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(54) **COVERING STRIP**

(57) In a covering strip (1) of plastic mountable to a mounting element (3) and forming with the covering strip (1) a covering set (5), whereby the covering strip (1) of the set comprises a main wall (10) with an upper surface (11) bent in a region of outer edges (12, 13) and a middle wall (20) connected to the main wall (10) in the region of the outer edges (12, 13) and surrounding together with the main wall (10) a middle inner chamber (19), the middle wall (20) has a gap (21) extending parallel to a longitudinal axis (4) of the covering strip (1) and dividing the middle wall (20) into two parts or portions in the form of projections (22, 23) facing each other, at least one of which is elastically deflectable, whereas the mounting element (3) has a base (32) and a main part (31) having a cross-section placed in the middle of a contour of the middle inner chamber (19), whereby the mounting element (3) on opposite sides of the main part (31) has tongues (33, 34), lower surfaces (35, 36) of which are spaced from the lower surface (37) of its base (31) by a distance that is not smaller than the thickness (g) of the projections (22, 23), whereby the width (s) of the gap (21) is not greater than the distance (b) between the outer edges of the tongues (33, 34) located on the opposite sides of the main part (31) of the mounting element (3) and not smaller than the width (a) of the base (32) of the mounting element (3) to prevent separation of the covering strip (1) and the mounting element (3) after fixing the covering strip (1) onto the mounting element (3).

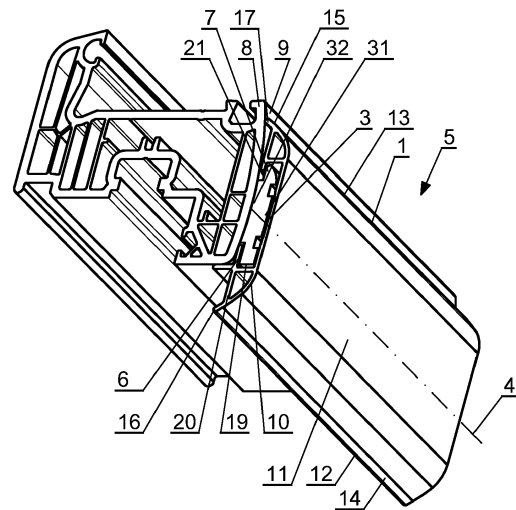


Fig.1

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Description

[0001] The subject matter of the invention is a covering strip of plastic according to the preamble of claim 1. The covering strip comprises a main wall with an upper surface bent in a region of outer edges and a middle wall connected to the main wall in the region of the outer edges, which, together with the main wall, surrounds a middle inner chamber. The covering strip, which is the subject of the present invention, is, in particular, mountable to a mounting element forming with the covering strip a covering set for covering in particular a contacting region or a connection of two elements or a gap between elements.

[0002] Ease of manufacturing of plastic profiles results in that plastic tends to replace the traditional material, namely wood, in the manufacture of window frames, doors and facades, and the entire inner and outer structures of buildings. In the areas of connection and/or a contact of the profiles, the most common finishing elements covering gaps between them are covering strips, in particular when none of the profiles has a portion overlapping a second profile, and when one is a portion of the movable element of a window, door and/or facade.

[0003] Covering strips of this type are known from the patent application publication EP 0794311 A1 titled "Astragal for double leaf window". The strips cover a gap between profiles, an inner surface of which is parallel to an outer surface. Each of the strips is fixed on one profile from the front by means of an expanding element. In the strips there are fixed gaskets which seal the gap between the profiles.

[0004] From the patent specification PL 210827 B1 titled "Double-leaf fire door" a door is known which serves to close communication openings in walls of buildings and to secure spaces divided from one another against the spread of fire. The door consists of an active tilting leaf and a passive tilting leaf. Each leaf has two parallel facings with substantially flat front panels. In the space between the facings there is placed a filling of incombustible insulating material, preferably of mineral wool. The passive leaf has on its periphery a vertically expanded profile with a cross portion similar to the letter T, located on the side towards the active leaf. The profile has two arms and a web made of a non-metallic fireproof material. A projecting arm of the profile forms a vertical swing strip which adheres to the front panel of the active leaf. The web and the arm of the profile are fixed to the periphery of the leaf.

[0005] The disadvantage of described covering strips is the complicated way of their mounting as well as problems with getting a good seal between elements of the covering strip and profiles of which window frames, doors and facade elements are made.

[0006] The purpose of this invention is to provide a covering strip of simple construction and sufficiently rigid or stiff to make surfaces of the covering strip adhering tightly to elements, in particular profiles, between which there is a gap.

[0007] The idea of the present invention is a covering strip of plastic, mountable to a mounting element, forming with the covering strip a covering set. The covering strip comprises a main wall with an upper surface bent the region of outer edges, and a middle wall connected to the main wall in the region of the outer edges, which, together with the main wall, surrounds the middle inner chamber. The middle wall of this strip has a gap, extending parallel to a longitudinal axis of the covering strip, dividing the middle wall into two parts or portions in a form of projections facing each other, at least one of which is elastically deflectable. In turn, the mounting element has a base and a main part with a cross-section placed in the middle of a contour of the middle inner chamber, wherein the mounting element on opposite sides of the main part has tongues, lower surfaces of which are spaced from a lower surface of its base by a distance not smaller than the thickness g of the projections and the width s of the gap is not bigger than the distance b between outer edges of the tongues located on opposite sides of the main part of the mounting element and not smaller than the width a of the base of the mounting element, which prevents the separation of the covering strip and the mounting element after mounting the covering strip on the mounting element. Through the described dimensioning of the tongue of the mounting element there is obtained a safe and stable mounting of the covering strip to an active leaf or one of the profiles of the present gap, i.e. the one that is closed as the last when closing a window. Good adhering of the covering strip to adjacent profiles of a passive leaf and the active leaf in case of two-leaf window without a post in the middle or the leaf profile and an adjacent post profile or a frame profile seals the window, which reduces loss of heat escaping at contact regions of windows or doors and a sash or elements reinforcing a structure of window or door.

[0008] Preferably, the main wall has elastically deflectable extensions projecting at both sides beyond a connection point of the middle wall and the main wall directed downwardly below a lower plane of the middle wall, and a contact area of the elastically deflectable extensions of the main wall is not greater than a contact area of the lower surfaces of the tongue of the mounting element and upper surfaces of the projections of the middle wall. In relation to the fact that the contact area of the elastically deflectable extensions of the main wall is not greater than the contact area of the lower surfaces of the tongue of the mounting element and upper surfaces of the projections of the middle wall, there are no deformations of the covering strip forming in points of its mounting to the active leaf, as is in the case of currently known solutions.

[0009] Preferably, from the middle wall there protrudes a reinforcing rib, a surface of which, directed away from the middle wall, is parallel to the longitudinal axis of the covering strip.

[0010] Preferably, the projections are inclined towards the interior of the inner chamber.

[0011] Preferably, the main wall has at least one recess extending parallel to the longitudinal axis of the covering strip.

[0012] Preferably, the middle wall in at least one projection has a recess.

[0013] Preferably, the middle wall at both projections has recesses lying opposite each other with a width not smaller than the length of the mounting element and the distance between edges of the recesses is not smaller than the width of the mounting element.

[0014] Preferably, the mounting element comprises more than one section or portion.

[0015] Preferably, the tongues of the mounting element have a cross-section of polygonal shape, in particular a rectangular shape.

[0016] Preferably, one of the tongues of the mounting element has a cross-section of rectangular shape, while the other tongue has a convex upper surface, or both tongues have convex upper surfaces.

[0017] Preferably, the mounting element has at least one groove in the upper surface.

[0018] Preferably, the mounting element has chamfered through holes.

[0019] The present invention has been presented in embodiments in drawings, in which Figs. 1 and 3 show an axonometric view of a covering set comprising a covering strip and a mounting element in the first embodiment, Fig. 2 shows an axonometric view of a covering strip in another embodiment, Fig. 4 shows an axonometric view of a covering set in a further embodiment, Figs. 5, 6 and 7 show a cross-section of different embodiments of covering sets, and Figs. 8, 9 and 10 show a bottom view of various embodiments of a covering strip.

[0020] A covering strip 1 in one embodiment, made of plastic, mountable by a mounting element 3 forming with the covering strip 1 a covering set 5, is shown in an axonometric view in Fig. 1 and Fig. 3, in which the covering strip 1 is shown in a mounted position to a profile 8 with a surface 9, and in Fig. 5, in which there is shown a cross-section of a mounting set. The main task of such a covering strip 1 is to improve the aesthetic effect and the seal in a contact region of two profiles, of which in Fig. 1 there is shown only one profile. In addition, the covering strip 1 shown here is intended to cover a gap between adjacent profiles and seal the contact area and/or a point of connection of two profiles located next to each other. The covering strip of this design can be used in a two-leaf window with a passive leaf and an active leaf, both fixed in the casing by means of hinges, when in a closed position inner profiles of both leafs are in contact with each other or lie opposite each other in the interior of the window opening.

[0021] The covering strip 1 in the embodiment shown in Figs. 1 and 3 comprises a main wall 10 having an upper surface 11 bent in region of outer edges 12, 13, and a middle wall 20 connected to the main wall 10 in the region of the outer edges 12, 13. The main wall 10 and the middle wall 20 surround an inner chamber. In the case of wide

covering strips, the covering strip 1 has inner walls 26, 27, which in this embodiment divide the inner chamber into a middle inner chamber 19 and side chambers 28, 29. The middle wall 20 has a gap 21 located parallel to a longitudinal axis 4 of the covering strip 1 and dividing the middle wall 20 into two parts or portions in the form of projections 22, 23, facing each other, at least one of which is elastically deflectable. From the middle wall 20 protrudes a lower reinforcing rib 25, a surface of which is facing the gap 21 and parallel to the longitudinal axis 4 of the covering strip 1. The covering strip 1 is mountable on a mounting element 3 with holes 38 for a fastening element, such as a bolt or a screw 40 shown in Fig. 5, which has a base 32 limited on the sides with recesses, and a main part 31 with grooves 39, having a cross-section placed in the middle of a contour of the inner chamber, and in particular the middle inner chamber 19. The mounting element in one embodiment is glued to the profile. The mounting element 3 on opposite sides of the main part 31 having a cross-section with the outer contour of a polygonal shape, for example a rectangular shape, has tongues 33, 34, lower surfaces 35, 36 of which, that is, the surfaces facing the profile 8 with the surface 9, are spaced from a lower surface 37 of the base 32 of the mounting element 3 by the distance c which is not smaller than the thickness g of the projections 22, 23, and the width s of the gap 21 s is not bigger than the distance b between the outer edges of the tongues 33, 34, located on opposite sides of the main part 31 of the mounting element 3 and not smaller than the width a of the base 32 of the mounting element 3. This configuration of the covering strip 1 and the mounting element 3 prevents the separation of the covering strip 1 and the mounting element 3 after mounting the covering strip 1 on the mounting element 3. Due to the fact that at least one of the projections 22, 23 of the covering strip 1 is elastically deflectable, after fixing in the space above the projection, for example designated 23, one tongue, for example designated 34, and pressing the covering strip 1 in the direction of the mounting element 3, the remaining projection, for example designated 22, sliding on a curved surface of the tongue deflects and then snaps into the groove, and the whole main part 31 of the mounting element is placed in the inner chamber, in particular in the middle inner chamber 19 of the covering strip 1. In the embodiment shown in Figs. 1 and 3, one tongue 34 which, for purposes of describing, is termed the first tongue, has a cross-section of a polygonal shape, in particular a rectangular shape, while the other tongue 33, which, for purposes of describing, is termed the second tongue, has a rounded upper surface on which slides an inner edge of the projection 22 of the covering strip 1, which facilitates fixing the strip 1 on the mounting element 3. In one embodiment, one of the projections of the covering strip, for example the projection 22, located under the tongue with the rounded upper surface, for example under the tongue 33, is shorter than the other projection, for example the projection 23, which facilitates mounting

the strip on the mounting element. The main wall 10 has extensions 14, 15, projecting on both sides beyond a point of connection of the middle wall 20 and the main wall 10, directed downwardly below a lower plane of the middle wall 20, and an adhering area 16, 17 of the extensions 14, 15 to the main wall 10 is not greater than a contact area of the lower surfaces 35, 36 of the tongue 33, 34 of the mounting element 3 and upper surfaces 6, 7 of the projections 22, 23 of the middle wall 20. In one embodiment, the extensions 14, 15 of the main wall 10 are elastically deflectable, which may allow for better adhering of the edges of the mounting strip to the profiles.

[0022] Fig. 2 shows an axonometric view of another embodiment of a covering strip 101. The covering strip 101 is similar to the strip 1 shown in Fig. 1 and comprises a main wall 110 with an upper surface bent in particular in a region of outer edges and a middle wall 120 connecting to the main wall 110 in the region of the outer edges. The main wall 110 and the middle wall 120 surround an inner chamber. The middle wall 120 has a gap 121 extending parallel to a longitudinal axis of the covering strip 101, which divides the middle wall 120 into two parts or portions in the form of projections 122, 123 facing each other, at least one of which is elastically deflectable. The projections 122, 123 are folded toward the main wall 110, so that after fixing on a mounting element they exert pressure on tongues of the mounting element not shown here, which causes the covering strip 101 to not move relative to the mounting element. The covering strip 101 has inner walls 126, 127, which divide the inner chamber into a middle inner chamber 119 and side chambers 128, 129. The main wall 110 has an elastically deflectable extension projecting on both sides beyond a point of connection of the middle wall 120 and the main wall 110 directed downwardly below the plane of the middle wall 120 with an adhering area 116, 117 of the elastically deflectable extensions of the main wall 110.

[0023] Fig. 4 shows an axonometric view of a covering set 205 in a further embodiment, which differs from that previously described in that two tongues 233, 234 of a mounting element, which comprises more than one section 202, 203, have a cross-section with a polygonal shape, in particular a rectangular shape. The total length of all sections of the mounting element is smaller than the length of the covering strip, which is mounted on these sections of the mounting element. The tongues 233, 234, lower surfaces 235, 236 of which, that is, the surfaces facing a profile 208 with an upper surface 209, are spaced from a lower surface 237 of a base 232. Such a shape of the tongues is recommended when high stiffness of the tongues is needed. For this type of tongue it is recommended to select a covering strip with recesses in the opposing projections, such as a covering strip 701, shown in Fig. 10, with edges 712, 713 and a gap 721 dividing a middle wall 720 to form projections 722, 723 with recesses 761, 762 forming a hole 760 with the length n and the width c greater than the width of a mounting element. The sections 202, 203 of the covering strip of

the covering set 205 should have the length l of not more than the length n of the recesses in the projections, and the distance m between specified points of the sections 202, 203 of the covering strip, for example between the beginnings of the sections 202, 203 of the covering strip, should correspond to the distance p between specified points of the recesses, for example between the beginnings of the recesses of the middle wall of the covering strip, the bottom of which is shown as one embodiment in Fig. 10. Such selection of the distances m and p allows for easy fixing of the covering strip onto the mounting element, and after moving the covering strip relative to the mounting element, hooking up the parts of the entire projections with the tongues of the mounting element.

The covering strip 201 of the covering set 205 comprises the main wall 210 with an upper surface 211 folded in particular in the region of outer edges 212, 213, and the middle wall 220 connecting to the main wall 210 in the region of the outer edges. The main wall 210 and the middle wall 220 surround an inner chamber. The middle wall 220 has a gap 221 extending parallel to a longitudinal axis of the covering strip 201, which divides the middle wall 220 into two parts or portions in the form of projections 222, 223 facing each other, at least one of which is elastically deflectable. The covering strip 201 has inner walls 226, 227, which divide the inner chamber into a middle inner chamber 219 and side chambers 228, 229. In addition, the covering strip has a lower reinforcing rib 225 that can come into contact with one of the walls of the profile 208 after screwing the sections 202, 203 of the mounting element to the profile 208 by means of screws 204 and fixing the covering strip 201 onto the sections 202, 203 of the mounting element. The sections 202, 203 of the mounting element have a base 232, which is limited on the sides with recesses, and the main part 231 with grooves 239, with the cross-section placed in a contour of the inner chamber, in particular the middle inner chamber. The main wall 210 has elastically deflectable extensions 214, 215 projecting on both sides beyond a point of connection of the middle wall 220 with the main wall 210, directed downwardly below a lower plane of the middle wall 220, and an adhering area 216, 217 of the elastically deflectable extensions 214, 215 of the main wall 210 is not greater than a contact area of the lower surfaces 235, 236 of the tongue 233, 234 of the mounting element 203 and upper surfaces 206, 207 of the projections 222, 223 of the middle wall 220.

[0024] Figs. 6 and 7 show a cross-section of different embodiments of covering sets 305, 405, each of which comprises a covering strip, respectively 301 and 401, and a mounting element, respectively 303 and 403. The mounting element, respectively 303 and 403, mounted by means of screws to the profile 8 with the upper surface 9, has a base, respectively 332 and 432, and the main part or portion, respectively 331 and 431, with tongues, respectively 333, 334 and 433, 434, lower surfaces of which, respectively 336 and 435, 436, that is, the surfaces facing the profile 8 with the upper surface 9, are spaced

from the lower surface, respectively 337 and 437, of the base, respectively 332 and 432, of the mounting element, respectively 303 and 403. The covering sets 305, 405 differ from one another in that both tongues 433, 434 of the mounting element 403 of the covering set 405 from Fig. 7 have an arcuate or arched upper surface of the tongue which is convex, and the mounting element 303 of the covering set 305 from Fig. 6 has only one tongue 334 with an arcuate upper surface, wherein the other tongue 333 has a cross-section with a polygonal shape, in particular a rectangular shape. The projection of the covering strip located under the tongue 334 is shorter than the other projection, which facilitates the fixing of the covering strip on the mounting element 303. The mounting element 403 from Fig. 7, which in this version is usually of a single section and extending over the entire length of the profile 8, is suitable in particular for mounting on it the covering strips without recesses in projections, and the projections of which can be bent when fixing the covering strip onto the mounting element without applying large forces. In turn, the mounting element 303 from Fig. 6 is suitable for embodiments in which it is required that one of the tongues have a greater stiffness or rigidity than the other. As in the embodiments shown in Figs. 1, 2, 3, 4 and 5, the main walls have elastically deflectable extensions, respectively 314, 315 and 414, 415, projecting on both sides beyond a point of connection of the middle wall and the main wall, directed downwardly below a lower plane of the middle wall, and an adhering area, respectively 316, 317 and 416, 417, of the elastically deflectable extensions, respectively 314, 315 and 414, 415, of the main wall is not greater than the contact area of the lower surfaces, respectively 335, 336 and 435, 436, of the tongue, respectively 333, 334 and 433, 434, of the mounting element, respectively 303 and 403, and the upper surfaces, respectively 306, 307 and 406, 407, of the projections of the middle wall.

[0025] Fig. 8 and 9 show a bottom view of various embodiments of a covering strip 501, 601 with edges, respectively 512, 513 and 612, 613, and a gap, respectively in 521 and 621, dividing a middle wall, respectively 520 and 620, to form projections, respectively 522 and 622, with a recess, respectively 560 and 660, in one of the projections, respectively 523 and 623. This shape of the recesses is applied in cases where the covering strip should be provided with the projections, one of which has a greater stiffness or rigidity than the other. The length n of the recesses of the projections, and the distance p between specified points of the recesses, should be selected to the lengths of sections of the mounting element and distribution of the sections of the mounting element fixed to the profile.

Claims

1. A covering strip (1, 101, 201, 301, 401, 501, 601, 701) of plastic, mountable to a mounting element (3,

203, 303, 403), forming with the covering strip (1, 201, 301, 401) a covering set (5, 205, 305, 405), whereby the covering strip (1, 101, 201, 301, 401, 501, 601, 701) comprises a main wall (10, 110, 210) with an upper surface (11, 211) and a middle wall (20, 120, 220, 520, 620, 720) connected to the main wall (10, 110, 210) in a region of outer edges (12, 13, 212, 213, 512, 513, 612, 613, 712, 713) and surrounding together with the main wall (10, 110, 210) a middle inner chamber (19, 119, 219), **characterised in that** the middle wall (20, 120, 220, 520, 620, 720) has a gap (21, 121, 221, 521, 621, 721) located parallel to a longitudinal axis (4) of the covering strip (1, 101, 201, 301, 401, 501, 601, 701), and dividing the middle wall (20, 120, 220, 520, 620, 720) into two parts or portions in a form of projections (22, 23, 122, 123, 222, 223, 522, 523, 622, 623, 722, 723) facing each other, at least one of which is elastically deflectable, whereas the mounting element (3, 203, 303, 403) has a base (32, 232, 332, 432) and a main part (31, 231, 331, 431) with a cross-section placed in the middle of a contour of the middle inner chamber (19, 119, 219), whereby the mounting element (3, 203, 303, 403) on opposite sides of the main part (31, 231, 331, 431) has tongues (33, 34, 233, 234, 333, 334, 433, 434) lower surfaces (35, 36, 235, 236, 336, 435, 436) of which are spaced from a lower surface (37, 237, 337, 437) of its base (31, 231, 331, 431) by a distance not smaller than thickness (g) of the projections (22, 23, 122, 123, 222, 223, 522, 523, 622, 623, 722, 723) and width (s) of the gap (21, 121, 221, 521, 621, 721) is not bigger than distance (b) between outer edges of the tongues (33, 34, 233, 234, 333, 334, 433, 434) located on opposite sides of the main part (31, 231, 331, 431) of the mounting element (3, 203, 303, 403) and is not smaller than width (a) of the base (32, 232, 332, 432) of the mounting elements (3, 203, 303, 403) that prevent separation of the covering strip (1, 101, 201, 301, 401, 501, 601, 701) and the mounting element (3, 203, 303, 403) after fixing the covering strip (1, 101, 201, 301, 401, 501, 601, 701) on the mounting element (3, 203, 303, 403).

2. The covering strip according to claim 1, **characterised in that** the main wall (10, 110, 210) has an elastically deflectable extension (14, 15, 214, 215, 314, 315, 414, 415) projecting on both sides beyond a connection point of the middle wall (20, 120, 220, 520, 620, 720) and the main wall (10, 110, 210) directed downwardly below a lower plane of the middle wall (20, 120, 220, 520, 620, 720) and an adhering area (16, 17, 116, 117, 216, 217, 316, 317, 416, 417) of the elastically deflectable extensions (14, 15, 214, 215, 314, 315, 414, 415) of the main wall (10, 110, 210) is not greater than a contact area of the lower surfaces (35, 36, 235, 236, 336, 435, 436) of the tongue (33, 34, 233, 234, 333, 334, 433, 434) of the

- mounting element (3, 203, 303, 403) and upper surfaces (6, 7, 206, 207, 306, 406, 407) of the projections (22, 23, 122, 123, 222, 223, 522, 523, 622, 623, 722, 723) of the middle wall (20, 120, 120, 220, 520, 620, 720).
3. The covering strip according to claim 1 or 2, **characterised in that** from the middle wall (20, 120, 220, 520, 620, 720) protrudes a reinforcing rib (25, 225), a surface of which, facing the middle wall (20, 120, 220, 520, 620, 720), is parallel to the longitudinal axis (4) of the covering strip (1, 201, 301, 401, 501, 601, 701).
4. The covering strip according to claim 1 or 2 or 3, **characterised in that** the projections (22, 23, 122, 123, 222, 223, 522, 523, 622, 623, 722, 723) are inclined towards an interior of the inner chamber (19, 119, 219).
5. The covering strip according to claim 1 or 2, **characterised in that** the main wall (10, 110, 210) has at least one recess extending parallel to the longitudinal axis (4) of the covering strip (1, 201, 301, 401, 501, 601, 701).
6. The covering strip according to one of the claims from 1 to 5, **characterised in that** the middle wall (20, 120, 220, 520, 620, 720) has a recess in at least one projection.
7. The covering strip according to one of the claims from 1 to 6 **characterised in that** the middle wall (20, 120, 220, 520, 620, 720) in both projections has recesses lying opposite to each other and having a width which is not smaller than the length of the mounting element and a distance between the edges of the recesses is not smaller than the width of the mounting element.
8. The covering strip according to one of the claims from 1 to 7, **characterised in that** the mounting element (3, 203, 303, 403) comprises more than one section and the total length of all sections is smaller than the length of the covering strip.
9. The covering strip according to one of the claims from 1 to 8 **characterised in that** the tongues (33, 34, 233, 234, 333, 334, 433, 434) of the mounting element (3, 203, 303, 403) have a cross-section of a polygonal shape.
10. The covering strip according to one of the claims from 1 to 8 **characterised in that** one of the tongues (33) of the mounting element has a cross-section of a polygonal shape, while the other tongue (34) has a convex upper surface.
11. The covering strip according to one of the claims from 1 to 8 **characterised in that** the tongues (433, 434) of the mounting element have a convex upper surface.
12. The covering strip according to one of the claims from 1 to 11, **characterised in that** the mounting element (3, 203, 303, 403) has at least one groove in the upper surface.
13. The covering strip according to one of the claims from 1 to 12 **characterised in that** the mounting element (3, 203, 303, 403) has chamfered through holes.

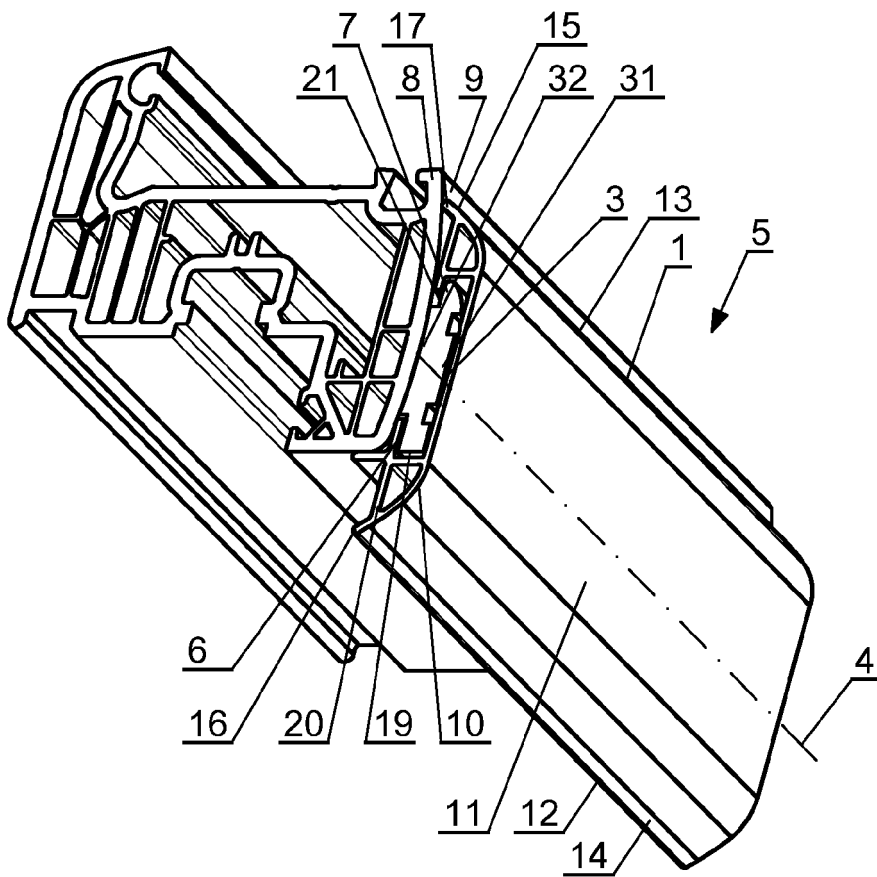


Fig.1

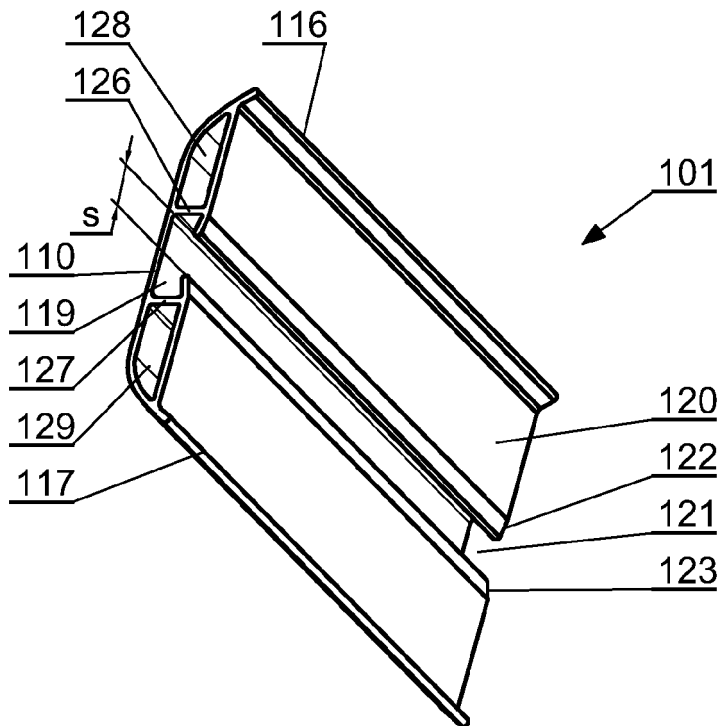


Fig.2

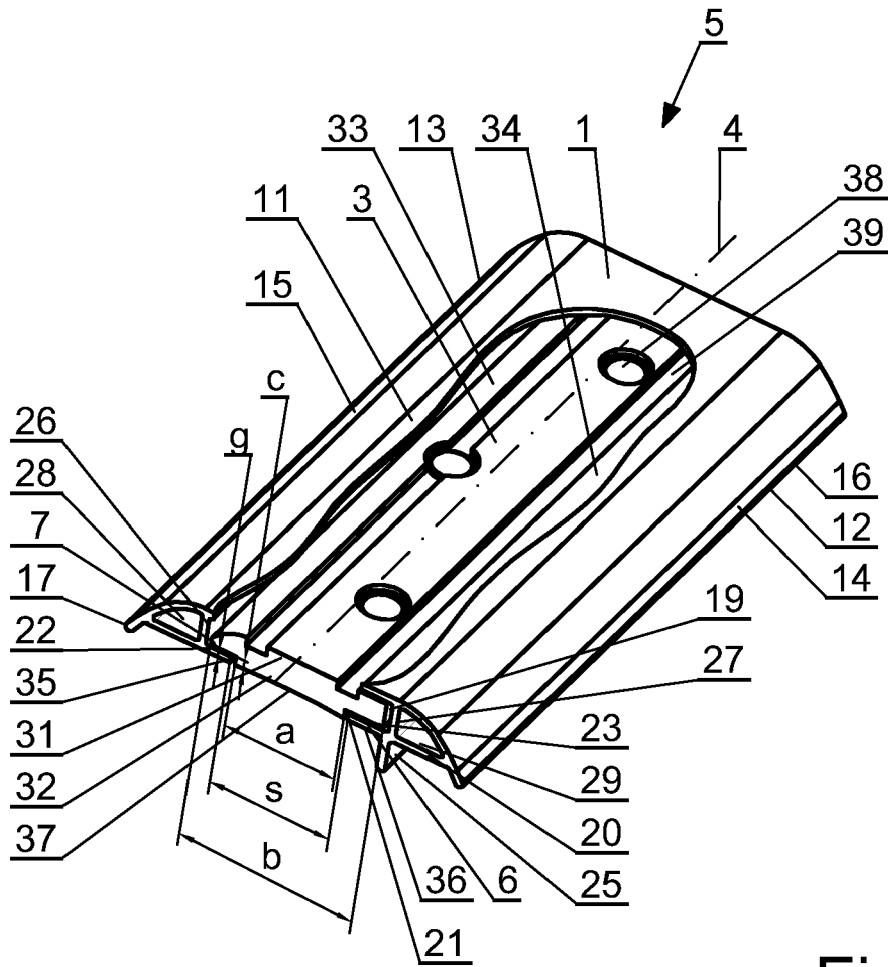


Fig.3

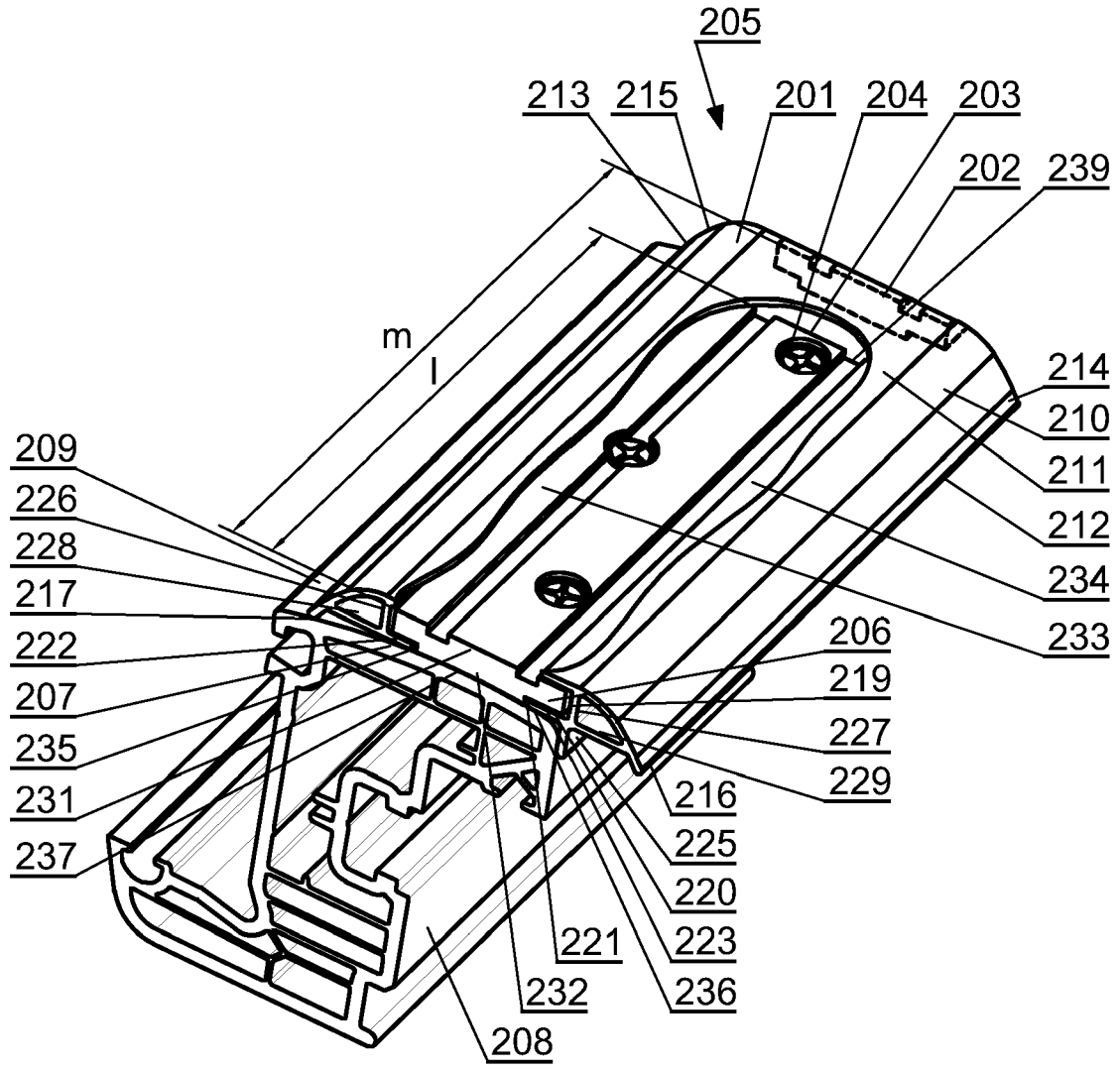


Fig.4

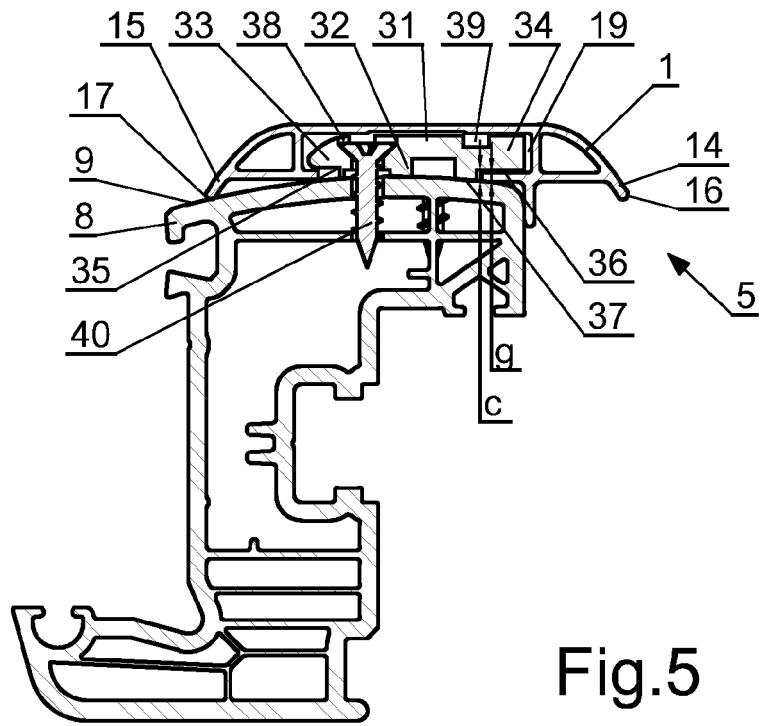


Fig.5

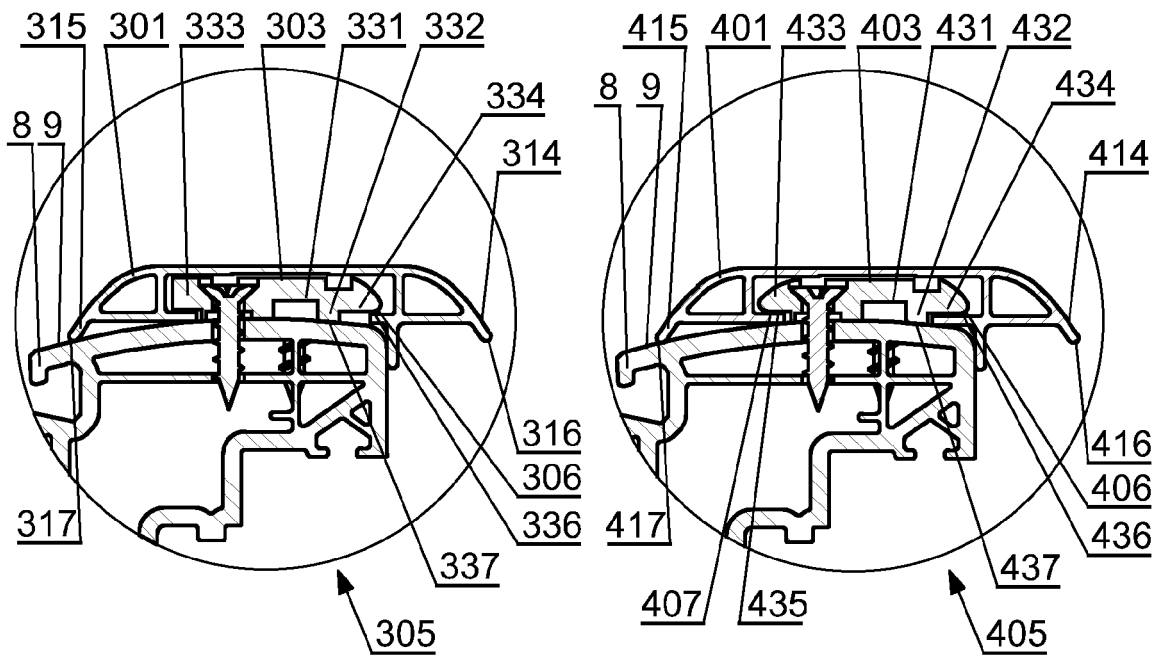


Fig.6

Fig.7

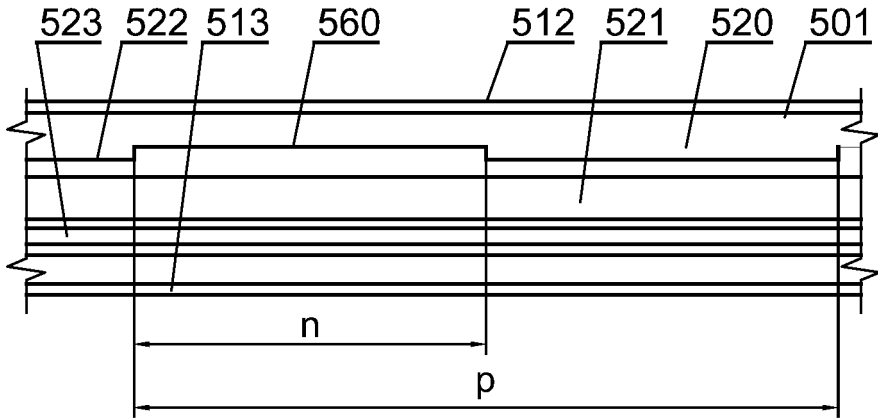


Fig.8

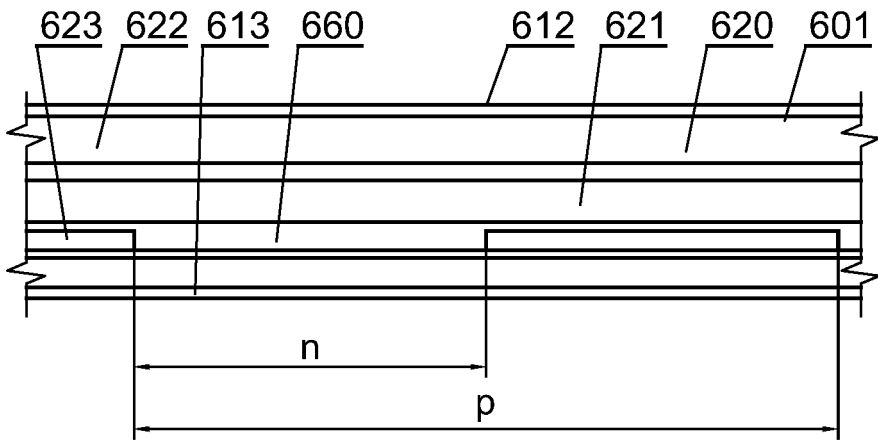


Fig.9

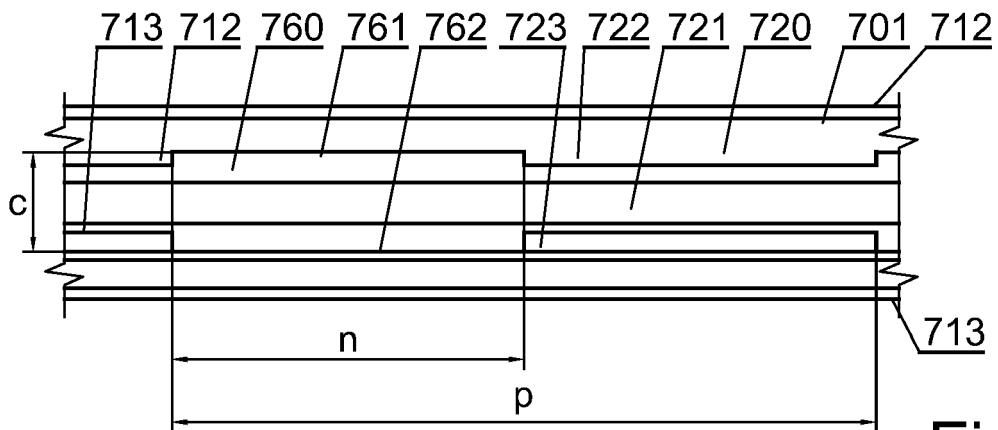


Fig.10



EUROPEAN SEARCH REPORT

Application Number
EP 15 46 1548

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DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
X	FR 2 861 764 A1 (TECHNAL [FR]) 6 May 2005 (2005-05-06)	1-3,5, 8-13	INV. E06B3/30
Y	* page 4, lines 19-21 * * page 5, lines 7-9,24-26 * * page 6, lines 9-25; figures *	4,6,7	
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