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# WASH STAND

## TECHNICAL FIELD

The present invention relates to a wash stand with a cover element according to claim 1.

## PRIOR ART

Wash stands with cover elements, which are inserted in a run-off, are known from the prior art. By way of example, DE 10 2008 044 637 discloses a wash stand, in the run-off opening of which a cover is inserted. A disadvantage of the cover according to DE 10 2008 044 637 is that the cover can be removed only in a comparatively complex manner. The removability of the cover is important, so that the regions behind the cover can be cleaned. For example, hair and other solid matter accumulate behind the cover. This solid matter has to be removed, since otherwise the water is no longer able to flow out adequately.

DE 20 2011 000278 U1 discloses a sanitary arrangement, wherein water impinging on the tub body is directed through the curvature of the tub body to a slot between the tub body and the sanitary arrangement. No water drainage is visible to a user, which means that the high-quality, continuous appearance of the bathtub body is not disturbed. Preferably, the cover, which can be swivelled around a horizontal axis, for example the described means supporting an opening is held in the opening position or locks into place.

## DESCRIPTION OF THE INVENTION

Proceeding from this prior art, the invention is based on an object of specifying a wash stand with a cover, said wash stand overcoming the disadvantages of the prior art. In particular, it is an object of the present invention to specify a wash stand with a cover, with the cover being able to be removed from the wash stand in a simple

manner by the user.

This object is achieved by the subject matter as claimed in claim 1. Accordingly, a wash stand comprises a wash basin with a run-off opening which opens into a run-off chamber. The wash stand further comprises a cover element which is arranged in the run-off opening and which extends partially across the run-off opening in such a way that, at least in a lower region of the run-off opening, a gap is provided, through which water can flow out of the wash basin into the run-off chamber. In the run-off chamber, there is arranged at least one bearing point on which the cover element is mounted in such a way that it can be removed from the at least one bearing point. This means that the cover element can be connected to the bearing point, and the connection can be canceled again during maintenance. The cover element is mounted in the bearing point so as to be able to pivot about at least one pivot axis, in such a way that the cover element can be pivoted from a use position into an intermediate position, in which the cover element can be readily gripped by a user. Furthermore, the cover element, from its intermediate position, can be removed from the bearing point out of the run-off opening.

The wash stand with the cover element which can be pivoted into an intermediate position achieves the object in that the cover element can be moved in a simple manner into the intermediate position, and can subsequently be readily gripped by the user. As a result of the pivoting movement, the cover element, in its intermediate position, lies in the run-off opening in an angularly inclined manner, as a result of which the cover element can be readily gripped.

The bearing point is preferably arranged in such a way that the bearing point is not visible when the cover element is in the use position.

Preferably, the front face of the cover element is flush with the surface of the wash basin all around the run-off opening.

Preferably, the cover element, in its intermediate position, projects partially out of the run-off chamber and extends, with the region projecting out of the run-off

chamber, from the run-off chamber into the wash basin. The user can then grip the cover element on the region thereof which extends into the wash basin, and can subsequently separate the connection between cover element and bearing point and remove the cover element from the run-off chamber.

The cover element can be moved from the use position into the intermediate position by application of pressure on the front face thereof, which faces toward the wash basin. Hereby, a simple actuation can be achieved.

Further, the bearing point is arranged centrally with respect to the cover element, in such a way that the cover element can be moved from the use position into the intermediate position by application of pressure on an end region. Alternatively, a plurality of bearing points are arranged symmetrically with respect to the center of the cover element, in such a way that the cover element can be moved from the use position into the intermediate position by application of pressure on an end region.

The term centrally is understood to mean that, in the case of an elongate cover, the center is understood to be the region between the two ends.

According to the invention, the pivot axis is oriented substantially parallel to the front face of the cover element and runs according to the invention substantially in the vertical or substantially in the horizontal. In this connection, substantially means that the pivot axis either runs exactly in the vertical or the horizontal or alternatively at a slightly inclined angle with respect to the vertical or with respect to the horizontal, respectively.

Preferably, in a lateral region and also in an upper region opposite said lower region, a gap is likewise present between the cover element and the run-off opening. This means that a gap which runs around the cover element is preferably provided, through which water can flow into the run-off chamber. In this way, the outflow capacity in the case of a filled wash basin can be increased.

The gap in the lower region is preferably larger than the gap in the lateral region

and/or in the upper region. Hereby, the outflow capacity can be optimized.

The gap in the upper and in the lateral region is preferably smaller than the gap in the lower region. Typically, the smaller gap has a clearance of 0.5 millimeters to approximately 3 millimeters. The larger gap, through which the water flows out, has a clearance of 3.5 to 8 millimeters.

The bearing point is preferably part of an insert element, which is configured separately from the wash stand and can be connected to the wash stand.

The insert element preferably closes off the run-off chamber toward the rear and comprises a connection piece through which the water can be discharged. The connection piece is preferably connected to an outflow system.

The cover element preferably has a bearing element on the rear side thereof, said bearing element being mounted in the bearing point. The bearing element preferably protrudes away from the rear side of the cover element and projects into the bearing point. The bearing point and the bearing element are in this case preferably configured in such a way that the front face of the cover element comes to lie flush with the surface of the wash basin around the run-off opening.

Preferably, a comb element with comb teeth is furthermore arranged in the run-off chamber, which comb teeth lie behind the cover element as seen in the direction of flow and project into the clear width of the gap in the lower region for the purpose of retaining solid articles.

In a first variant, the cover element and the comb element are preferably of one-part configuration. This means that the cover element and the comb element are configured in one piece.

According to a second variant, the cover element is configured separately from the comb element, wherein the cover element and the comb element are connected to one another.

The connection between the cover element and the comb element is preferably a materially bonded and/or force-fitting and/or positively locking connection.

In the second variant, the comb element preferably has a bearing element on the rear side thereof, said bearing element being mounted in said bearing point. In this variant, the bearing is independent of the cover element. Alternatively, it is also possible for the cover element to comprise the bearing element.

Preferably, the bearing point and the bearing element each have a contact area which is rounded with a rounded portion and by way of which said pivoting movement can be carried out. The rounded portion of the bearing point is preferably convex and the rounded portion of the bearing element is preferably concave. The two rounded portions are of mutually complementary configuration, such that the rounded portions fit together.

The rounded contact area is preferably rounded in a cylindrical manner, wherein the center axis of the cylindrical rounded portion defines the pivot axis. Alternatively, the rounded contact area is of partially spherical configuration.

The bearing point and the bearing element preferably have a retaining means which increases the separating force between the bearing point and the bearing element, wherein the retaining means is preferably a mechanical snap-fit element and/or a magnetic element.

The cover element, in its use position, is preferably aligned with respect to the wash basin. In particular, the front face of the cover element is oriented parallel to the wall of the wash basin.

Further embodiments are specified in the dependent claims.

## BRIEF DESCRIPTION OF THE DRAWINGS

Preferred embodiments of the invention are described below with reference to the drawings, which serve merely for explanation and should not be interpreted as restrictive. In the drawings:

fig. 1 shows a perspective view of a wash stand according to a preferred embodiment of the present invention;

fig. 2 shows a perspective detail view of the wash stand according to figure 1;

fig. 3 shows a perspective exploded view of the wash stand according to figure 1;

fig. 4 shows a further perspective illustration of the wash stand according to figure 1;

fig. 5 shows a sectional illustration of the wash stand according to figure 1;

fig. 6 shows a further perspective view of the wash stand according to figure 1 with a detailed view;

fig. 7 shows a perspective view of a wash stand according to a further preferred embodiment of the present invention; and

figs. 8a/8b show detailed views of figure 7.

## DESCRIPTION OF PREFERRED EMBODIMENTS

Figures 1 to 6 show a first embodiment of a wash stand 1 according to the invention. Figures 7 to 8b show a second embodiment of a wash stand 1 according to the invention. Identical parts are in this case provided with identical reference numerals.

The wash stand 1 comprises a wash basin 2 with a run-off opening 3 which opens into a run-off chamber 4. Water is in this case supplied to the water basin 2 by way of an outlet fitting (not illustrated), and the water can then be guided via the run-off opening 3 to the run-off chamber 4. From the run-off chamber 4, the water is then supplied to a wastewater system. Here, the run-off opening is arranged in a side wall 28 of the wash basin 2.

A cover element 5 is arranged in the run-off opening 3. The cover element 5 extends

partially across the run-off opening 3 in such a way that, at least in a lower region 6 of the run-off opening 3, a gap 7 is provided. Through the gap 7, water can flow out of the wash basin 2 into the run-off chamber 4. The cover element 5 substantially conceals the elements lying in the run-off chamber 4 behind the run-off opening 3. This means that the cover element 5 in its use position, as shown in figure 1, lies in the run-off opening 3 in such a way that the interior space of the run-off chamber 4 is concealed.

In the run-off chamber 4, there is arranged at least one bearing point 8 on which the cover element 5 is mounted. In this case, the cover element 5 is mounted in such a way that it can be removed from the at least one bearing point 8. This means that the cover element 5 can be separated from the bearing point 8 and removed from the run-off opening 3. In this way, access to the run-off chamber 4 can be provided through the run-off opening 3.

In this case, the cover element 5 is mounted on the at least one bearing point in such a way that the cover element 5 is mounted so as to be able to pivot about a pivot axis S1, S2. In this case, the cover element 5 can be pivoted from a use position, as is shown in figure 1, into an intermediate position, as is shown for example in figures 2 and 7. In the intermediate position, the cover element 5 lies in the run-off opening 3 in such a way that the cover element 5 can be readily gripped by a user. The cover element 5, from its intermediate position, can then be removed from the bearing point 8 out of the run-off opening 3. The access to the run-off chamber 4 is correspondingly provided.

This means that, during removal from the run-off opening 3, the cover element 5 is initially pivoted into the intermediate position and subsequently gripped by the user, wherein the cover element 5, from its intermediate position, is then separated from the bearing point 8 and accordingly removed from the run-off opening 3.

In the first embodiment according to figures 1 to 6, the cover element 5 can be pivoted about a pivot axis S1. In this case, the pivot axis S1 runs substantially in the vertical V or at a slight angular inclination with respect to the vertical V. In the second

embodiment according to figures 7 to 8b, the cover element 5 is pivoted substantially about the pivot axis S2. In this case, the pivot axis S2 lies in the horizontal H or at a slight angular inclination with respect to the horizontal H.

In both embodiments, the cover element 5, in its intermediate position, projects partially out of the run-off chamber 4. In this case, the cover element 5 extends, with a projecting region 21, from the run-off chamber 4 into the wash basin 2. The user can readily grip the cover element 5 on the projecting region 21. The cover element 5 thus lies, in its intermediate position, in such a way that it extends out of the run-off opening 3.

Preferably, the cover element 5 is moved from the use position into the intermediate position by application of pressure on the front face 9 thereof. With regard to the first embodiment, looking at figure 2, this means that the user pushes the right-hand region of the cover element 5 inward into the run-off opening 3 or the run-off chamber 4, respectively, wherein the pivoting about the pivot axis S1 then occurs. After the pivoting, the left-hand side of the cover element 5 then projects as projecting region 21 into the wash basin 2. In the second embodiment according to figure 7, the user likewise pushes on the front face 9, but in the lower region of the cover element 5 rather than in the end region. In this way, the cover element 5 is pivoted correspondingly at the pivot axis S2 and the projecting region 21 can be gripped correspondingly.

In both embodiments, the bearing point 8 is preferably arranged centrally with respect to the cover element 5. In particular centrally as seen in the direction of the horizontal H. The arrangement is in this case such that the cover element 5 can be moved from the use position into the intermediate position with an application of pressure on an end region of the cover element 5. Alternatively, a plurality of bearing points 8 can also be arranged symmetrically with respect to the center of the cover element 5, with said bearing points 8 then likewise being arranged in such a way that the cover element 5 can be moved from the use position into the intermediate position by application of pressure on a region. In the first embodiment, a bearing point 8 is arranged centrally with respect to the cover element 5, and in the second

embodiment, a plurality of bearing points 8 are arranged slightly offset with respect to the center of the cover element 5.

In the embodiment according to figures 1 to 6, one bearing point is arranged, and in the embodiment according to figures 7 to 8b, two bearing points 8 are arranged. The cover element 5 according to the first embodiment has a bearing element 15 on the rear side 14 thereof, and the cover element 5 according to the second embodiment has two bearing elements 15. The bearing element 15 or the bearing elements 15, respectively, engage in the bearing point 8. The cover element 5 is thus mounted with the bearing element 15 in the bearing point 8. In this case, the bearing element 15 projects into the bearing point 8 and is correspondingly accommodated by the bearing point 8.

The cover element 5 preferably lies in the run-off opening 3 in such a way that not only is the gap 7 provided, but a gap which runs circumferentially around the cover element 5 is provided. This means that, in a lateral region 10 of the cover element 5 and also in the upper region 11 opposite said gap, a gap 12 is likewise present between the cover element and the run-off opening 3. The gap 7 in the lower region is preferably larger than the gap 12 in the lateral region 10 or in the upper region 11, respectively.

The bearing point 8 and the bearing element 15 each have a contact area 20 which is rounded with a rounded portion 23. The rounded contact area 20 is advantageous because, as a result, the pivoting movement can be correspondingly defined and executed. In the embodiments shown according to figures 1 to 7, the rounded contact area 20 is rounded in a cylindrical manner. The center axis of the cylindrical rounded portion 23 in this case defines the pivot axis S1. Alternatively, said connection or the rounded portion 23, respectively, can also be provided by a spherical structure.

In the second embodiment according to figures 7 to 8b, the bearing point 8 and the bearing element 15 do not have a rounded contact area. Rather, the bearing elements 15 are snap-fit elements which engage correspondingly on the bearing

point 8. Here, the pivotability is achieved in that the snap-fit connection is canceled and the cover element is correspondingly pivoted upward or downward.

The bearing point 8 and the bearing element 15 preferably have retaining means. With the retaining means, the separating force between the bearing point 8 and the bearing element 15 is increased. The retaining means is preferably a mechanical snap-fit element or a magnetic element. The combination of said two elements is also conceivable.

The cover element is aligned with respect to the side walls of the wash basin 2. Particularly with respect to the region 25 of the side walls of the wash basin 2 which extend around the run-off opening 3.

The sectional illustrations of figure 3 and also of figures 8a and 8b show that, in both embodiments shown, the bearing point 8 is part of an insert element 13. The insert element 13 is configured separately from the wash stand 1. The insert element 13 can be connected to the wash stand 1 and is preferably produced as a plastics injection-molded part. In the embodiment shown, the insert element 13 projects from the rear into the run-off chamber 4 and forms a part of the run-off chamber 4. A connection piece 26 is furthermore arranged on the insert element 13, on the rear side thereof with respect to the wash stand 1.

In both embodiments, a comb element 16 with comb teeth 17 is furthermore arranged in the run-off chamber 4. The comb element 16 is optional. The comb teeth 17 lie behind the cover element 5 as seen in the direction of flow F and project into the clear width of the gap 7 in the lower region 6. As a result of the comb teeth 17, solid articles, such as, for example, hair, can be retained. Figure 5 shows that the comb teeth 17 stand on the lower wall of the run-off opening 3. In this way, corresponding articles, which are led in the direction of flow F toward the comb teeth 17, can be stopped before entering the actual run-off chamber 4.

In the embodiments shown, the cover element 5 is configured separately from the comb element 16 and is connected thereto. Figure 5 shows an exemplary

configuration where the comb element 16 is connected to the cover element 5 by way of a dovetail guide 24. Other types of connection are also possible. However, in alternative embodiments, the cover element 5 and the comb element 16 can also be of one-part configuration.

In the embodiment shown, the bearing element 15 is also not arranged directly on the cover element 5 but rather extends away from the comb element 16. In this case, it is also conceivable for the bearing element to extend away from the cover element.

LIST OF REFERENCE NUMERALS

| | | | |
|---|---|---|---|
| 1 | Wash stand | 21 | Projecting region |
| 2 | Wash basin | 22 | End region |
| 3 | Run-off opening | 23 | Rounded portion |
| 4 | Run-off chamber | 24 | Dovetail guide |
| 5 | Cover element | 25 | Regions |
| 6 | Lower region | 26 | Connection piece |
| 7 | Gap | 27 | Wall |
| 8 | Bearing point | 28 | Side wall |
| 9 | Front face | | |
| 10 | Lateral region | F | Direction of flow |
| 11 | Upper region | S1, S2 | Pivot axes |
| 12 | Gap | V | Vertical |
| 13 | Insert element | H | Horizontal |
| 14 | Rear side | | |
| 15 | Bearing element | | |
| 16 | Comb element | | |
| 17 | Comb teeth | | |
| 20 | Contact area | | |

## PATENTKRAV

1. Vaskebord (1), omfattende: en vaskekumme (2) med en afløbsåbning (3), som udmunder i et afløbskammer (4),

hvorved der i afløbsåbningen (3) er arrangeret et blændeelement (5), der delvist strækker sig over afløbsåbningen (3) på en sådan måde, at der mindst i et nedre område (6) af afløbsåbningen (3) tilvejebringes en spalte (7), gennem hvilken vand fra vaskekummen (2) kan strømme ind i afløbskammeret (4),

hvorved der i afløbskammeret (4) er arrangeret mindst eet lejepunkt (8), i hvilket blændeelementet (5) er monteret på en sådan måde, at det kan fjernes fra det mindst ene lejepunkt (8),

hvorved blændeelementet (5) er monteret i det mindst ene lejepunkt (8) med henblik på at kunne svinge omkring mindst én svingakse (S1, S2) på en sådan måde, at blændeelementet (5) kan svinges fra en anvendelsesposition til en mellemposition, i hvilken blændeelementet (5) nemt kan gribes af en bruger, og

hvorved blændeelementet (5) fra dets mellemposition kan bevæges fra lejepunktet (8), ud fra afløbsåbningen (3),

hvorved blændeelementet (5) kan bevæges fra anvendelsespositionen til mellempositionen ved udøvelse af tryk på dets frontflade (9),

hvorved lejepunktet (8) er arrangeret centralt i forhold til blændeelementet (5) på en sådan måde, at blændeelementet (5) fra anvendelsespositionen kan bevæges til mellempositionen ved udøvelse af tryk på et endeområde (22),

eller hvorved en flerhed af lejepunkter på en sådan måde er arrangeret symmetrisk i forhold til blændeelementets (5) midte, at blændeelementet (5) kan bevæges fra anvendelsespositionen til mellempositionen ved udøvelse af tryk mod et endeområde (22), og

hvorved svingaksen (S1) er orienteret i det væsentlige parallelt med frontfladen (9) på blændeelementet (5) og i det væsentlige strækker sig vertikalt (V).

2. Vaskebord (1) ifølge krav 1, **kendetegnet ved, at** blændeelementet (5) i dets mellemposition delvist rager ud fra afløbskammeret (4) og med området (21) ragende ud fra afløbskammeret (4) strækker sig fra afløbskammeret (4) og ind i vaskekummen (2).

3. Vaskebord (1) ifølge et af de foregående krav, **kendetegnet ved, at,** i et lateralt område (10) og ligeledes i et øvre område (11) modsat beliggende det nedre område (6), der eksisterer en spalte (12) mellem blændeelementet (5) og afløbsåbningen (3), hvorved spalten (7) i det nedre område (6) fortrinsvis er større end spalten (12) idet laterale område (10) og/eller i det øvre område (11).

4. Vaskebord (1) ifølge et af de foregående krav, **kendetegnet ved, at** lejepunktet (8) er en del af indsatselementet (13), som er konfigureret separat i forhold til vaskebordet (1) og kan forbindes til vaskebordet (1).

5. Vaskebord (1) ifølge et af de foregående krav, **kendetegnet ved, at** blændeelementet (5) på dets bagside (14) omfatter et lejeelement (15), hvilket lejeelement er monteret i lejepunktet (8).

6. Vaskebord (1) ifølge et af de foregående krav, **kendetegnet ved, at** der i afløbskammeret (4) ydermere er arrangeret et kam-element (16) med kamtænder (17), hvilke kamtænder (17), set i strømningsretningen (F), ligger bag blændeelementet (5) og rager ind i spaltens (7) lysning i det nedre område (6) med henblik på tilbageholdelse af faste genstande.

7. Vaskebord (1) ifølge krav 6, **kendetegnet ved, at** blændeelementet (5) og kam-elementet (16) er udformet som én del.

8. Vaskebord (1) ifølge krav 6, **kendetegnet ved, at** blændeelementet (5) er konfigureret separat fra kam-elementet (16), hvorved blændeelementet (5) og kam-elementet (16) er forbundet til hinanden.

9. Vaskebord (1) ifølge krav 8, **kendetegnet ved, at** kam-elementet (16) på dets bagside omfatter et lejeelement (15), hvilket lejeelement er monteret i lejepunktet (8); eller **ved, at** blændeelementet (5) omfatter et lejeelement (15) på dets bagside (14), hvilket lejeelement er monteret i lejepunktet (8).

10. Vaskebord (1) ifølge et af de foregående krav 5 til 9, **kendetegnet ved, at** lejepunktet (8) og lejeelementet (15) hvert omfatter et kontaktområde (20), som er afrundet med et afrundet afsnit (23), og ved hjælp af hvilket svingbevægelsen kan udføres.

11. Vaskebord (1) ifølge krav 10, **kendetegnet ved, at** det afrundede kontaktområde (20) er cylindrisk afrundet, hvorved det cylindrisk afrundede afsnits centerakse definerer svingaksen (S1); eller **ved, at** det afrundede kontaktområde afsnitsvist er sfærisk afrundet.

12. Vaskebord (1) ifølge et af de foregående krav 5 til 11, **kendetegnet ved, at** lejepunktet (8) og lejeelementet (15) råder over et tilbageholdemiddel, som forøger adskillelseskraften mellem lejepunktet (8) og lejeelementet (15), hvorved tilbageholdemidlet fortrinsvis er et mekanisk tryklåselement og/eller et magnetisk element.

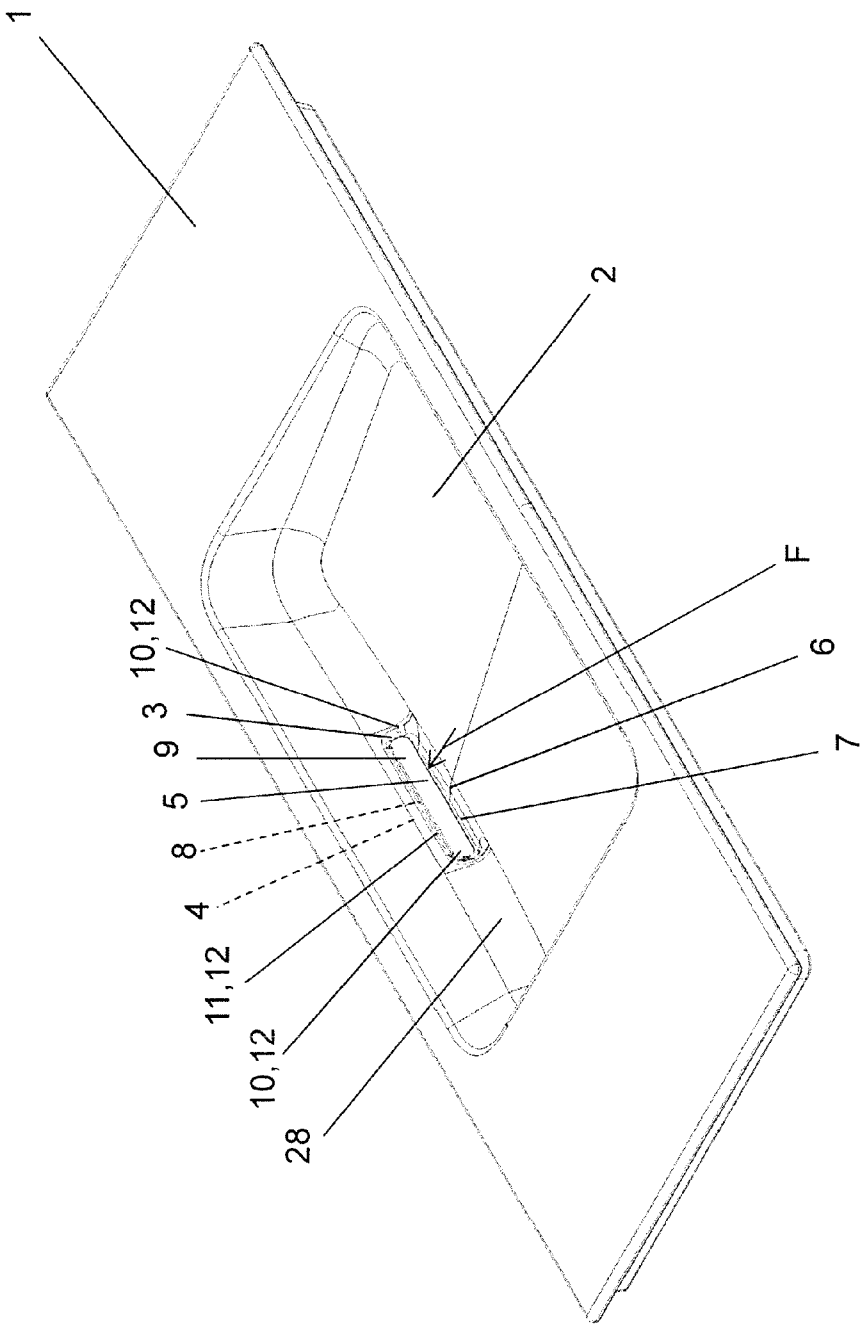



FIG. 1

FIG. 2

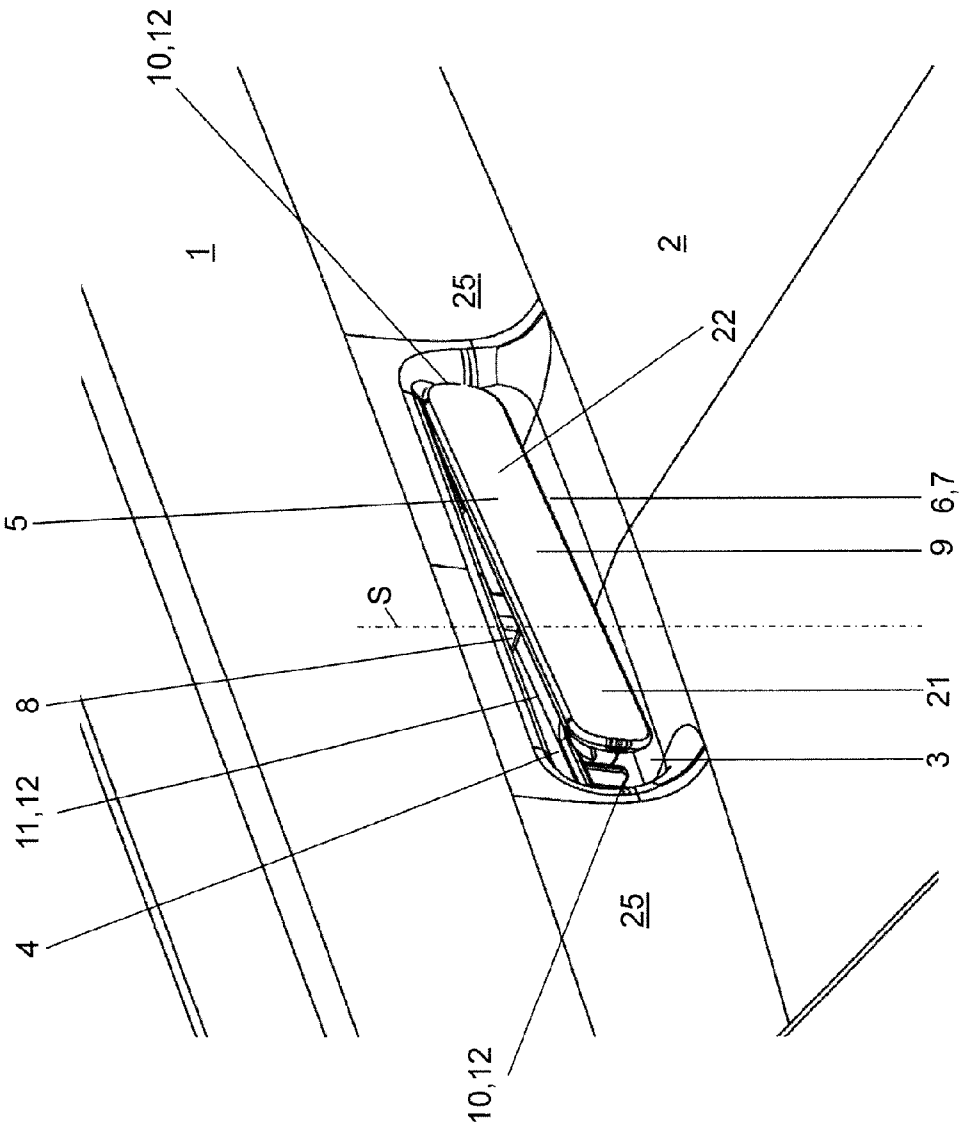


FIG. 3

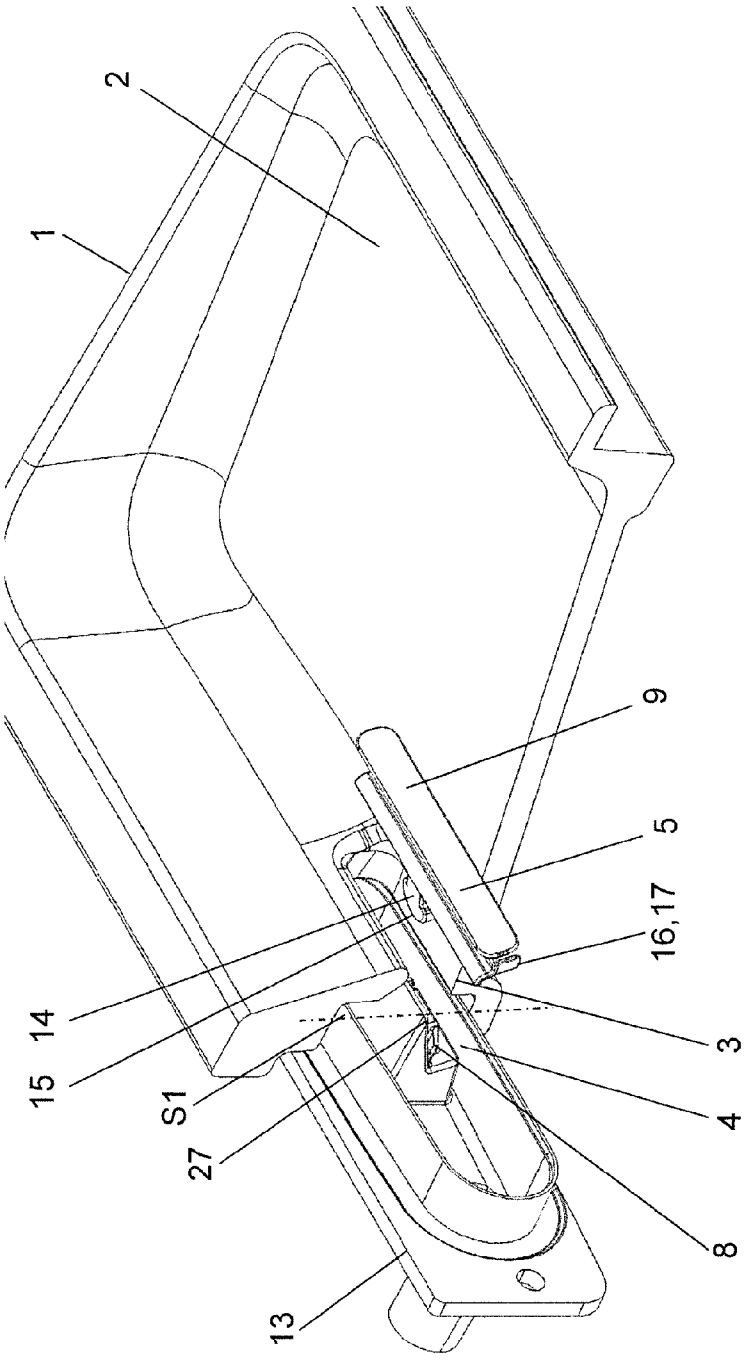


FIG. 4

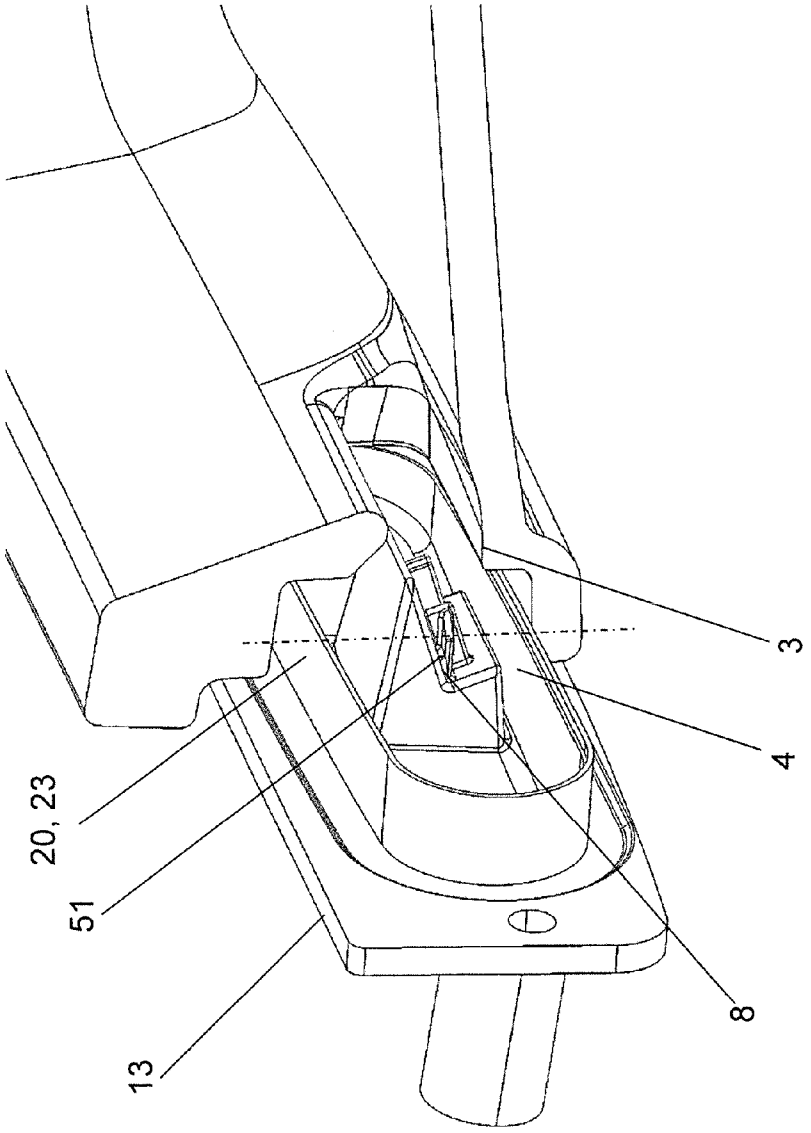
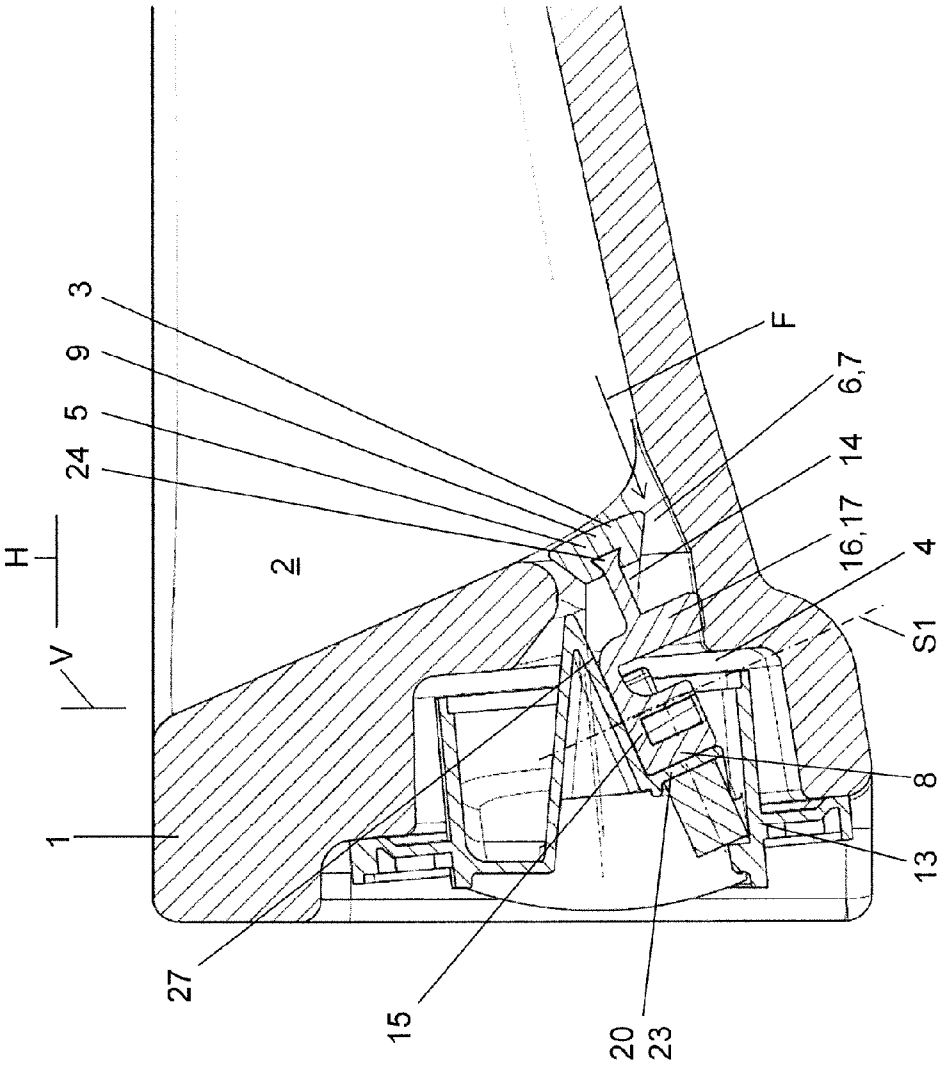


FIG. 5



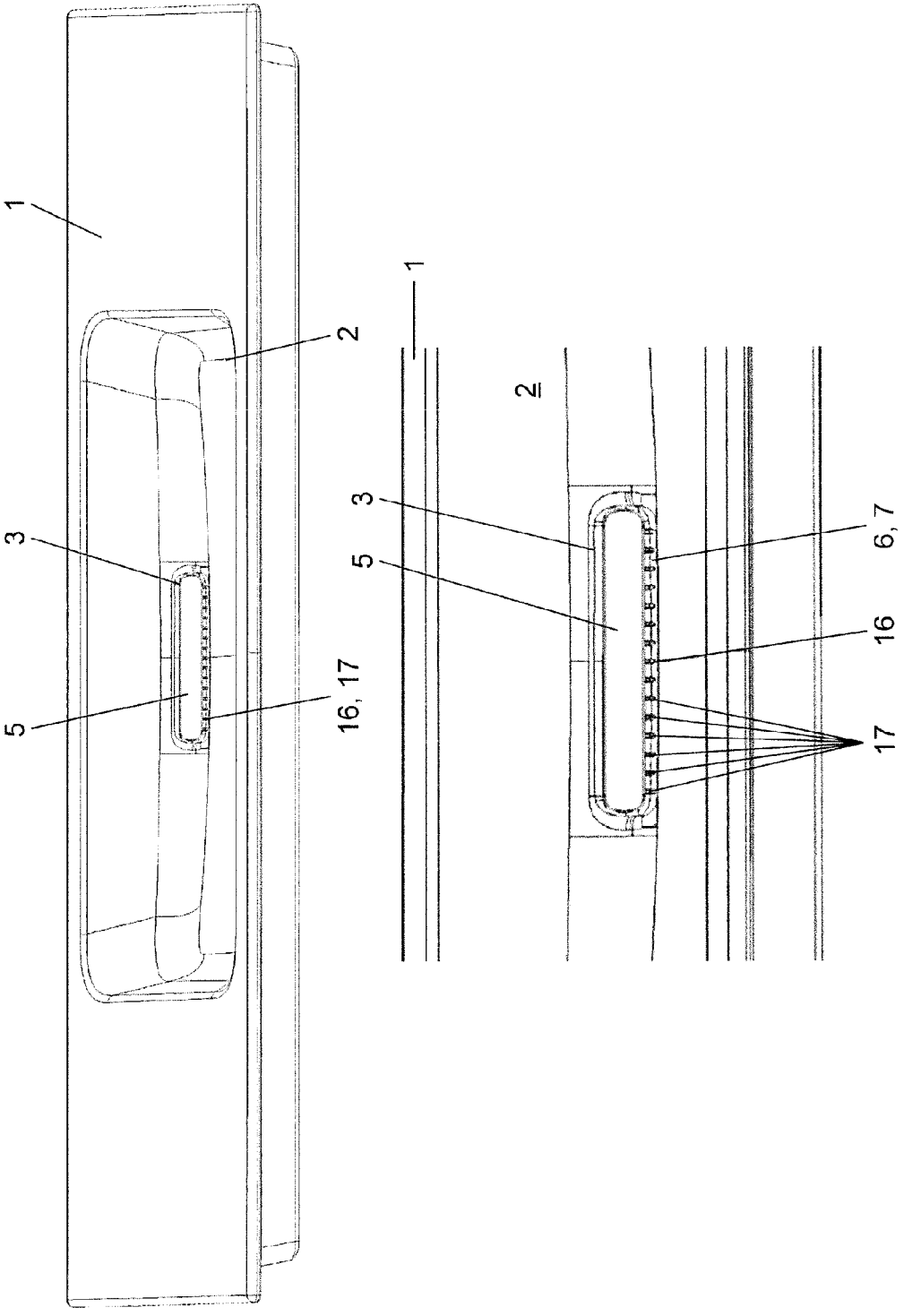
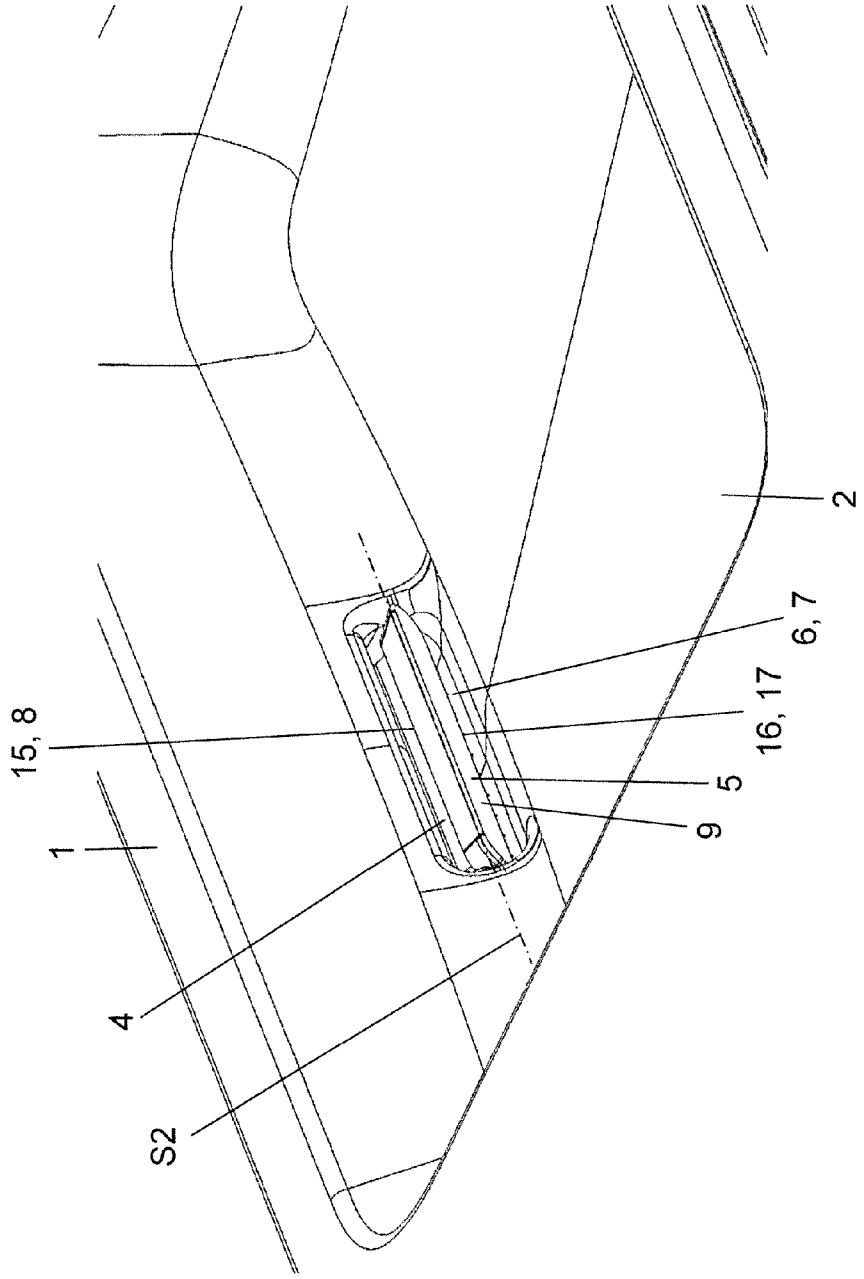



FIG. 6

FIG. 7



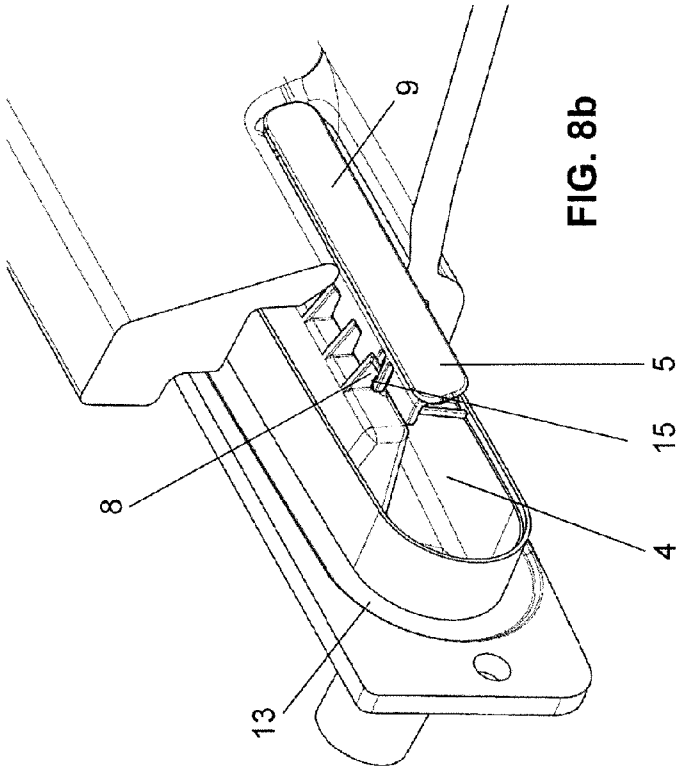



FIG. 8b

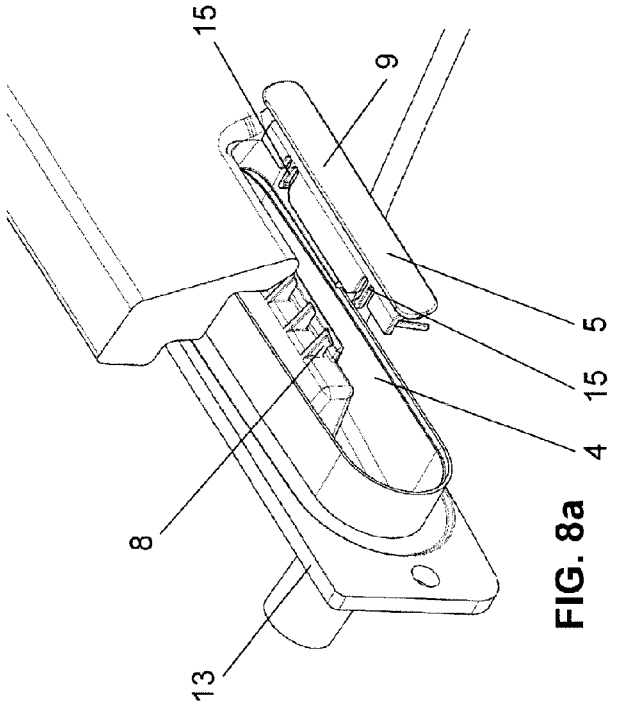



FIG. 8a