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(54) Passage divice for a wall

(57) Passage device for a wall, such as a roofing wall or upright wall, comprising an interior member and an exterior member that extend through a passage through the wall, wherein the interior member and the exterior member are connectable to each other in passage direction at several mutual distances by means of a first toothed connection active through meshing in passage direction along the interior member and/or exterior member, wherein the interior member and the exterior member are mutually rotatable for ending the meshing of the first toothed connection.

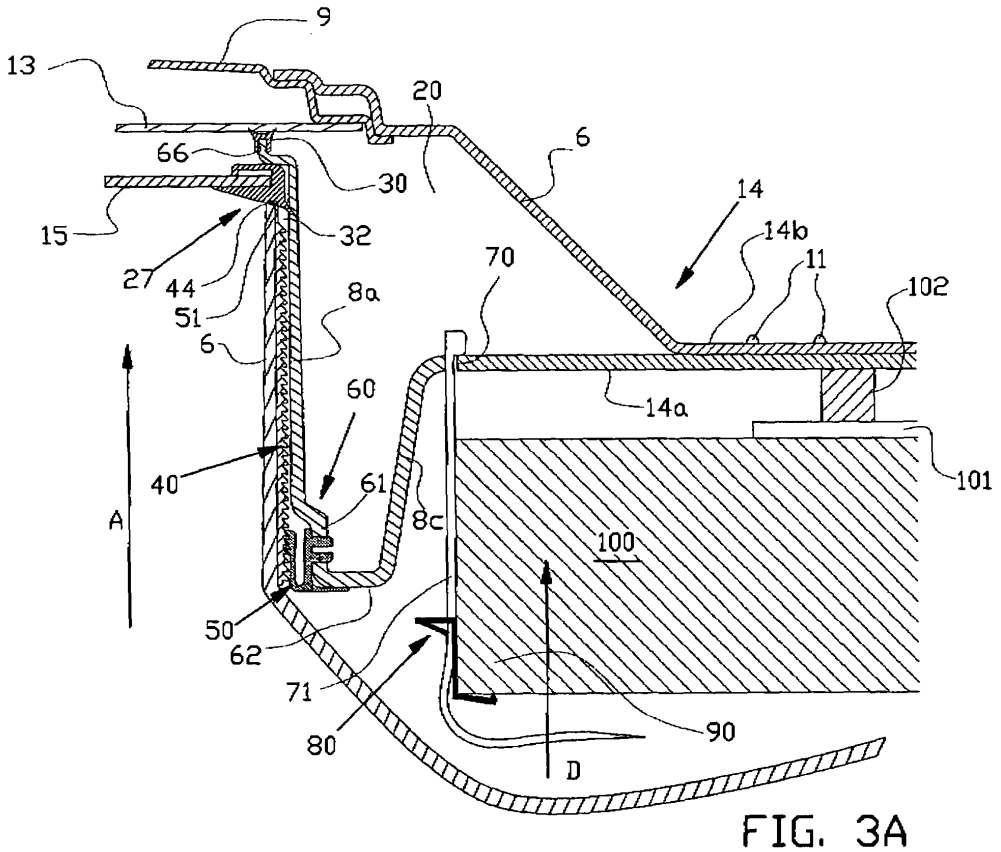

FIG. 3A

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Description

[0001] The invention relates to a passage device for a wall, such as a roofing wall or upright wall. Such a passage structure may for instance be designed like a skylight for allowing daylight to pass through.

[0002] A known skylight comprises a covering transitional plate for accommodation between the tiles on the roof, and a tube member having a placement flange for placement at the inside of the roof. The tube member is then inserted through the roof and partially through a tubular part at the covering transitional plate. The depth of insertion depends on the thickness of the roofing wall. The parts that are inserted into each other remain mutually connected to each other by means of a rubber finishing ring that is situated around the insertion end of the tube member and which with a radially outwardly extending bendable sealing lip at slight pressure abuts the inside of the tubular part of the covering transitional plate.

[0003] The connection by means of the rubber ring is not strong enough for carrying the heavier skylight parts at the inside of the roof. Moreover the connection may in the long run become unreliable due to the rubber ageing.

[0004] In another known embodiment including placement flange it is held against the inner surface of the roof boarding and a tube member protrudes free into a tube member that extends inward from a covering transitional plate. Screwing is difficult and the result ugly.

[0005] It is an object of the invention to provide a passage device for a wall of which the interior member and the exterior member can be reliably connected.

[0006] It is an object of the invention to provide a passage device for a wall of which device the interior member and the exterior member can be reliably connected to each other for several roofing wall thicknesses.

[0007] It is an object of the invention to provide a passage device for a wall of which device the interior member and the exterior member can be durably connected to each other.

[0008] It is an object of the invention to provide a passage device for a wall of which device the connection between the interior member and the exterior member is self-locking.

[0009] It is an object of the invention to provide a passage device for a wall of which device the connection between the interior member and the exterior member can be made and ended several times without loss of reliability.

[0010] The invention provides a passage device for a wall, such as a roofing wall or upright wall, comprising an interior member and an exterior member which in a passage direction can be secured in several positions with respect to each other by means of a first toothed connection active through meshing in passage direction along the interior member and/or exterior member, wherein the interior member and the exterior member are mutually rotatable for ending the action of the first toothed connection.

[0011] The first toothed connection may due to meshing form a substantially shape-closed and as a result strong connection between the interior member and the exterior member. The substantially shape-closed connection can also in the long run remain reliable, whereas this connection by mutual rotation of the interior member and the exterior member can be ended again when this is necessary.

[0012] Preferably the interior member and the exterior member are mutually rotatable about a centre line extending in the passage direction.

[0013] Preferably the interior member and/or the exterior member comprise several first toothed connections which in the mutual direction of rotation of the interior member with respect to the exterior member are spaced apart, preferably regularly spaced apart, preferably according to a circle. Said toothed connections may then ensure a connection between the interior member and the exterior member that is evenly distributed around the passage, wherein due to the spaced apart placement it can be counteracted that the toothed connections hinder each other in case of mutual rotation of the interior member and the exterior member.

[0014] In a first development the first toothed connection comprises first toothed connection means at the interior member and second toothed connection means at the exterior member for engaging into the first toothed connection with each other.

[0015] In that case it can particularly be counteracted that the first and second toothed connection means are able to hinder each other in the mutual rotation of the interior member and the exterior member when each of the first toothed connection means according to a path in the direction of rotation extend over a width that is smaller than the distance according to said path between the sides of the consecutive second toothed connection means. Moreover there will always be enough room between the second toothed connection means for allowing the first toothed connection means to pass in passage direction when moving the interior member and the exterior member apart.

[0016] If the passage device comprises stop means for in the mutual direction of rotation bringing the first and second toothed connection means right across each other, the interior member and the exterior member can in passage direction also be moved towards each other without action of the toothed connection means, after which the toothed connection means can be reliably activated by the stop means in case of mutual rotation of the interior member with respect to the exterior member.

[0017] The connection between the interior member and the exterior member can be made and ended several times, for instance for cleaning or inspecting the parts of the passage device that are situated inside, if the first toothed connection is adapted for repeatedly effecting and ending the meshing.

[0018] In an embodiment that is simple to manufacture, at least a part of the first toothed connection is separately

attachable at the interior member and/or exterior member, preferably by means of snap connection means. Moreover the part of the first toothed connection can only be placed when the toothed connection is actually wanted, for instance not until after forming the passage in the wall.

[0019] In a simple embodiment the first and/or second toothed connection means comprise first teeth forming a gear rack extending in the passage direction. Alternatively or in addition the first and/or second toothed connection means may comprise at least one second tooth situated on a spring tab, preferably at a free end of the spring tab. Within its spring range the spring tab may constantly exert pressure on the tooth for maintaining the meshing. The influence of form deviations of the interior member and the exterior member on the meshing action of the toothed connection can moreover as a result be slight.

[0020] Preferably the first teeth and the at least one second tooth comprise an engagement surface situated transverse to the passage direction and leaning in passage direction for locking the meshed condition of the first teeth with the at least one second tooth. Due to the leaning position the mutual meshing of the teeth may even be maintained if the teeth move mutually slightly apart transverse to the passage direction, for instance as a result of the interior member shifting with respect to the exterior member due to axial load.

[0021] The first toothed connection may invisibly be concealed when the interior member comprises an interior placement member to be placed against the inside of the wall and a first tube member to extend through the wall, and wherein the exterior member comprises an exterior placement member to be placed against the outside of the wall and a second tube member accommodating the first tube member, wherein the first toothed connection in placed condition of the passage device is at least partially situated in an intermediate space between the first tube member and the second tube member.

[0022] Preferably the first tube member and the second tube member have a circular shape transverse to the passage direction. Due to the circular shape the first tube member and the second tube member when in connected condition can be evenly rotated with respect to each other, due to which the meshing of the teeth and thus the mutual toothed connection can easily be ended.

[0023] For an evenly distributed connection around the passage, the passage device may comprise several first toothed connections distributed over the circumference of the first tube member and/or the second tube member.

[0024] Preferably a gear rack is connected to the first tube member, and a second tooth is connected to the second tube member, preferably at the accommodation side of the second tube member. By placement of a second tooth at the accommodation side of the second tube member a large number of second teeth distributed over the length of the gear rack are selectable for forming the mutual connection of the interior member and the exterior member.

[0025] Preferably the spring tab with the free end extends in the direction of the exterior placement member. Due to this position of the spring tab the free end may during rotation in tangential direction rotate away with the interior member or exterior member, due to which the engagement forces between the teeth can be reduced.

[0026] For forming a firm (glue) connection between the gear rack and the first tube member, the gear rack may comprise an abutment surface facing away from the first teeth which surface as regards shape corresponds to the outer circumferential surface of the first tube member.

[0027] For the purpose of easily mounting the gear rack to the first tube member, a gear rack at one end may comprises a placement edge situated transverse to the passage direction, for abutment against the insertion end of the first tube member.

[0028] The mutually rotatable parts of the passage device may be provided with an additional placement aid when the gear rack comprises an abutment surface situated in the direction of the centre line of the second tube member, for positioning the first teeth and the at least one second tooth right across each other.

[0029] In a further development of the passage device the interior member and/or the exterior member comprises attachment means for attaching the interior member and/or exterior member to the wall, wherein the attachment means comprise engagement means for engagement onto a circumferential edge of the passage in the wall.

[0030] In a reliable embodiment thereof the engagement means can be brought into engagement with the circumferential edge at several mutual distances to the exterior member in passage direction, by means of a second toothed connection active through meshing. Said second toothed connection may have the same characteristics as the first toothed connection.

[0031] In further developments the passage device is adapted as air passage and/or as skylight, optionally provided with additional electric lighting.

[0032] The invention further relates to a wall, such as a roofing wall or upright wall, provided with the said passage device according to the invention.

[0033] The aspects and measures described in this description and claims of the application and/or shown in the drawings of this application, may where possible also be used individually. Said individual aspects may the subject of divisional applications related thereto. The same applies in particular to the measures and aspects that have been described per se in the sub claims.

[0034] The invention will be elucidated on the basis of a number of exemplary embodiments shown in the attached drawings, in which:

Figures 1 A and 1 B show an isometric side view and a top view, respectively, of a skylight having an interior member and exterior member according to the

invention;

Figure 2 shows a cross-section according to the lines II-II in figure 1 B;

Figure 3A shows a cross-section of the skylight according to line III-III in figure 1B;

Figure 3B shows a detail of the sealing at the inside of the skylight according to figure 3A;

Figure 4 shows an isometric bottom view of the tube member of the exterior member of the skylight according to figure 2;

Figures 5A-C show a front view, a bottom view and a side view, respectively, of the gear rack as shown in figure 3A;

Figures 5D-E show a detail of the toothing of the gear rack and a detail of the top side of the gear rack, respectively, as shown in figures 5A-C;

Figures 6A and 6B show a cross-section and an isometric bottom side view, respectively, of the tooth member for meshing onto the gear rack as shown in figures 3A, 5A-E; and

Figure 7 shows an isometric view of the attachment hook as shown in attached condition in figure 3A.

[0035] The skylight 1 as shown in figures 1 A and 1 B comprises an interior member 2 and an exterior member 3. Both members are made of synthetic material, for instance by vacuum moulding or injection moulding, in the desired colour(s).

[0036] The interior member 2 comprises a placement flange 4 and a circular cylindrical inner tube member 6. The placement flange 4 has a circumferential edge 7 and a curved recessed inner section 5, intended to be oriented away from the roof package with its convex side. The placement flange 4 in this example has a width varying over its circumference, so that the placement flange 4 is situated eccentrically with respect to the centre line S of the inner tube member 6. The placement flange 4 may also have a circular circumference.

[0037] The exterior member 3 forms a double-walled exterior tube 20 and comprises a two-part covering transitional plate 14 which is intended to be placed against the tile laths on a roof package. The covering transitional plate 14 comprises an inner plate 14a and an outer plate 14b, which along the circumferential edge are glued to each other. From the outer plate 14b an outer wall 8b of the tube 20 projects, in the outer end of which a transparent outer plate has been accommodated. On both sides of the tube 20, the covering transitional plate 14b is provided with upright corrugations 11 for guiding precipitation along the covering transitional plate 14. In the covering transitional plate 14 an upright 10 has been formed for supporting the tiles that can be placed at a slope and in cascade with the covering transitional plate 14.

[0038] Figure 2 shows the skylight 1 built in into a roof package 100. On the roof package 100 battens 101 with transverse thereto parallel tile laths 102, 103 have been attached. The covering transitional plate 14 supports on the tile laths 102, 103, which may have been mutually moved at the location of the skylight 1 for correct abutment against the covering transitional plate 14. The roof package 100 slopes in the direction of the uppermost tile lath 102 towards the lowermost tile lath 103. At the level of the lowermost tile lath 103 the covering transitional plate 14 has an edge for accommodation of a lead flashing between the covering transitional plate 14 and the subsequent tiles. At the side of the inner plate facing the roof package 100, two protruding placement cams 12 have been formed opposite the edge for the flashing, which cams abut the lowermost tile lath 103.

[0039] The inner plate 14a comprises an as it were downwardly/inwardly extending continuation 8c of the outer tube wall 8b, which at its inner end 60 is turned U-shaped (in cross-section of figure 3A) towards inner tube wall 8a, which extends to the outside and which in cross-section is circular cylindrical. The outer tube member 20 is thus partially situated in the passage in the roof package 100. The wall members 8a-c define a circumferential chamber.

[0040] As shown in figure 3A the skylight 1 has a total of three transparent plates. It regards the transparent outer plate 9, which has been glued to the wall 8b, and a transparent inner plate 13, which has been glued to the plate 9 and defines a chamber with the plate 9. Furthermore an additional transparent light plate 15 has been placed at a short distance from the inner plate 13. Around the light plate 15 a rubber fastening ring 27 has been arranged. Between the inner plate 13 and the upper edge of the outer tube member 20 a glazing rubber 30 has been arranged for airtight sealing of the space between the inner plate 13 and the light plate 15. The upper edge on which rubber 30 has been attached is situated slightly inward with respect to the rest of the tube wall 8a, while forming a shoulder 66.

[0041] The fastening ring 27 around the light plate 15 is shown in more detail in figure 3B. The fastening ring 27 has a support edge 29 and a pressure edge 28 situated opposite thereto, which together confine the light plate 15. Between the support edge 29 and the pressure edge 28 a printed circuit board 31 provided with LED lighting is accommodated which printed circuit board is situated against a levelled and polished part of the outer edge of the light plate 15. Overall three printed circuit boards 31 have been accommodated around the light plate 15. At the outer surface the light plate is invisibly grooved and provided with a finishing coating for breaking the LED light in the direction of the inner tube member 6. The fastening ring 27 is furthermore provided with a radially

and downwardly protruding circumferential edge 32 for sealing abutment against the inner surface of tube wall 8a. The light plate 15 is thus kept in its place against the shoulder 66 by clamping force of the edge 32. The presence of the end edge 51 of the inner tube 6 is not necessary for that purpose: it can be spaced apart.

[0042] In the situation shown in figure 3A the inner tube 6 is inserted to a maximum in the direction A in the outer tube 20, particularly in its tube wall 8a. In the diagonal planes of the skylight 1 that are situated through or parallel to the centre line S, a number (in this example four, regularly spaced apart from each other in circumferential direction) synthetic gear racks 40 have been glued against the inner tube member 6. The gear racks 40 each mesh with one of the as many synthetic tooth parts 50 which have been snapped fixedly in a section 60 (also see figure 4) of the outer tube member 20 which section is recessed with respect to the inner tube member 6. The gear racks 40 and tooth parts 50 are manufactured from a hard synthetic material, such as ABS. Due to meshing of the gear racks 40 with the tooth parts 50 the interior member 2 is held in the connected condition with exterior member 3 as shown in figures 2 and 3A.

[0043] One of the gear racks 40 is shown in detail in figures 5A-D. The gear rack 40 has several teeth 42 placed at regular intermediate distances over its length, the teeth having engagement surfaces 45. The teeth 42 extend at least almost radially (radial as resultant) to the centre line S. The engagement surfaces 45 of the teeth 42 have stop surfaces 45 that lean downwards with respect to the insertion direction A, so that both sides of the teeth are inclined backward.

[0044] Along the teeth 42 of gear rack 40 at one side an upright stop edge 43 is situated extending along said teeth 42 and at least substantially radially with respect to the centre line S. The height of the stop edge 43 in radial direction equals the height of the teeth 42 in this direction. If several gear racks 40 have been arranged their stop edges 43 are situated at the same longitudinal edge thereof.

[0045] At the side of the gear rack 40 facing away from the teeth 42 an attachment surface 41 has been formed that is identically shaped to the outer wall of the inner tube member 6. At the upper side of the gear rack 40 a placement surface 44 is situated which with respect to the abutment surface 41 is situated in radial direction towards the inside of the inner tube member 6, which placement surface 44 is to be placed against the upper edge 51 of the insertion end of the inner tube member 6.

[0046] The tooth part 50, as shown in detail in figures 6A and 6B has a placement surface 51 for abutment against the lower surface 62 of the outer tube member 20. The tooth part 50 has two snap connection members 53 which together define an outer circumferential surface 59 having the same diameter as the attachment hole 61 in the recessed, U-shaped, section 60 of the outer tube member 20. At a short distance from the insertion end of the snap connection members 53, the outer circumferential surface 59 has a broadening 58 having a larger diameter than the outer circumferential surface 59 for locking the snap connection members 53 in the attachment hole 61.

[0047] The tooth part 50, with respect to the placement surface 51 and snap connection members 53, has an elastically movable tab 54 with at the ends three teeth 57 extending radially to the centre line S the mutual distance of said three teeth 57 corresponding to the intermediate distances of the teeth 42 of the gear rack 40. The engagement surfaces 57 of the teeth 56 have an upwardly leaning position with respect to the placement direction A of the interior member 2: both surfaces of the teeth 56 incline backward. Due to the mutually leaning positions of the engagement surfaces of the teeth 42, 56 of the gear rack 40 and the tooth part 50, respectively, the interior member 2 can only be inserted in direction A, as shown in figures 2 and 3A, into the exterior member 3, wherein a movement back in opposite direction to A is blocked.

[0048] Small mutual movements transverse to the centre line S between the exterior member 3 and the interior member 2 inserted therein hardly affect the meshing of the teeth 56 and 42 of the tooth part 50 and the gear rack 40, as the tab 54 is able to compensate said slight mutual movements. The outermost position during mutually snapping the teeth is schematically shown in figure 6A with dotted lines. The engagement surfaces 45, 57 of the teeth 56, 42 may have an angular end for further locking of the mutual meshing of the teeth 56, 42.

[0049] The covering transitional plate 14 has been secured to an inner edge 90 of the roof package 100 with a total of four synthetic fastening cords ("Tie-Wraps") 71. The fastening cords 71 in this case extend from their closing head through holes 70 in the covering transitional plate 14 and with their cord section through in total four metal fastening hooks 80.

[0050] Figure 7 shows the fastening hook 80 as shown in figure 3A in detail. The fastening hook 80 has an upper plane 81 and a lower plane 83 that are situated perpendicularly on both sides of a centre plane 82, resulting in the fastening hook 80 having a Z-shape. In the upper plane 81 a U-shaped recess 86 has been formed extending up to the centre plane 82, from which recess a barb 85 has been bent. The free end of the barb 85 is situated at a short distance from the centre plate 82, such that the fastening hook 80 can only move in direction D past the fastening cord 71 in order to thus come into abutment with the lower edge 90 of the roof package 100, wherein two turned edges 84 at the lower plane 83 are able to fasten into the roof package 100.

[0051] During installation of the skylight 1, after said placement/attachment of the exterior member 3 on the roof package 100, wherein optionally no attachment means need to be arranged at the outside of the roof boarding 100, the interior member 2 has to be inserted in direction A, wherein the gear racks 40 are held in front of the teeth sets 56. The interior member is then already

held by the exterior member. Subsequently interior member 2 is pressed further into the exterior member, during which the teeth 42 rattle/snap over the teeth 56. When the circumferential edge 7 (which at the roof side may be provided with a sealing ring) has arrived near the inner surface of the roof, and is parallel thereto at sight, the interior member 2 is rotated in direction B until the teeth 56 abut the stop edges 43 of the gear racks 40. At that moment one knows that all teeth sets are active and furthermore the interior member is correctly oriented (the teeth parts 50 are correctly oriented with the outer part). Subsequently the interior member is pressed so that the gear racks snap further over the teeth 56 and the circumferential edge 7 tightly contacts the inner surface of the roof. An optional sealing at the circumferential edge is then actively clamped. The skylight 1 is now arranged in the roof in a reliable and correctly aligned manner. The lighting can be connected with wires that are not shown.

[0052] In order to detach the interior member 2, for instance for inspecting the lighting, the interior member 2 has to be rotated back in the direction C (opposite to direction B) with respect to the exterior member 3 until the teeth 42, 56 no longer mesh with each other. Due to the direction of the free end of the tab 54 in the direction A, the teeth 56 of the tooth part 50 in case of the rotation in direction C, are initially able to move along with the teeth 42 of the gear rack 40, so that the mutual tension of the teeth 42, 56 can be lifted. In this way it is possible to unscrew the interior member 2 further in direction C with little effort until the teeth 42, 56 are fully unmeshed. The intermediate distances between the several gear racks 40 and the teeth 50, respectively, is such that they have room to move freely past each other in the returning direction D. The gear rack 40 and the tooth part 50 together form a bayonet catch.

Claims

1. Passage device for a wall, such as a roofing wall or upright wall, comprising an interior member and an exterior member which in a passage direction can be secured in several mutual positions with respect to each other by means of a first toothed connection active through meshing in passage direction along the interior member and/or exterior member, wherein the interior member and the exterior member are mutually rotatable for ending the action of the first toothed connection.

2. Passage device according to claim 1, wherein the interior member and the exterior member are mutually rotatable about a centre line extending in the passage direction.

3. Passage device according to claim 1 or 2, wherein the interior member and/or the exterior member comprise several first toothed connections which in the mutual direction of rotation of the interior member with respect to the exterior member are spaced apart, preferably regularly spaced apart, preferably according to a circle.

4. Passage device according to any one of the preceding claims, wherein the first toothed connection comprises first toothed connection means at the interior member and second toothed connection means at the exterior member for engaging into the first toothed connection with each other.

5. Passage device according to claims 3 and 4, comprising several first toothed connection means and several second toothed connection means cooperating therewith, wherein each of the first toothed connection means has a width considered according to a path in the direction of rotation that is smaller than the distance considered according to said path between the consecutive second toothed connection means.

6. Passage device according to claim 4 or 5, comprising stop means for in the mutual direction of rotation bringing the first and second toothed connection means right across each other.

7. Passage device according to any one of the preceding claims, wherein the first toothed connection is adapted for repeatedly effecting and ending the meshing.

8. Passage device according to any one of the preceding claims, wherein at least a part of the first toothed connection is separately attachable at the interior member and/or exterior member, preferably by means of snap connection means.

9. Passage device according to any one of the preceding claims, when depending on claim 4, wherein the first and/or second toothed connection means comprise first teeth forming a gear rack extending in the passage direction.

10. Passage device according to claim 9 and claim 6, wherein the stop means are formed by a stop edge or stop surface on the gear rack.

11. Passage device according to any one of the preceding claims, when depending on claim 4, wherein the first and/or second toothed connection means comprise at least one second tooth situated on a spring tab, preferably at a free end of the spring tab.

12. Passage device according to claim 9 or 10 and 11, wherein the first teeth and the at least one second tooth comprise an engagement surface situated transverse to the passage direction and leaning in

the passage direction for locking the meshed condition of the first teeth with the at least one second tooth.

13. Passage device according to any one of the preceding claims, wherein the interior member comprises an interior placement member to be placed against the inside of the wall and a first tube member to extend through the wall, and wherein the exterior member comprises an exterior placement member to be placed against the outside of the wall and a second tube member accommodating the first tube member, wherein the first toothed connection in placed condition of the passage device is at least partially situated in an intermediate space between the first tube member and the second tube member.

14. Passage device according to claim 13, wherein the first tube member and the second tube member have a circular shape transverse to the passage direction.

15. Passage device according to claim 13 or 14, comprising several first toothed connections distributed over the circumference of the first tube member and/or the second tube member.

16. Passage device according to any one of the claims 13-15, when depending on any one of the claims 9-12, wherein a gear rack is connected to the first tube member, and a second tooth is connected to the second tube member, preferably at the accommodation side of the second tube member, wherein the gear rack preferably comprises an abutment surface facing away from the first teeth which surface as regards shape corresponds to the outer circumferential surface of the first tube member, wherein a gear rack at one end preferably comprises a placement edge situated transverse to the passage direction, for abutment against an insertion end of the first tube member.

17. Passage device according to claim 16, when depending on claim 11, wherein the spring tab with the free end extends in the direction of the exterior placement member.

18. Passage device according to any one of the preceding claims, wherein the interior member and/or the exterior member comprises attachment means for attaching the interior member and/or exterior member to the wall, wherein the attachment means comprise engagement means for engagement onto a circumferential edge of the passage in the wall, wherein the engagement means can be brought into engagement with the circumferential edge preferably at several mutual distances to the exterior member in passage direction, by means of a second toothed connection active through meshing.

19. Passage device according to any one of the preceding claims, adapted as air passage and/or skylight, preferably provided with additional electric lighting.

20. Wall, such as a roofing wall or upright wall, provided with the passage device according to any one of the preceding claims.

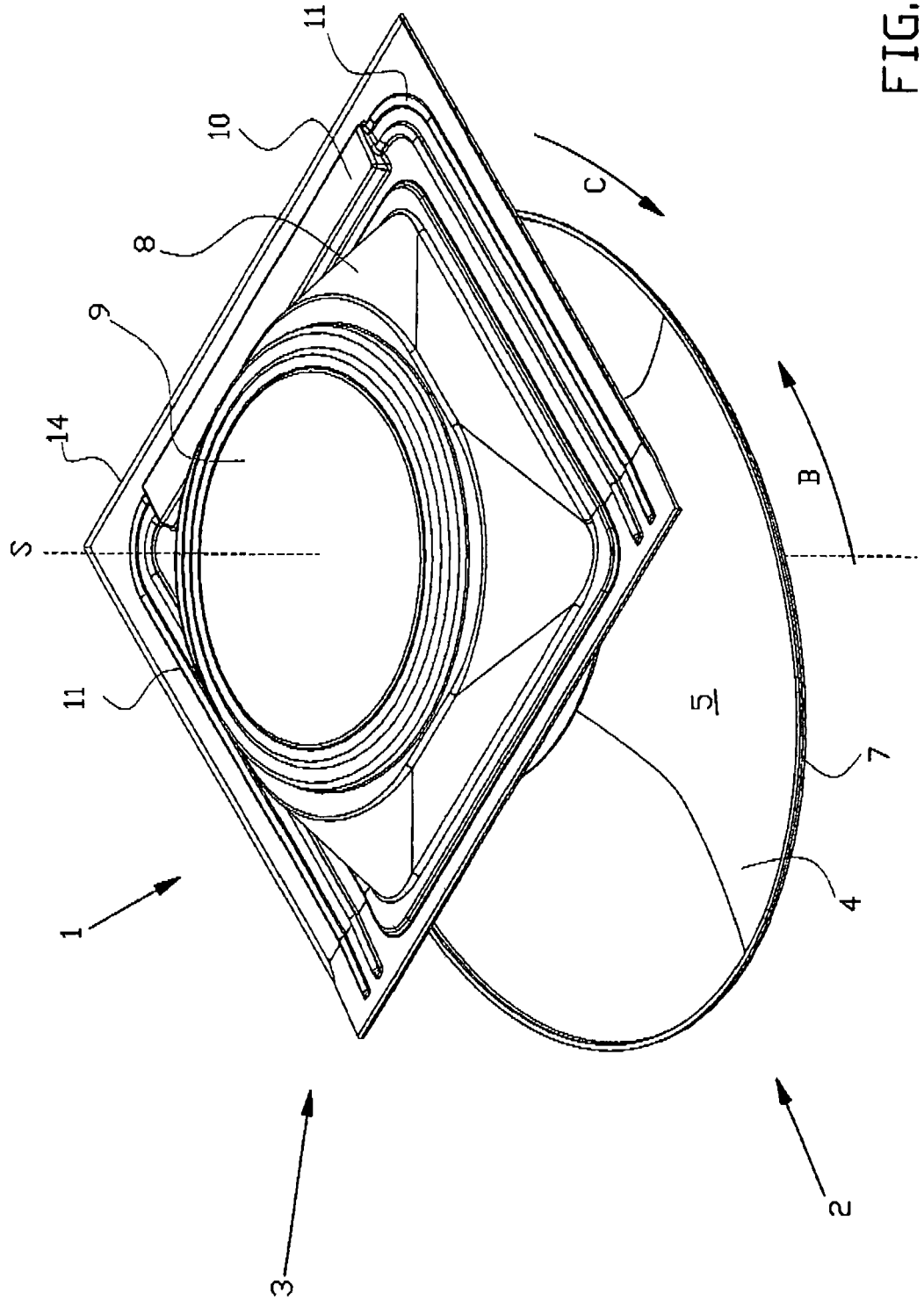

FIG. 1A

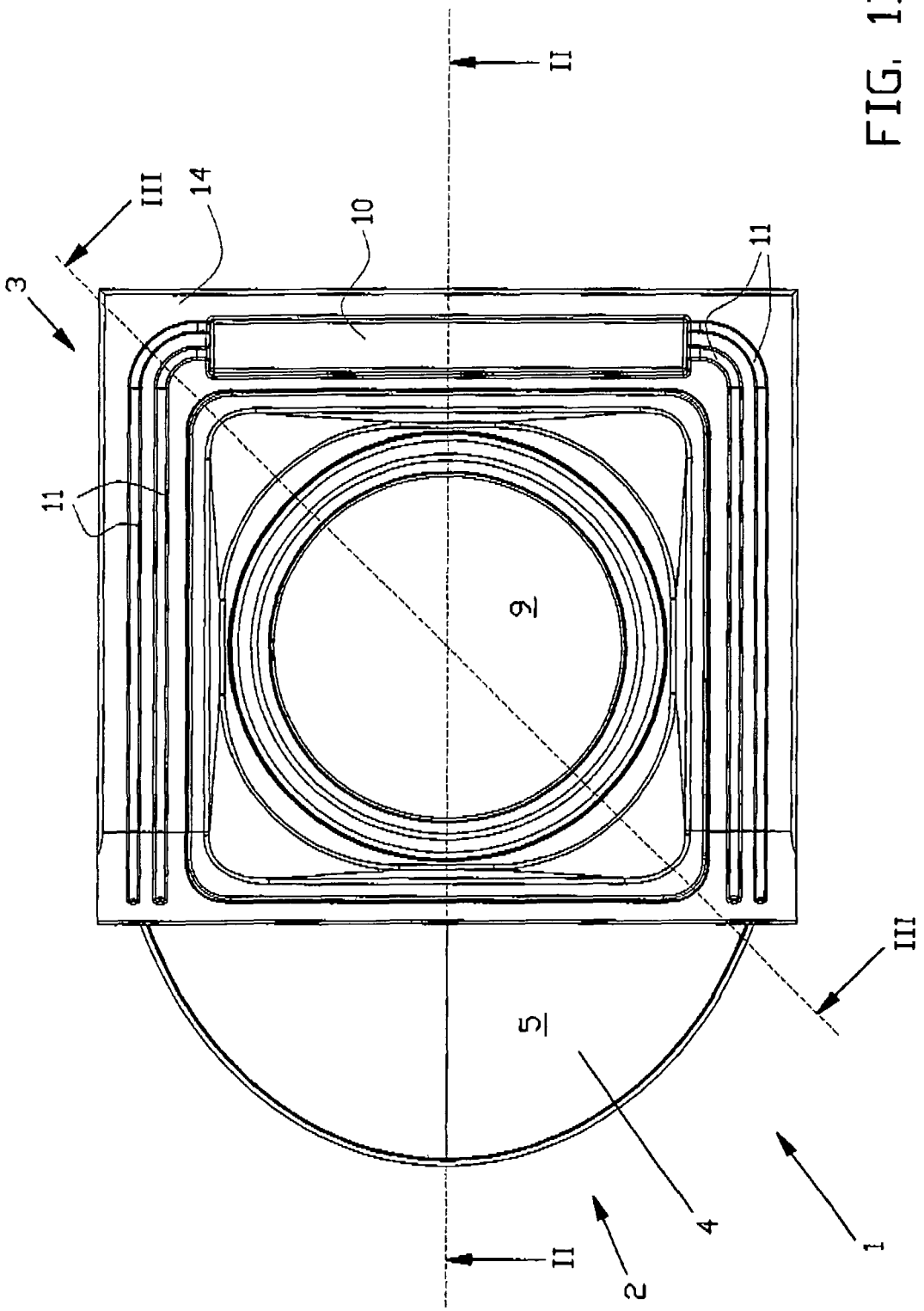

FIG. 1B

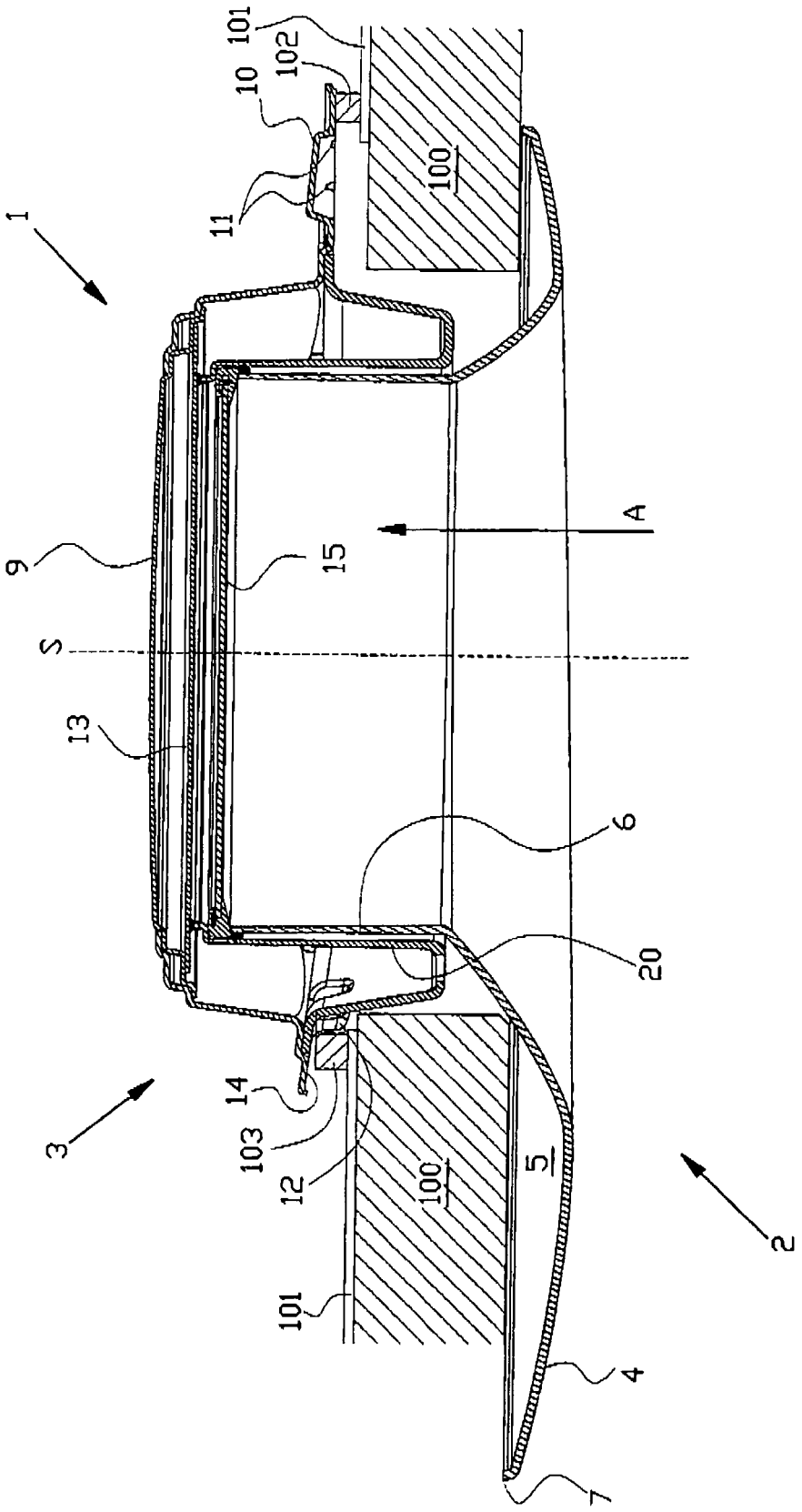

FIG. 2

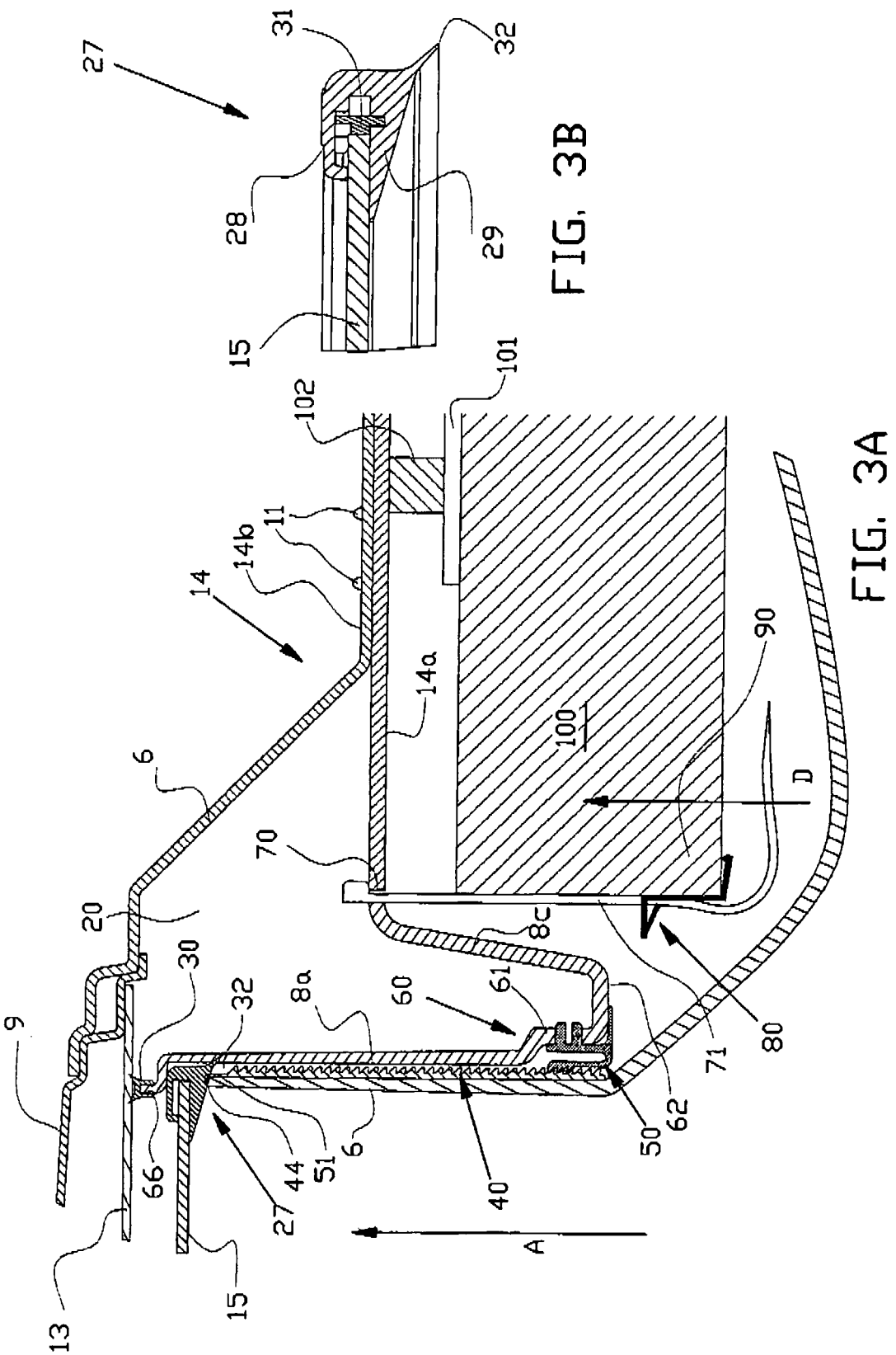
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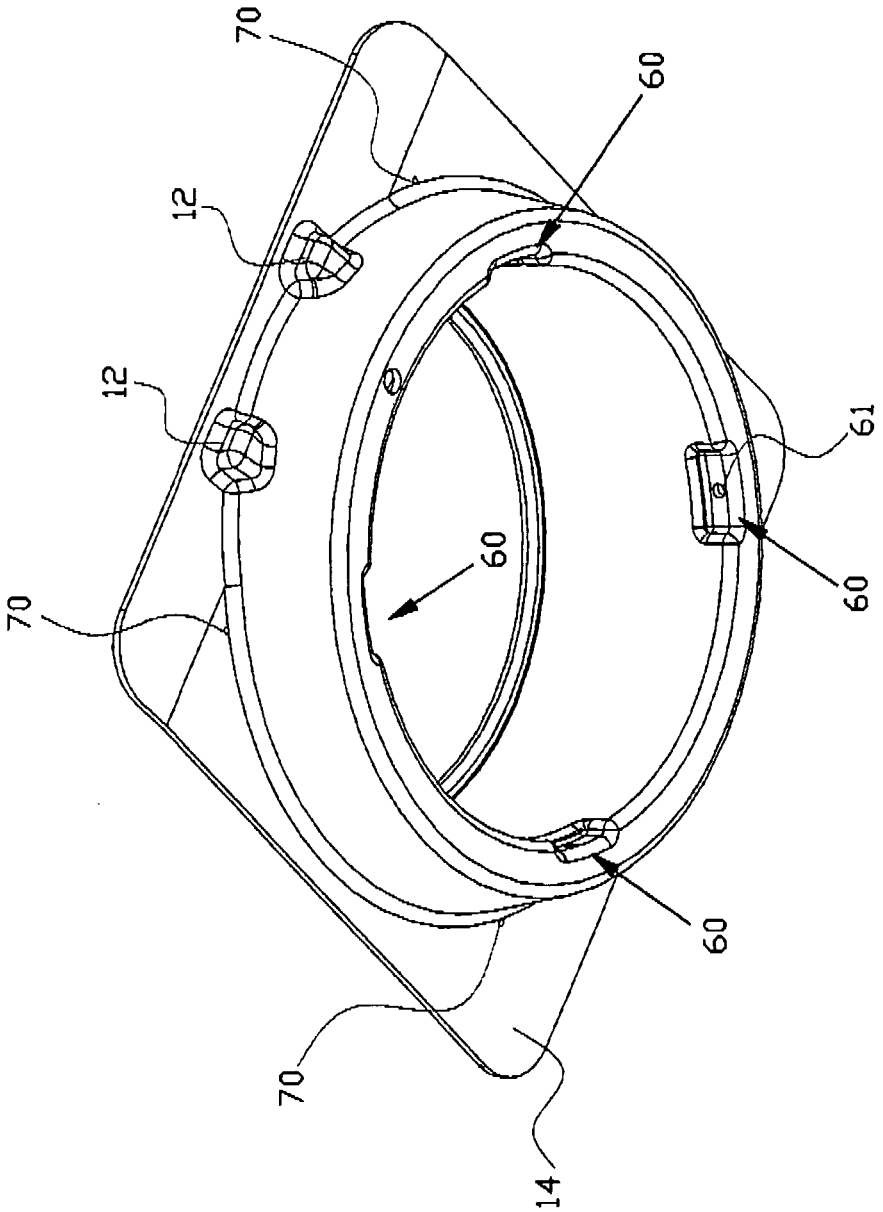
FIG. 3B

FIG. 3A

FIG. 4



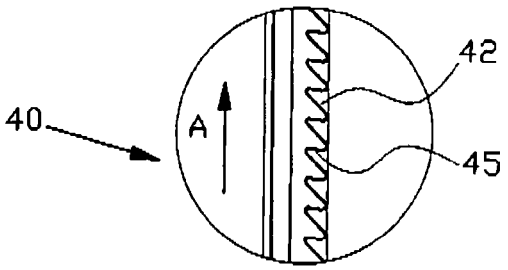


FIG. 5D

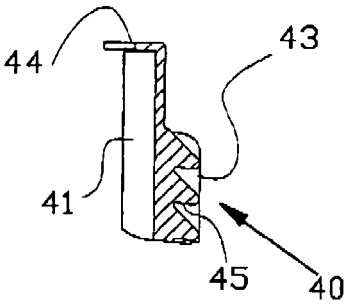


FIG. 5E

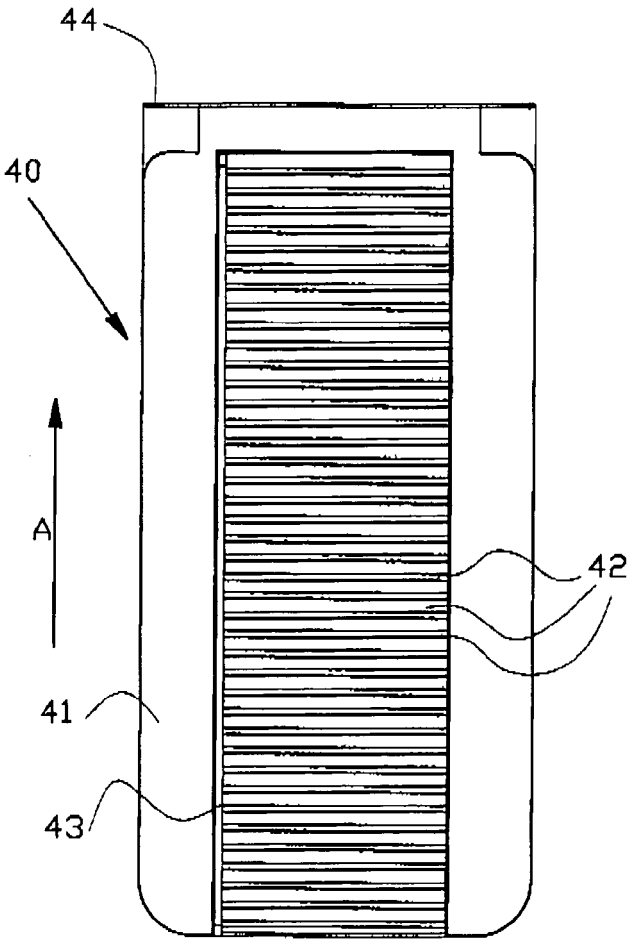


FIG. 5A

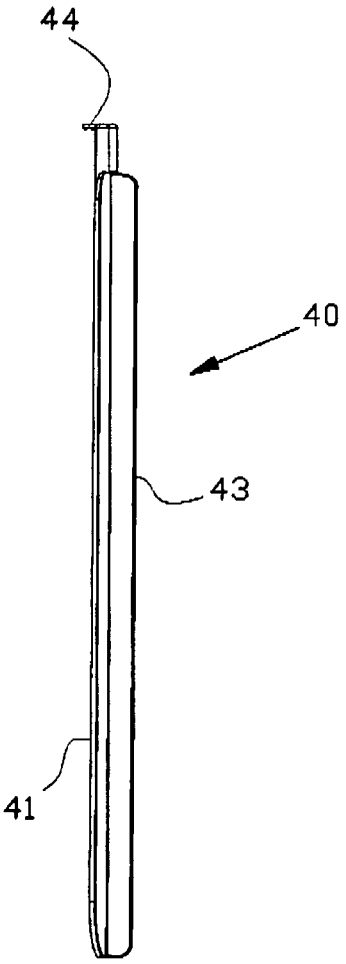


FIG. 5C

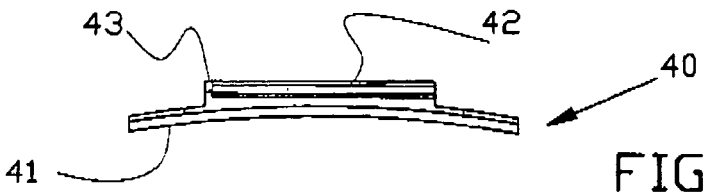


FIG. 5B

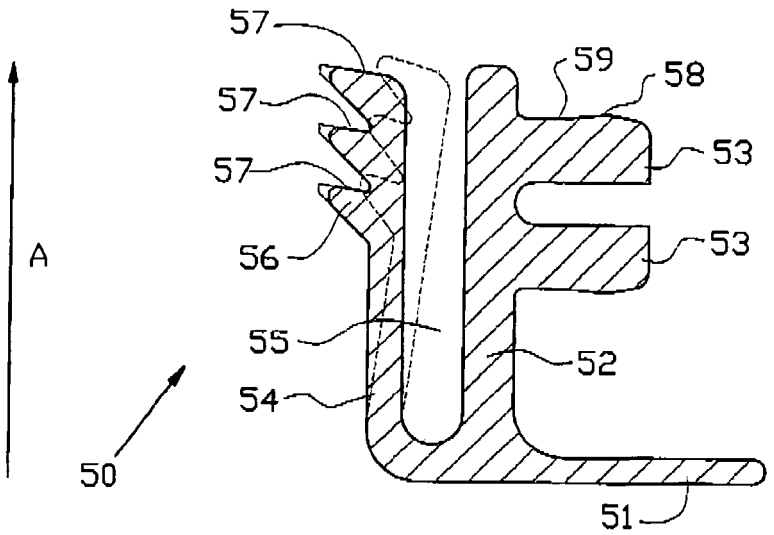


FIG. 6A

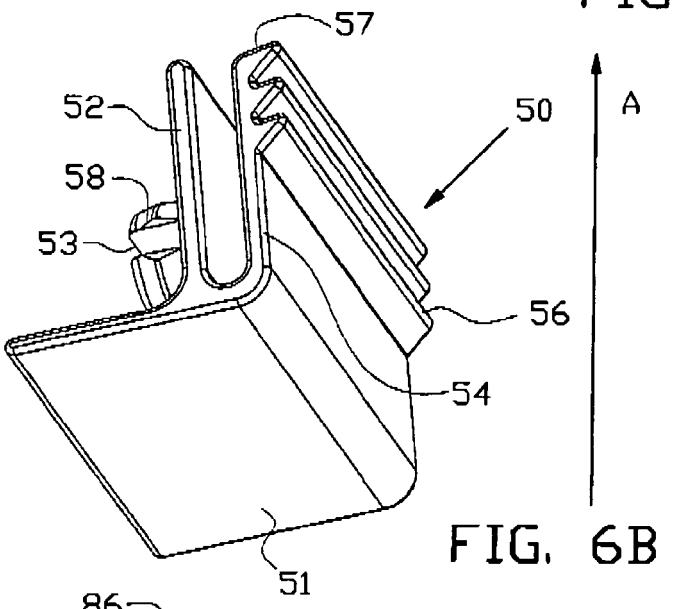


FIG. 6B

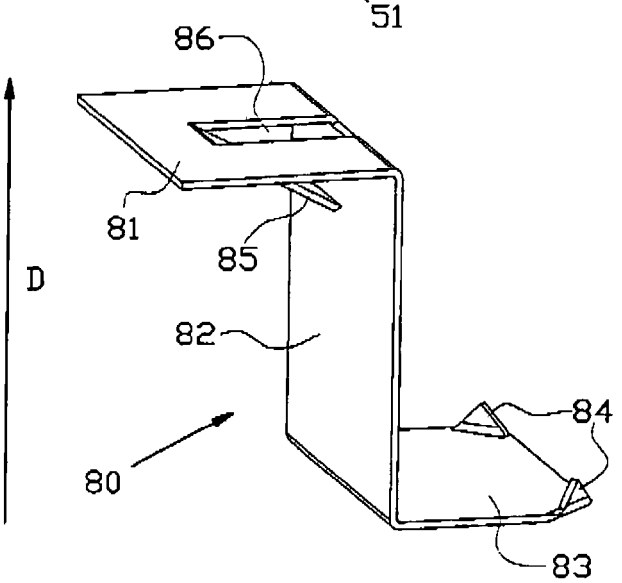


FIG. 7

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EUROPEAN SEARCH REPORT

Application Number
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A	WO 2004/098352 A (SUGATSUNE KOGYO CO., LTD; SAKURAI, MASANORI) 18 November 2004 (2004-11-18) * figures 1,4 * -----	1-5,7,9, 12-15, 19,20	
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The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
The Hague	18 May 2006	Demeester, J

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