 at the upper side thereof. The glass panels 8 are transparent in order to allow light to enter the greenhouse 1. As shown in figure 2, the glass panels 8 are shorter than the fixed glass panels 7. A horizontal window profile 9 is provided between two adjacent slanting window profiles 6 in order to form a rabbet for an additional, smaller glass panel 10 below the glass panel 8.

As shown in figure 2, the glass panel 8 is configured to hinge around the hinge axis B between the shown open position and a closed position in order to regulate the ventilation of the greenhouse 1. The greenhouse 1 is provided with pushing rods 11 connected to distributed connections 12 within the tempered glass panel

8, which pushing rods 11 are coupled to a slide 13 that my move along a horizontal rail 14 by means of an electromotor, in order to move the tempered glass panel 8 into the open or closed position thereof.

5 Each of the glass panels 8 is provided with a netting system 20 to prevent passage of insects when the glass panel 8 is in the open position. These can be harmful insects that have to be kept outside the greenhouse 1 or specific insects that are held inside the greenhouse 1. The netting system 20 comprises a framework 21 arranged along 10 the free edges of the glass panel 8, and an insect netting 22 of fine mesh gauze. When the glass panel 8 is in the closed position, the framework 21 rests on the horizontal window profile 9 and the adjacent slanting window profiles 6. The insect netting is pleated in a bellow configuration 15 in order to stack when it collapses. The insect netting 22 is connected with the framework 21 at the upper side thereof, for example by stitching the insect netting 22 to a non-shown stitching web that is oriented downwards from the framework 21. The stitching web may be manufactured 20 from rubber, EPDM or the like, and at the lower side the insect netting 22 is connected to the corresponding horizontal window profile 6 and the slanting window profiles 6 along the ventilation opening.

25 The insect netting 22, without the framework 21, is shown in figure 3. The insect netting 22 comprises a front panel 23 and two parallel side panels 24. The two parallel side panels 24 merge into the front panel 23 at a straight corner 25. When the insect netting 22 is arranged 30 at a glass panel 8, the two parallel side panels 24 extend substantially transverse or transverse to the hinging axis B of the respective glass panel 8.

As shown in figure 3, the two parallel side panels 24 and the front panel 23 comprise a number of bellow sections 26 arranged above each other in order to form the pleated configuration of the insect netting. Each bellow section 26 has two parallel side bellow portions 27

WO 2022/245215

and a front bellow portion 28. Each of the two parallel side bellow portions 27 has a first side gauze web 29 with a first longitudinal side 30 and a second longitudinal side 31, opposite to the first longitudinal side 30, and a second side gauze web 32 also with a first longitudinal side 30 and a second longitudinal side 31, opposite to the first longitudinal side 30. The first and second side gauze webs 29, 32 are connected to each other along the second longitudinal side 31 thereof, for example by means of stitching. Furthermore, each of the first and second side 10 gauze webs 29, 32 comprises a first web end 33, also called first short site, facing towards the hinging axis B of the glass panel 8, and a second web end 34, also called second short side, facing away from the hinging axis B of the glass panel 8 and towards the front panel 23. 15

Each of the front bellow portions 28 has a first front gauze web 35 with a first longitudinal side 36 and a second longitudinal side 37, opposite to the longitudinal side 36, and a second front gauze web 38 also with a first longitudinal side 36 and a second longitudinal 20 side 37, opposite to the first longitudinal side 36. The first and second front gauze webs 35, 38 are connected to each other along the second longitudinal side 37 thereof, for example by means of stitching. Furthermore, each of the first and second front gauze webs 35, 37 comprises a first 25 web end 39, facing one of the two parallel side panels 24, and a second web end 40, facing towards the other one of the two parallel side panels 24.

The front bellow portions 26 and the two side 30 bellow portions 27 are connected to each other by connecting the first side gauze web 29 of the side bellow portions 27 to the first front gauze web 35 of the front bellow portions 26, and by connecting the second side gauze web 32 of the side bellow portions 27 to the second front 35 gauze web 38 of the front bellow portions 26, as is elucidated in more detail in relation to figures 4 and 5.

In figure 4, it is shown how the side gauze webs

WO 2022/245215

29, 32 of the side bellow portions 27 are connected to the front gauze webs 35, 38 of the front bellow portions 26 according to the prior art. As shown in figure 4, the second web end 34, or the second short side, of the side gauze webs 29, 32 of the side bellow portions 27 is placed on top of the second web end 40 of the front gauze webs 35, 38, or the second web end 40 of the front gauze webs 35, 38 is placed on top of the second web end 34 of the side bellow portions 27, therewith realizing an overlapping area 45. As clearly shown, the second web end 34, or the second 10 short side of the side gauze webs 29, 32 is located on or at the second longitudinal side 37 of the front gauze webs 35, 38, i.e. the longitudinal side of the front gauze webs facing away from the hinging axis B of the glass panel 8. The same is applicable to the first web end 39 of the front 15 gauze webs 35, 38. Subsequently, the side gauze webs 29, 32 are stitched to the front gauze webs 35, 38 by means of stitchings 46 along the outer edges of the overlapping area 45.

In figure 5, it is shown how the side gauze webs 20 29, 32 of the side bellow portions 27 are connected to the front gauze webs 35, 38 of the front bellow portions 26 according to an embodiment of the invention. As is clearly shown in figure 5, the second web end 34, or the second short side, of the side gauze webs 29, 32 of the side 25 bellow portions 27 is connected to the first longitudinal of the front gauze webs 35, side 36 38, longitudinal side of the front gauze webs 35, 38 facing towards the hinging axis B of the glass panel 8, at or near the second web end 40 of the front gauze webs 35, 38. In 30 particular, the second web end 34 of the side gauze webs 29, 32 of the side bellow portions 27 is spaced apart from the second longitudinal side 37 of the of the front gauze webs 35, 38, i.e. the longitudinal side of the front gauze webs 35, 38 facing away from the hinging axis B of the 35 glass panel 8. The side gauze webs 29, 32 interconnected to the front gauze webs 35, 38 by means of

welding, therewith forming a welding area 47. As clearly shown in figure 5, the first and second web ends 39, 40 of the front gauze webs 35, 38 are connected to each other, for example by means of welding, in order to form front bellow section 28 with closed ends.

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Due to the side gauze webs 29, 32 and the front gauze webs 35, 38 being interconnected by means of welding, the thickness of the bellow sections 26 at the merger of the side bellow portions 27 into the front bellow portion 28 is decreased in comparison with the thickness of the bellow sections 26 at the merger of the side bellow portions 27 into the front bellow portion 28 of the insect netting 22 according to the prior art as shown in figure 4. This is advantageous, as this results in that the glass panel 8 is enabled to close evenly, such that the framework 21 lies evenly on the horizontal window profile 9.

Additionally, ventilation at the mergers of the side gauze webs 29, 32 of the side bellow portions 27 to the front gauze webs 35, 38 of the front bellow portions 26 may be improved due to less overlap of the gauze webs 29, 32; 35, 38 at the mergers in comparison to the prior art.

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In order to illustrate a result of the insect netting 22 according to the invention, a comparison is made between a glass panel 8 in closed position with an insect netting according to an embodiment of the invention, figure 6, and with an insect netting according to the prior art, figure 7. It is clearly shown in figure 7 that at least the front portion of the framework 21 parallel to the front panel 23 of the insect netting 22 is warped with respect to the underlying horizontal window profile 9. In particular, 30 the centre of the front portion of the framework 21 is situated closer to the underlying horizontal window profile 9 than the outer ends of the front portion of the framework 21. Warping of the front portion of the framework 21 is caused by the insect netting having a greater thickness at the mergers in comparison to the remaining of the insect netting 22. This is disadvantageous as elucidated above. As

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a result, one or more intermediate slanting window profiles 6 located between outer slanting window profiles 6 at which the framework 21 rests when in closed position, are not under load by the glass panel 8. All load applied by the glass panel 8, via the framework 21, is absorbed by the outer slanting window profiles 6 and the underlying horizontal window profile 9.

As shown in figure 6, the front portion of the framework 21 is substantially parallel to the underlying horizontal window profile 9. As a result, all load applied by the glass panel 8, via the framework 21, is absorbed by the outer slanting window profiles 6, the underlying horizontal window profile 9 and also the one or more intermediates slanting window profiles. The one or more intermediate slanting window profiles, therefore, are also under a load when the glass panel 8 is in its closed position.

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It is to be understood that the above description is included to illustrate the operation of the preferred 20 embodiments and is not meant to limit the scope of the invention. From the above discussion, many variations will be apparent to one skilled in the art that would yet be encompassed by the scope of the present invention.

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C L A I M S

1. Insect netting for a greenhouse, wherein the insect netting is configured to be secured to a ventilation panel that is hingeable around a hinging axis, wherein in an open position of the ventilation panel, the insect netting at least extends between an opening edge extending parallel to the hinging axis of the ventilation panel, and a ventilation panel edge extending parallel to the hinging axis of the ventilation panel,

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insect netting comprising a front panel 10 merging into two side panels, wherein the insect netting is pleated in a bellow configuration to collapse in a stacked manner, wherein the bellow configuration is formed with bellow sections, wherein each of the bellow sections has two parallel side bellow portions and a front bellow portion,

side bellow the wherein each of portions comprises a first side gauze web and a second side gauze web connected to each other at a longitudinal side thereof and each having a first short side configured for facing towards the hinging axis, and a second short side, opposite to the first web end, configured for facing away from the hinging axis, wherein each of the front bellow portions comprises a first front gauze web and a second front gauze web connected to each other a longitudinal side thereof, and

wherein the second short side of the first and second side gauze webs of the side bellow portions is connected to the longitudinal side of the first and second front gauze webs facing towards the hinging axis of the ventilation panel, respectively.

2. Insect netting according to claim 1, wherein each of the first and second front gauze webs has a first web end and a second web end, opposite to the first web end

PCT/NL2022/050278

WO 2022/245215

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in the longitudinal direction thereof, wherein the second short side of the first and second side gauze webs of the side bellow portions is connected to the longitudinal side of the first and second front gauze webs facing towards the hinging axis of the ventilation panel, respectively, at or near the first or second web end thereof.

- 3. Insect netting according to claim 2, wherein the first and second front gauze webs are connected to each other at the first and second web ends thereof.
- 4. Insect netting according to claim 1, 2 or 3, wherein the second short side of the first and second side gauze webs of the side bellow portions is fused to the longitudinal side of the first and second front gauze webs facing towards the hinging axis of the ventilation panel, respectively.
 - 5. Insect netting according to claim 1, 2 or 3, wherein the second short side of the first and second side gauze webs of the side bellow portions is welded to the longitudinal side of the first and second front gauze webs facing towards the hinging axis of the ventilation panel, respectively.
 - 6. Insect netting according to claim 1, 2 or 3, wherein the second short side of the first and second side gauze webs of the side bellow portions is stitched to the longitudinal side of the first and second front gauze webs facing towards the hinging axis of the ventilation panel, respectively.
 - 7. Insect netting according to any one of the preceding claims, wherein the longitudinal side of the first and second front gauze webs facing away from the hinging axis, is spaced apart from the first and second web end of the first and second side gauze webs, respectively.
 - 8. Insect netting according to any one of the preceding claims, wherein the longitudinal side of the first and second front gauze webs facing away from the hinging axis is free from the first and second side gauze webs.

WO 2022/245215

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9. Insect netting according to any one of the preceding claims, wherein the gauze webs of the web sections are connected to each other at a first longitudinal side thereof, and wherein the web sections are connected to each other at a second longitudinal side, opposite to the first longitudinal side, of the gauze webs.

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PCT/NL2022/050278

- 10. Insect netting according to any one of the preceding claims, wherein the gauze webs comprise a woven textile with warp threads and crossing weft threads that alternatingly go over and under the consecutive warp threads, wherein the warp threads and the weft threads each comprise at least one strand.
- 11. Insect netting according to claim 10, wherein the strand is formed with a plastic resin or fiberglass.
- 12. Insect netting according to claim 11, wherein the plastic resin is a polyolefin.
 - 13. Insect netting according to claim 11 or 12, wherein the plastic resin is polyethylene, polypropylene or polyester.
- 20 14. Insect netting according to any one of the preceding claims, wherein at least one of the side panels has a substantially triangular shape, when the ventilation panel is in the open position.
- 15. Insect netting according to claim 14, wherein 25 mating ends of a pair of bellow sections facing away from the front panel are located further away from the front panel than mating ends of a further pair of bellow sections facing away from the front panel, wherein the further pair of bellow sections is located between the pair of bellow sections.
 - 16. Insect netting according to any one of the claims 1-13, wherein the side panels comprise an outermost bellow section and multiple intermediate bellow sections that are connected to each other along longitudinal inner edges of their gauze webs, wherein the bellow sections all have their front side merging into the front panel, wherein of each intermediate bellow section the gauze webs are

connected to each other at the opposite back end, wherein the opposite back end of the outermost bellow section is configured to be located at or close to the hinging axis, and wherein the back ends of the consecutive intermediate bellow sections are adjacent to and spread along the outermost bellow section.

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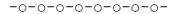
- 17. Netting system for a greenhouse, wherein the netting system comprises a framework for securing the netting system to a ventilation panel that is hingeable around a hinging axis, and an insect netting according to any one of the preceding claims.
- 18. Netting system according to 17, wherein the insect netting is secured to the framework by means of stitching.
- 19. Greenhouse, wherein the greenhouse comprises a roof construction having a slanting upper surface with an opening and a rectangular glass panel that covers the opening, wherein at its upper edge the glass panel is hingeably connected with a part of the roof construction to 20 hinge around a hinging axis between a closed position in which the glass panel extends substantially parallel to the upper surface and an open position in which the glass panel is oriented oblique with respect to the upper surface to form a ventilation passage,
- wherein the greenhouse further comprises an insect netting according to any one of the claims 1 16, or a netting system according to claim 17 or 18.
 - 20. Method for manufacturing bellow sections for an insect netting according to any one of the claims 1 16, the method comprising the steps of:
 - providing two or more side gauze webs and two or more front gauze webs;
 - connecting two side gauze webs to each other along a longitudinal side thereof;
- connecting two front gauze webs to each other along a longitudinal side thereof; and
 - securing the two connected gauze webs to the

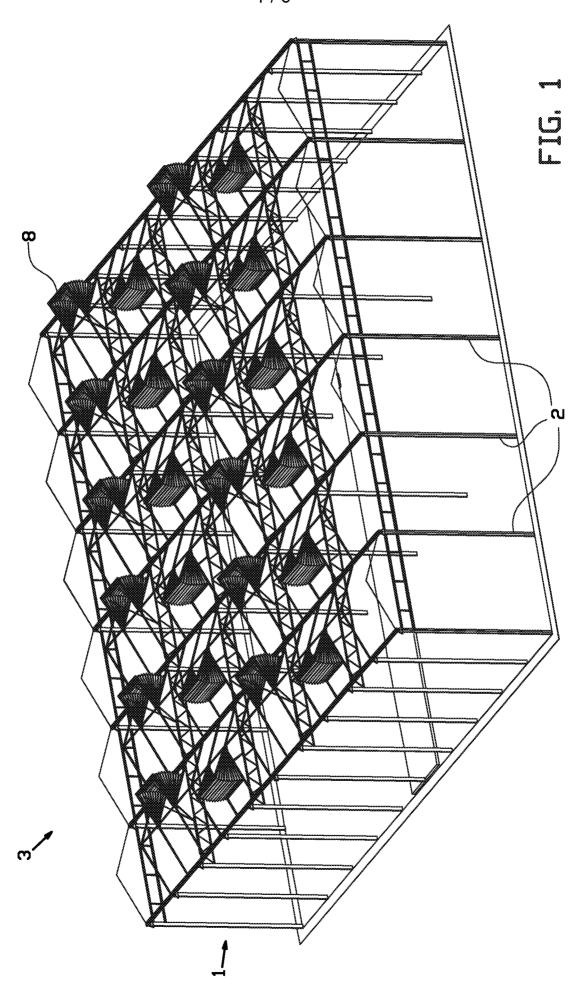
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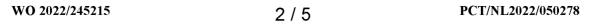
two connected front gauze webs by arranging and connecting the second short side of the side gauze webs at and to the longitudinal side of the front gauze webs that is configured to face towards a hinging axis of a ventilation panel during use.

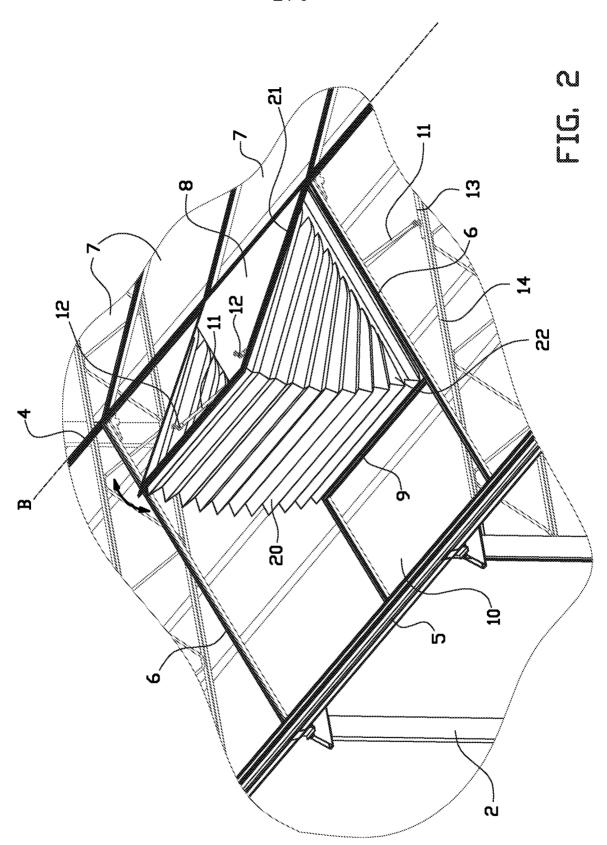
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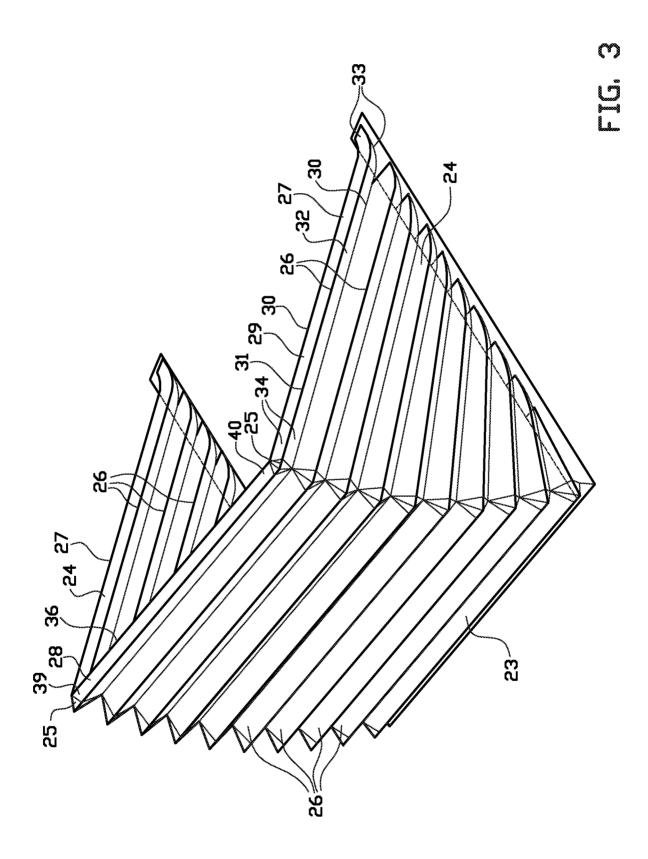
21. Method according to claim 20, wherein the side gauze webs are connected to the front gauze webs by means of welding, fusing or stitching.

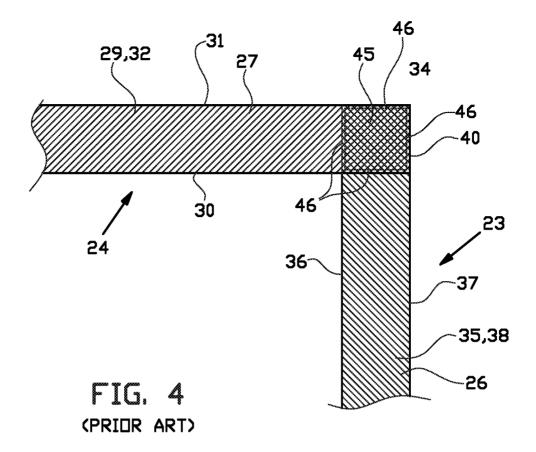


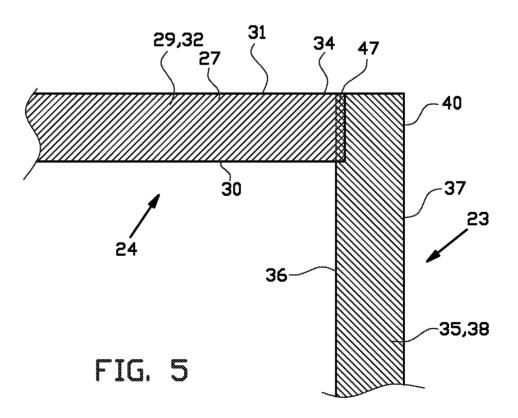


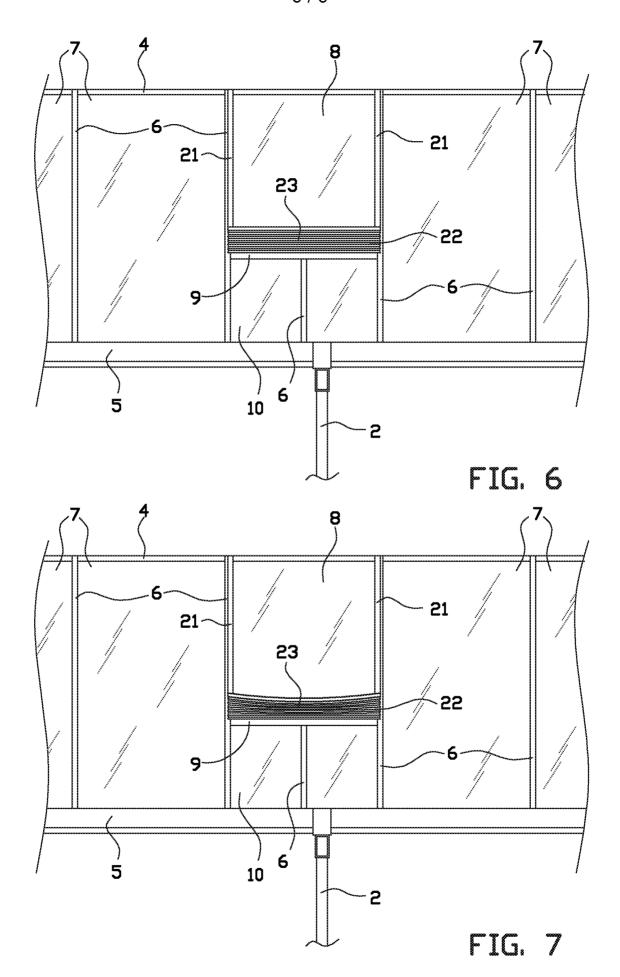












INTERNATIONAL SEARCH REPORT

International application No

	PCT/		PCT/NL2022/050278				
A. CLASSIFICATION OF SUBJECT MATTER INV. A01G9/24							
	E06B9/52						
	o International Patent Classification (IPC) or to both national classific	cation and IPC					
B. FIELDS SEARCHED Minimum documentation searched (classification system followed by classification symbols)							
A01G E06B							
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched							
Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)							
EPO-Internal, WPI Data							
C. DOCUMENTS CONSIDERED TO BE RELEVANT							
Category*	Citation of document, with indication, where appropriate, of the re	Relevant to claim No.					
A	NL 1 015 820 C2 (LEEN HUISMAN BV	1-21					
	29 January 2002 (2002-01-29)						
	page 7; claim 1; figures 2,3						
A	NL 1 007 720 C2 (HOLLAND SCHERMING B V		1				
	[NL]) 17 September 1999 (1999-09						
	abstract; figures 9,10						
A	NL 1 019 229 C2 (LEEN HUISMAN BV	[NL])	1				
	28 April 2003 (2003-04-28) abstract; figure 2						
Furth	ner documents are listed in the continuation of Box C.	X See patent fam	nily annex.				
* Special c	ategories of cited documents :		lished after the international filing date or priority nflict with the application but cited to understand				
"A" document defining the general state of the art which is not considered to be of particular relevance			ory underlying the invention				
"E" earlier application or patent but published on or after the international filing date		"X" document of particular relevance;; the claimed invention cannot be considered novel or cannot be considered to involve an inventive					
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other		step when the document is taken alone "Y" document of particular relevance;; the claimed invention cannot be					
special reason (as specified) "O" document referring to an oral disclosure, use, exhibition or other		considered to invo	ular relevance;; the claimed invention cannot be live an inventive step when the document is e or more other such documents, such combination				
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"P" document published prior to the international filing date but later than the priority date claimed		"&" document member of the same patent family					
Date of the	he international search report						
1	5 August 2022	01/09/2	01/09/2022				
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Tel. (+31-70) 340-2040, Fax: (+31-70) 340-3016		Weinmüller, C					

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No
PCT/NL2022/050278

cited in search report		Publication date	Patent family member(s)	Publication date
NL 1015820	C2	29-01-2002	NONE	
NL 1007720	C2	17-09-1999	NONE	
NL 1019229	C2	28-04-2003	NONE	