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(54) INFILLING ELEMENT FOR FORMWORK FOR THE BUILDING SECTOR

FÜLLELEMENT FÜR SCHALUNGEN FÜR DEN BAUSEKTOR

ÉLÉMENT DE MATÉRIAU DE REMPLISSAGE POUR COFFRAGE DANS LE SECTEUR DE LA CONSTRUCTION

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Description

[0001] The present invention relates to an infilling element for formwork for the building sector used for providing ventilated crawl spaces and ventilated floors, for example for building and renovation of civilian and industrial buildings, accumulation or collection tanks, dispersion tanks, honeycomb rafts, refrigeration chambers, swimming pools.

[0002] Currently, it is known to provide very high ventilated crawl spaces and ventilated floors by using disposable formwork, made of thermoplastic material and having a substantially dome-like shape with a substantially square base the corners of which are supported in a lower region by tubes made of plastic material which, filled with concrete, supports the floor slab or the overlying raft foundation.

[0003] EP1092816B1 is known which relates to a formwork for containing a concrete casting, adapted to form a resting surface for a floor, floor slab or the like of a building, the formwork being constituted by stool-shaped elements, molded in plastic material, which are mutually connected by superimposing the respective lateral edges.

[0004] This formwork has legs supported by tubular elements which are arranged vertically on the ground so as to increase the height of the formwork; at the lower end of each leg of said stool-shaped elements there is furthermore a protrusion having a fork-like shape that is open downward.

[0005] Such protruding fork-shaped element is adapted to engage in the upper edge of one of the tubular elements.

[0006] One drawback found in this background art resides in that once said formwork has been laid a free space remains which corresponds to half of the diameter of the tubular element and is present between the perimeter wall that delimits the casting area.

[0007] In order to obviate this drawback, it is thus known to insert in said free space a strip made of polystyrene which fills the free space between the wall and the formwork that is closest to said wall, so as to prevent the concrete from pouring into the crawl space.

[0008] However, even this system has drawbacks, since the strip made of polystyrene partially blocks the tubular elements on which is positioned, therefore rendering the subsequent filling of the tubular element with concrete more difficult, thus compromising the support of the overlying structure, with consequent structural instabilities.

[0009] Moreover, since the strip made of polystyrene is not integral with the formwork, the concrete casting necessary for filling the tubular element risks unseating the strip.

[0010] Moreover, polystyrene is subject to the absorption of water in case of rain, and this water is released even several months later, creating islands of humidity in the structure.

[0011] Moreover, problems are known for storage at the construction site, where said strips can be easily spread/scattered in the construction site area even due to just a slight breeze.

5 **[0012]** EP1282750B1 is also known which describes a fitting for modular support and ventilation elements for crawl spaces, floor slabs, floors or similar building components, which has a front wall to which a side wall is contiguous which has a profile that is complementary to the one of the opening formed by each pair of vertical legs of a modular element.

10 **[0013]** This solution has the function of closure and lateral extension of the modular elements.

15 **[0014]** This solution, too, has drawbacks: the front wall for closing the fitting is in fact not perfectly vertical, being preferably inclined by approximately 5-15 degrees, and this does not allow optimum closure at the wall of the crawl space, thus allowing the passage of concrete during pouring.

20 **[0015]** Moreover, this solution cannot be applied if one uses the modular elements by positioning at their legs tubular elements which are arranged vertically on the ground so as to increase the height of the modular elements.

25 **[0016]** For example, US 2,602,323 is also known which describes a disposable formwork having a dome-like shape or a stool-like shape with a substantially square plan that has, at its corners, legs for resting on a loft slab which are mutually blended by arc-like elements which, once arranged adjacent to other arc-like elements of other formwork, form an empty space of the sanitary or technical type below the flooring.

30 **[0017]** The connection between adjacent formwork occurs at the arc-like elements by using flanges provided for this purpose.

35 **[0018]** In any case, since the formwork is not supported by tubes it reaches maximum heights of less than one meter.

40 **[0019]** Moreover, the production of a monolithic formwork of greater height would be technologically very expensive, its installation would not be easy because of the dimensions that the operators would have to handle, and the distribution logistics would be scarcely efficient.

45 **[0020]** The use of an infilling element constituted by a semicircular infilling element used for closing the formwork, again corresponding to the monolithic type (not supported by tubes), at one or more of the arc-like elements that define openings, is also provided.

50 **[0021]** The use of said infilling elements, however, is not effective in the case of concrete casting, since these elements may uncouple from said formwork and furthermore said elements, while occluding the wall of the formwork in order to prevent the pouring of the concrete casting, do not close the space between the formwork and the wall that delimits the casting region.

55 **[0022]** Furthermore, the problem of compensating for the space that forms, due to the modular dimension of the formwork on the changeable areas of intervention,

between the perimetric wall that delimits the crawl space or floor and the formwork that is adjacent to said wall, would remain.

[0023] As a partial solution to this drawback it is known to use, as infilling elements, sheets or blocks or strips made of expanded polystyrene sometimes also shaped for allowing a certain adjustability with respect to the perimetric wall; even this solution, however, is not effective, since said sheets or blocks or strips are not integral with the formwork and thus may move under the thrust of the concrete.

[0024] A further problem is that since the elements are solid, below them there is no cavity provision and therefore no forming of a real ventilated crawl space.

[0025] Moreover, they are not stackable and therefore occupy a large volume during transport.

[0026] Moreover, they are subject to absorption of water by the expanded polystyrene in case of rain, said water being released even several months later, creating islands of humidity in the structure.

[0027] Furthermore, problems are known for storage at the construction site, where said blocks or sheets or strips can easily spread/scatter in the construction site area even under the effect of just a slight breeze.

[0028] Finally, many purchasers tend to limit or eliminate the use of expanded polystyrene from the construction site due to problems of flammability during storage and of loss of granules during the laying, since these granules soil the construction site.

[0029] Document US 2015/260313 A1 discloses an infill element according to the preamble of claim 1.

[0030] The aim of the present invention is to eliminate the drawbacks mentioned above, providing an infilling element for formwork that allows, in the laying of disposable formwork the legs of which are supported by tubular elements arranged vertically on the ground, to close rapidly and effectively the opening defined by the arc-like elements of a formwork.

[0031] Within this aim, an object of the present invention is to obtain an infilling element for formwork that allows, in the laying of disposable formwork that rests on tubular elements which are arranged vertically on the ground, to obtain an optimum engagement and at the same time allow optimum and easy filling of the tube by means of concrete.

[0032] Another object is to provide an infilling element for formwork that allows, during the laying of disposable formwork, which rests on tubular elements which are arranged vertically on the ground, to prevent the concrete from flowing between the formwork and the perimetric wall that delimits the casting area.

[0033] Another object is to devise an infilling element for formwork that allows, during the laying of disposable formwork, which rests on tubular elements which are arranged vertically on the ground, to obtain an optimum closure to the passage of concrete by absorbing any differences of length of the invention due to use of recycled plastic material, which does not always have the same

uniform shrinkage.

[0034] Another object is to obtain an optimum closure to the passage of the concrete, absorbing any uneven and protruding regions normally present on the wall adjacent to which the tubular support will have to be placed.

[0035] Another object is to obtain an optimum closure, in the series arrangement, between the infilling elements.

[0036] A further object is to devise an infilling element for formwork that allows, during the laying of disposable formwork which rests on tubular elements which are arranged vertically on the ground, to be adapted rapidly and easily if a closure of a protruding corner toward the flooring through 270 degrees is observed.

[0037] Another object is to provide an infilling element for formwork that is structurally simple, has low provision costs and can be manufactured with ordinary known plants.

[0038] This aim and these and other objects which will become better apparent hereinafter are achieved by an infilling element according to claim 1.

[0039] Further characteristics and advantages of the invention will become better apparent from the detailed description of a particular but not exclusive embodiment, illustrated by way of non-limiting example in the accompanying drawings, wherein:

Figure 1 is a perspective view of some devices, with the infilling element of the invention associated therewith, associated with each other;

Figure 2 is a first lateral perspective view of the infilling element of the invention;

Figure 3 is a second lateral perspective view of the infilling element of the invention;

Figure 4 is a third lateral perspective view of the infilling element of the invention;

Figure 5 is a bottom view of the infilling element of the invention;

Figure 6 is a top view of the infilling element of the invention;

Figure 7 is a sectional view, taken along the sectional plane VII-VII of Figure 6;

Figure 8 is a bottom perspective view of the infilling element of the invention, with the ends of which tubular elements are associated;

Figure 9 is a sectional view, taken along the sectional plane IX-IX of Figure 1.

[0040] With reference to the figures, the reference numeral 1 designates an infilling element for formwork 2 for the building sector, having a dome-like shape so as to form arc-like openings 3 which can be arranged between the perimetric walls 4 that delimit the crawl space 5.

[0041] The formwork 2 has legs 6 supported by tubular elements 7 which are arranged vertically on the ground.

[0042] The infilling element 1 has a flat base 8 that is longer than the dimension of the base diameter of the opening 3 (i.e., greater than the measurement between the free lower ends of the opening 3), the longitudinal

ends 9a, 9b of which are substantially shaped complementarily to the lateral surface 10 of the tubular element 7.

[0043] At the longitudinal ends 9a, 9b there are means for temporary engagement with the upper end of each one of said tubular elements 7, such means being constituted by a fork 11 which is shaped like an inverted letter C, between the wings 12a, 12b of which it is possible to insert said upper end of each one of said tubular elements 7.

[0044] A wing 14 of chosen height protrudes at the outer longitudinal edge 13 of the base 8 along the entire length and in the direction of said tubular element 7.

[0045] A first tab 15 protrudes longitudinally, on the opposite side with respect to said wing 14, proximate to the longitudinal ends 9a, 9b of the flat base 8, has a curved shape that is substantially complementary to the opening 3 and is provided with a first upper perimetric edge 16 provided with a lip 17 for engaging the second perimetric edge 18 of the opening 3 which is advantageously shaped like a letter C directed upward.

[0046] Therefore, the connection of the infilling element 1 to the formwork 2 occurs by superimposing the first perimetric edge 16 on the outermost wing 19 of the second perimetric edge 18.

[0047] Advantageously, there are two pairs of protrusions 20a, 20b, 20c, 20d for connection between the flat base 8 and the ends of the first tab 15 that begin to protrude from it proximate to the longitudinal ends 9a, 9b.

[0048] The infilling element 1 is furthermore provided with a plurality of second tabs 21, which are substantially mutually identical and protrude from the outer longitudinal edge 13 of the base 8 on the opposite side with respect to said wing 14.

[0049] Advantageously, the plurality of second tabs 21 has such an inclination that their upper third perimetric edge 22 protrudes in the opposite direction with respect to the first tab 15, so as to achieve the function of a gasket in case of resting contact of the infilling element 1 against said walls 4, given the possibility of each one of the second tabs 21 to adapt to the not always flat shape of the part of said wall 4 against which it is rested.

[0050] Advantageously, the plurality of second tabs 21 protrudes beyond the longitudinal ends 9a, 9b of the flat base 8.

[0051] At each one of the longitudinal ends 9a, 9b of the flat base 8 there is furthermore a pre-cut 23 which connects the outer longitudinal edge 13 of the flat base 8 to the wing 12b of the fork 11.

[0052] The pre-cuts 23 are arranged with such an inclination as to produce, in case of breakage thereof, a decrease in the radius of curvature of the longitudinal ends 9a, 9b.

[0053] It has thus been found that the invention fully achieves the intended aim and objects, an infilling element having been obtained which allows, during the laying of disposable formwork the legs of which are supported by tubular elements which are arranged vertically on

the ground, to close rapidly and effectively the opening, defined by the arc-like elements, of a formwork.

[0054] Moreover, the invention allows, during the laying of disposable formwork which rests on tubular elements which are arranged vertically on the ground, to obtain an excellent engagement and at the same time allow optimum and easy filling of the tube by means of the concrete, preventing at the same time said concrete from passing between the formwork and the perimetric wall that delimits the casting area.

[0055] The invention allows furthermore, during the laying of disposable formwork, to achieve an optimum closure to the passage of concrete, absorbing any differences in length of said invention due to the use of recycled plastic material, which does not always have the same uniform shrinkage, absorbing at the same time any irregularities and protrusions usually present on the wall against which the tubular support will be arranged.

[0056] The invention also allows to obtain an optimum closure, in the series arrangement, between said infilling elements and allows the user, during the laying of disposable formwork, to be adapted rapidly and easily if a closure of a protruding corner toward the flooring through 270 degrees is observed.

[0057] Of course, the invention is susceptible of numerous modifications and variations, all of which are within the scope of the appended claims.

[0058] Where technical features mentioned in any claim are followed by reference signs, those reference signs have been included for the sole purpose of increasing the intelligibility of the claims and accordingly, such reference signs do not have any limiting effect on the interpretation of each element identified by way of example by such reference signs.

Claims

1. An infilling element (1) for formwork (2) for the building sector, having a dome-like shape so as to form arc-like openings (3) which can be arranged between the perimetric walls (4) that delimit the crawl space (5) and legs (6) supported by tubular elements (7) which are arranged vertically on the ground, said infilling element (1) having a flat base (8) proximate to the longitudinal ends (9a, 9b) of which there protrude upward a first tab (15), which is shaped complementarily to said opening (3) and is provided with a lip (17) for engaging the first perimetric edge (16) of said opening (3), and at least one second tab (21), which acts as a gasket in case of resting against said walls (4), said longitudinal ends (9a, 9b) of said flat base (8) having an arc-like shape, **characterized in that** said flat base (8) is longer than the dimension of the base diameter of said opening (3), the longitudinal ends (9a, 9b) thereof being shaped complementarily to the lateral surface (10) of said tubular element (7), at said longitudinal

- ends (9a, 9b) there being means for temporary engagement with the upper end of each one of said tubular elements (7), said means being constituted by a fork (11) which is shaped like an inverted letter C between the wings (12a, 12b) of which it is possible to insert said upper end of each one of said tubular elements (7).
2. The infilling element according to claim 1, **characterized in that** a wing (14) of chosen height protrudes at the outer longitudinal edge (13) of said flat base (8) along the entire length and in the direction of said tubular element (7).
 3. The infilling element according to claim 2, **characterized in that** the first tab (15) protrudes longitudinally, on the opposite side with respect to said wing (14), proximate to said longitudinal ends (9a, 9b) of said flat base (8) and has a curved shape that is substantially complementary to said opening (3) and is provided with a first upper perimetric edge (16) provided with the lip (17) for engaging the second perimetric edge (18) of said opening (3) and is shaped like a letter C directed upward.
 4. The infilling element according to one or more of the preceding claims, **characterized in that** its connection to said formwork (2) occurs by superimposing said first perimetric edge (16) on an outermost wing (19) of said second perimetric edge (18).
 5. The infilling element according to one or more of the preceding claims, **characterized in that** there are two pairs of protrusions (20a, 20b, 20c, 20d) for connection between said flat base (8) and the ends of said first tab (15) that begin to protrude from it proximate to said longitudinal ends (9a, 9b).
 6. The infilling element according to one or more of the preceding claims, **characterized in that** it has a plurality of second tabs (21) which are substantially mutually identical and protrude from said outer longitudinal edge (13) of said base (8) on the opposite side with respect to said wing (14).
 7. The infilling element according to claim 6, **characterized in that** said plurality of second tabs (21) has such an inclination that their upper third perimetric edge (22) protrudes in the opposite direction with respect to said first tab (15) so as to achieve the function of a gasket in case of resting contact of said infilling element (1) against said walls (4) given the possibility of each one of said second tabs (21) to adapt to the shape of the part of said wall (4) against which it is rested.
 8. The infilling element according to claim 6 or 7, **characterized in that** said plurality of second tabs (21)

protrudes beyond said longitudinal ends (9a, 9b) of said flat base (8).

9. The infilling element according to one or more of the preceding claims, **characterized in that** at each one of said longitudinal ends (9a, 9b) of said flat base (8) there is a pre-cut (23) which connects said outer longitudinal edge (13) of said flat base (8) to said wing (12b) of said fork (11), said pre-cuts (23) are arranged with such an inclination as to produce, in case of breakage thereof, a decrease in the radius of curvature of said longitudinal ends (9a, 9b).

15 Patentansprüche

1. Ein Füllelement (1) für Verschalungen (2) für den Gebäudesektor, das eine kuppelartige Form hat, um bogenartige Öffnungen (3) zu bilden, die zwischen den Umfangswänden (4) angeordnet sein können, die den Kriechbereich (5) begrenzen, und Beine (6), die von röhrenförmigen Elementen (7) getragen sind, welche vertikal auf dem Boden angeordnet sind; wobei das Füllelement (1) eine flache Basis (8) hat, an deren Enden (9a, 9b) in Längsrichtung eine erste Lasche (15), die komplementär zu der Öffnung (3) geformt und mit einer Lippe (17) für den Eingriff mit der ersten Umfangskante (16) der Öffnung (3) ausgestattet ist, und mindestens eine zweite Lasche (21) nach oben vorstehen, die im Falle des Aufliegens gegen die Wände (4) als Dichtung dient; wobei die Enden (9a, 9b) in Längsrichtung der flachen Basis (8) eine bogenartige Form haben; **dadurch gekennzeichnet, dass** die flache Basis (8) länger ist als die Abmessung des Grunddurchmessers der Öffnung (3), wobei die Enden (9a, 9b) derselben in Längsrichtung komplementär zur Seitenfläche (10) des röhrenförmigen Elements (7) geformt sind; wobei sich an den Enden (9a, 9b) in Längsrichtung Mittel für den vorübergehenden Eingriff mit dem oberen Ende jedes der röhrenförmigen Elemente (7) befinden, wobei die Mittel aus einer Gabel (11) bestehen, die wie ein umgekehrtes C geformt ist und zwischen deren Zinken (12a, 12b) das obere Ende jedes der röhrenförmigen Elemente (7) eingeführt werden kann.
2. Das Füllelement gemäß Anspruch 1, **dadurch gekennzeichnet, dass** ein Flügel (14) von gewünschter Höhe an der äußeren Längskante (13) der flachen Basis (8) über die gesamte Länge und in Richtung des röhrenförmigen Elements (7) vorsteht.
3. Das Füllelement gemäß Anspruch 2, **dadurch gekennzeichnet, dass** die erste Lasche (15) auf der dem Flügel (14) gegenüberliegenden Seite, nahe den Enden (9a, 9b) der flachen Basis (8) in Längsrichtung, vorsteht und eine gekrümmte Form hat, die

im Wesentlichen komplementär zu der Öffnung (3) und mit einer ersten oberen Umfangskante (16) versehen ist, welche mit der Lippe (17) für den Eingriff mit der zweiten Umfangskante (18) der Öffnung (3) ausgestattet ist, und wie ein nach oben gerichtetes C geformt ist.

4. Das Füllelement gemäß einem oder mehreren der obigen Ansprüche, **dadurch gekennzeichnet, dass** seine Verbindung mit der Verschalung (2) durch Positionierung der ersten Umfangskante (16) über einem äußersten Flügel (19) der zweiten Umfangskante (18) stattfindet. 10
5. Das Füllelement gemäß einem oder mehreren der obigen Ansprüche, **dadurch gekennzeichnet, dass** zwei Paare von Vorsprüngen (20a, 20b, 20c, 20d) zur Verbindung zwischen der flachen Basis (8) und den Enden der ersten Lasche (15) vorhanden sind, die davon in der Nähe der Enden (9a, 9b) in Längsrichtung vorzustehen beginnen. 20
6. Das Füllelement gemäß einem oder mehreren der obigen Ansprüche, **dadurch gekennzeichnet, dass** es eine Vielzahl zweiter Laschen (21) hat, die im Wesentlichen miteinander identisch sind und von der äußeren Längskante (13) der Basis auf der dem Flügel (14) gegenüberliegenden Seite vorstehen. 25
7. Das Füllelement gemäß Anspruch 6, **dadurch gekennzeichnet, dass** die Vielzahl zweiter Laschen (21) eine Neigung derart hat, dass ihre obere dritte Umfangskante (22) in die der ersten Lasche (15) entgegengesetzte Richtung vorsteht, um im Falle von Auflagekontakt des Füllelements (1) gegen die Wände (4) aufgrund der Fähigkeit jeder der zweiten Laschen (21), sich an die Form des Teils der Wand (4) anzupassen, gegen den sie aufliegt, die Funktion einer Dichtung zu erzielen. 30
8. Das Füllelement gemäß Anspruch 6 oder 7, **dadurch gekennzeichnet, dass** die Vielzahl zweiter Laschen (21) über die Enden (9a, 9b) der flachen Basis (8) in Längsrichtung hinausragt. 35
9. Das Füllelement gemäß einem oder mehreren der obigen Ansprüche, **dadurch gekennzeichnet, dass** sich an jedem der Enden (9a, 9b) der flachen Basis (8) in Längsrichtung ein Voreinschnitt (23) befindet, der die äußere Längskante (13) der flachen Basis (8) mit der Zinke (12b) der Gabel (11) verbindet, wobei die Voreinschnitte (23) mit einer Neigung angeordnet sind, um im Falle eines Bruchs derselben eine Verminderung des Krümmungsradius der Enden (9a, 9b) in Längsrichtung zu verursachen. 40

Revendications

1. Élément de remplissage (1) pour coffrage (2) dans le secteur de la construction, ayant une forme de type dôme de sorte à former des ouvertures de type arc (3) qui peuvent être agencées entre les parois périmétriques (4) qui délimitent le vide sanitaire (5) et des pieds (6) supportés par des éléments tubulaires (7) qui sont agencés verticalement sur le sol, ledit élément de remplissage (1) ayant une base plate (8) à proximité des extrémités longitudinales (9a, 9b) desquelles font saillie vers le haut une première languette (15), qui a une forme complémentaire de ladite ouverture (3) et est pourvue d'une lèvre (17) pour mettre en prise le premier bord périmétrique (16) de ladite ouverture (3), et au moins une seconde languette (21), qui sert de garniture en cas de repos contre lesdites parois (4), lesdites extrémités longitudinales (9a, 9b) de ladite base plate (8) ayant une forme de type arc, **caractérisé en ce que** ladite base plate (8) est plus longue que la dimension du diamètre de base de ladite ouverture (3), les extrémités longitudinales (9a, 9b) de celle-ci ayant une forme complémentaire de la surface latérale (10) dudit élément tubulaire (7), au niveau desdites extrémités longitudinales (9a, 9b) où se trouvent des moyens pour une mise en prise temporaire avec l'extrémité supérieure de chacun desdits éléments tubulaires (7), lesdits moyens étant constitués d'une fourche (11) qui a la forme d'une lettre C inversée entre les ailettes (12a, 12b) de laquelle il est possible d'insérer ladite extrémité supérieure de chacun desdits éléments tubulaires (7). 5
2. Élément de remplissage selon la revendication 1, **caractérisé en ce qu'**une ailette (14) de hauteur choisie fait saillie au niveau du bord longitudinal externe (13) de ladite base plate (8) tout au long de la longueur et dans la direction dudit élément tubulaire (7). 10
3. Élément de remplissage selon la revendication 2, **caractérisé en ce que** la première languette (15) fait saillie longitudinalement, sur le côté opposé par rapport à ladite ailette (14), à proximité desdites extrémités longitudinales (9a, 9b) de ladite base plate (8) et a une forme incurvée qui est sensiblement complémentaire de ladite ouverture (3) et est pourvue d'un premier bord périmétrique supérieur (16) pourvu de la lèvre (17) pour mettre en prise le deuxième bord périmétrique (18) de ladite ouverture (3) et a la forme d'une lettre C dirigée vers le haut. 15
4. Élément de remplissage selon une ou plusieurs des revendications précédentes, **caractérisé en ce que** sa liaison audit coffrage (2) se produit en superposant ledit premier bord périmétrique (16) sur une 20

aillette la plus à l'extérieur (19) dudit deuxième bord périmétrique (18).

5. Élément de remplissage selon une ou plusieurs des revendications précédentes, **caractérisé en ce qu'**il existe deux paires de saillies (20a, 20b, 20c, 20d) permettant la liaison entre ladite base plate (8) et les extrémités de ladite première languette (15) qui commencent à faire saillie à partir de celle-ci à proximité desdites extrémités longitudinales (9a, 9b).
6. Élément de remplissage selon une ou plusieurs des revendications précédentes, **caractérisé en ce qu'**il a une pluralité de secondes languettes (21) qui sont sensiblement mutuellement identiques et font saillie à partir dudit bord longitudinal externe (13) de ladite base (8) sur le côté opposé par rapport à ladite ailette (14).
7. Élément de remplissage selon la revendication 6, **caractérisé en ce que** ladite pluralité de secondes languettes (21) ont une inclinaison telle que leur troisième bord périmétrique supérieur (22) fait saillie dans la direction opposée par rapport à ladite première languette (15) de sorte à remplir la fonction d'une garniture dans le cas de contact de repos dudit élément de remplissage (1) contre lesdites parois (4) étant donné la possibilité de chacune desdites secondes languettes (21) de s'adapter à la forme de la partie de ladite paroi (4) contre laquelle elle repose.
8. Élément de remplissage selon la revendication 6 ou 7, **caractérisé en ce que** ladite pluralité de secondes languettes (21) fait saillie au-delà desdites extrémités longitudinales (9a, 9b) de ladite base plate (8).
9. Élément de remplissage selon une ou plusieurs des revendications précédentes, **caractérisé en ce qu'**à chacune desdites extrémités longitudinales (9a, 9b) de ladite base plate (8), se trouve une prédécoupe (23) qui relie ledit bord longitudinal externe (13) de ladite base plate (8) à ladite ailette (12b) de ladite fourche (11), lesdites prédécoupes (23) sont agencées avec une inclinaison de nature à produire, dans le cas de rupture de celui-ci, une diminution du rayon de courbure desdites extrémités longitudinales (9a, 9b).

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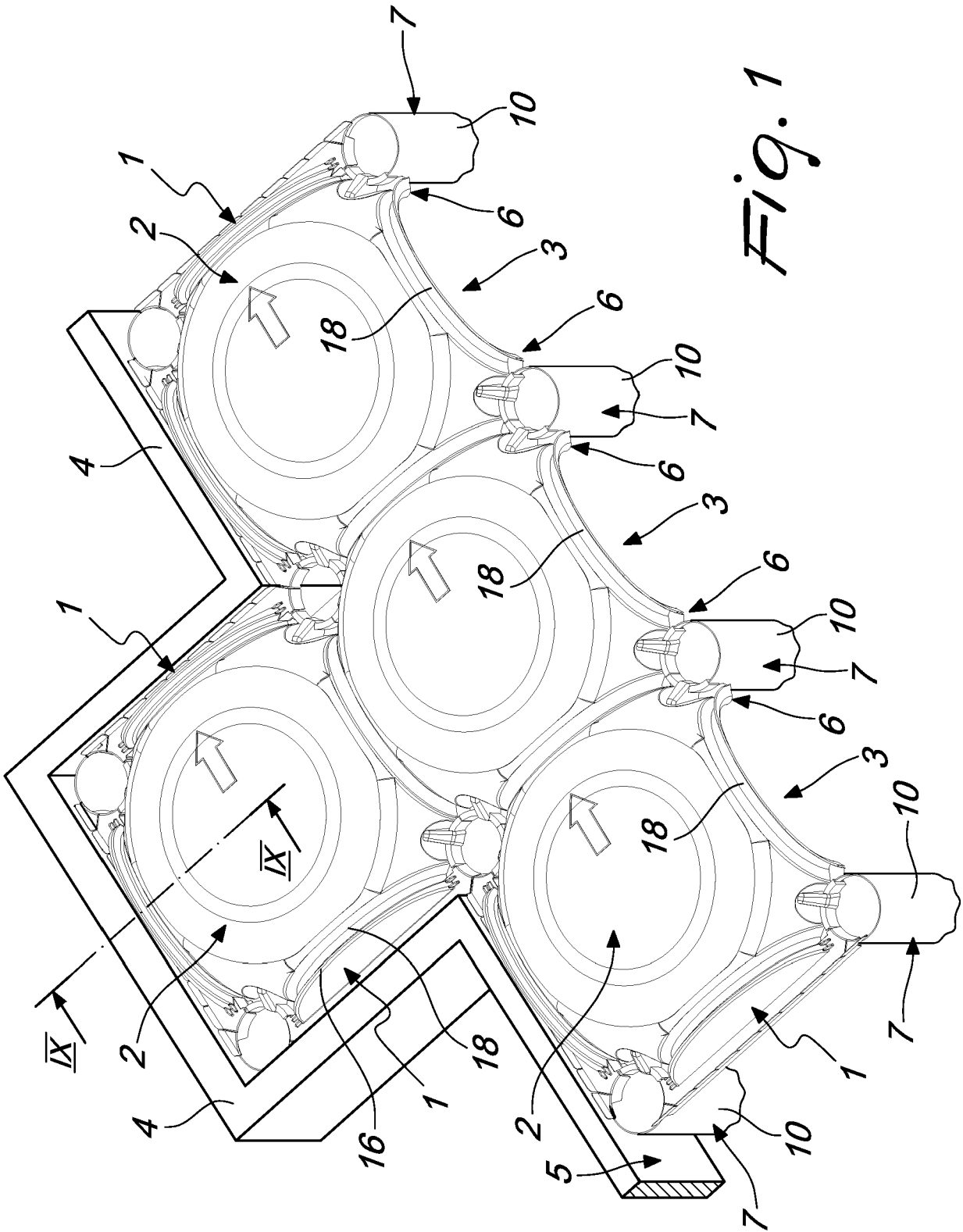


Fig. 1

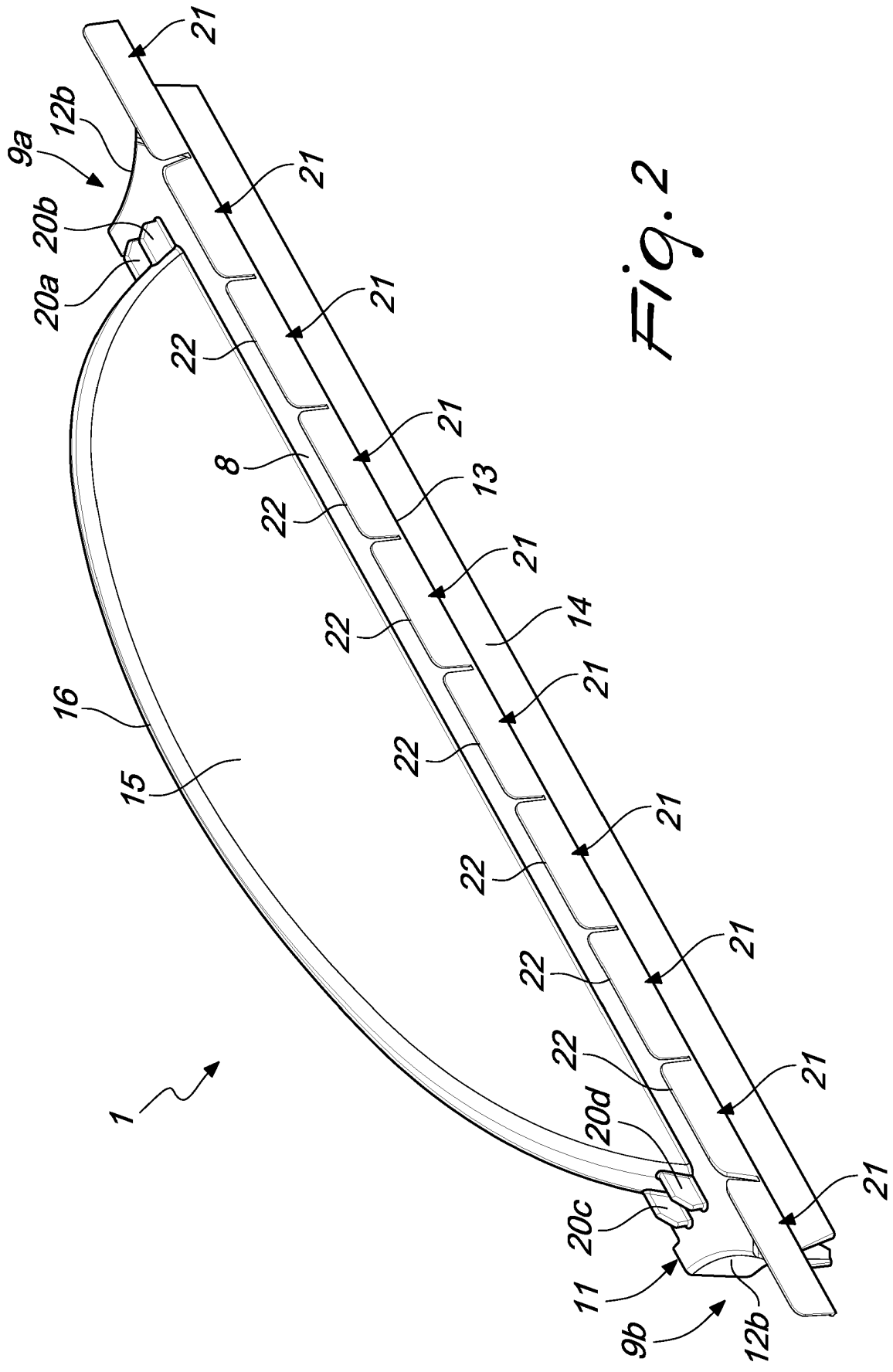


Fig. 2

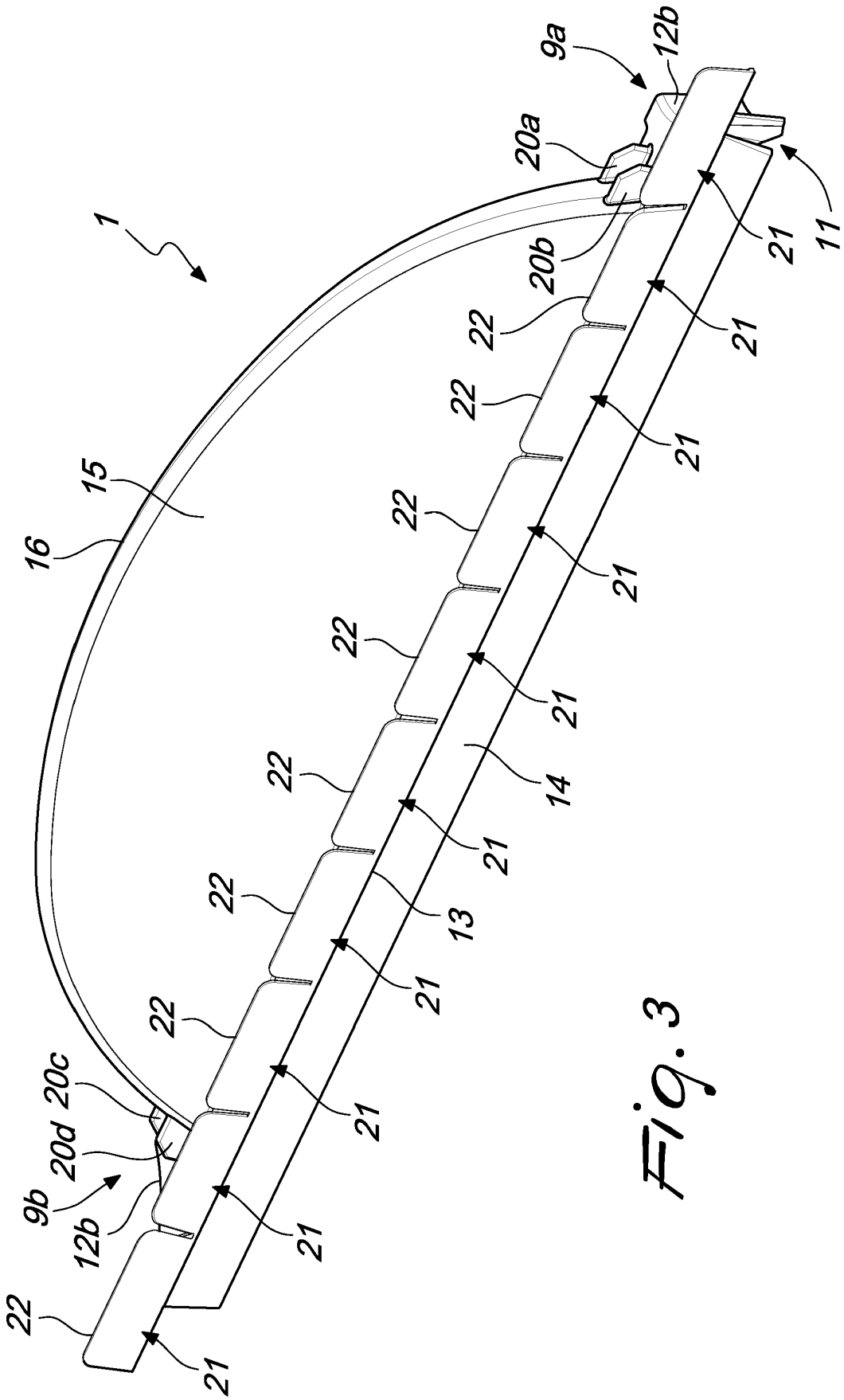


Fig. 3

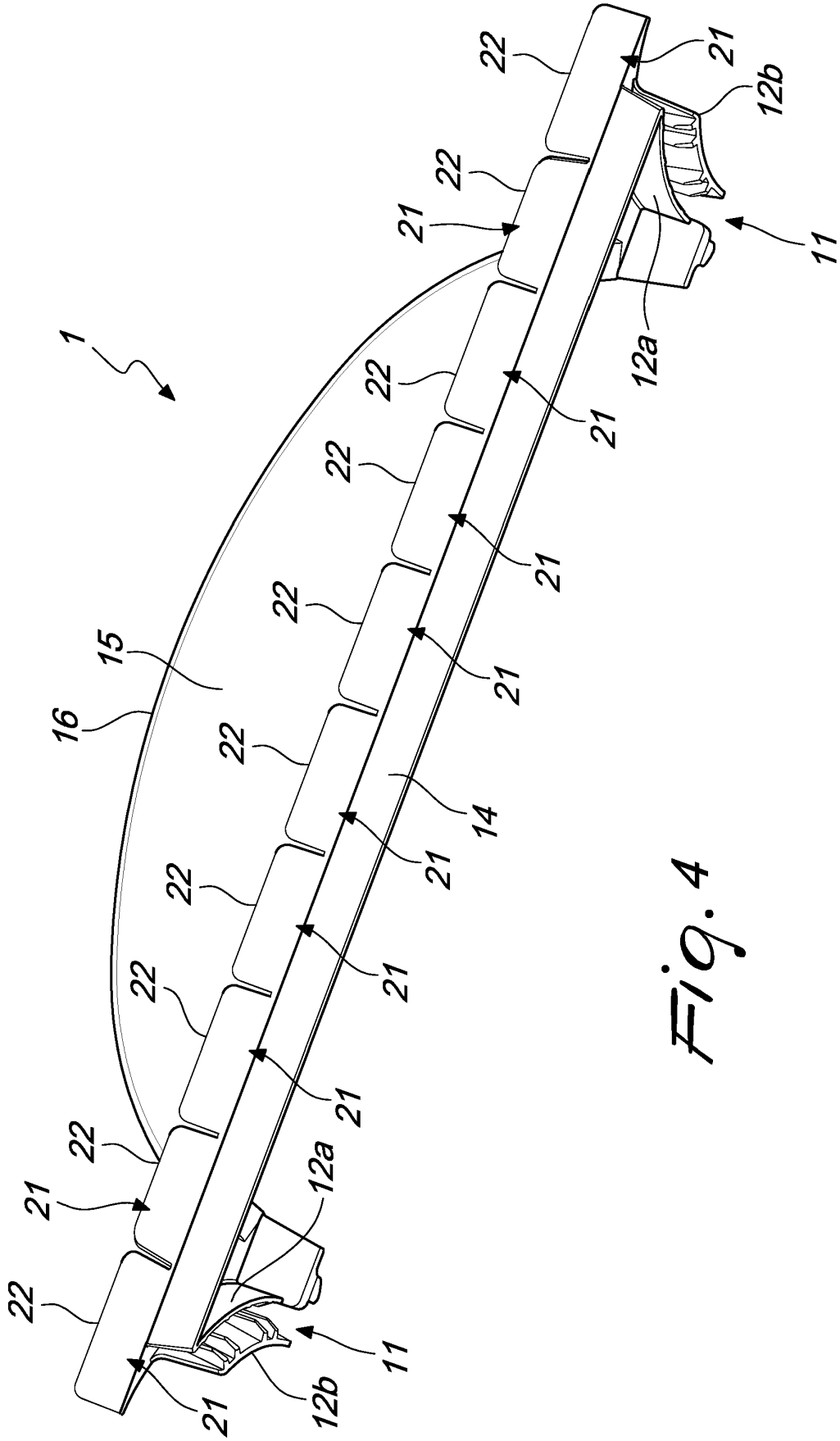
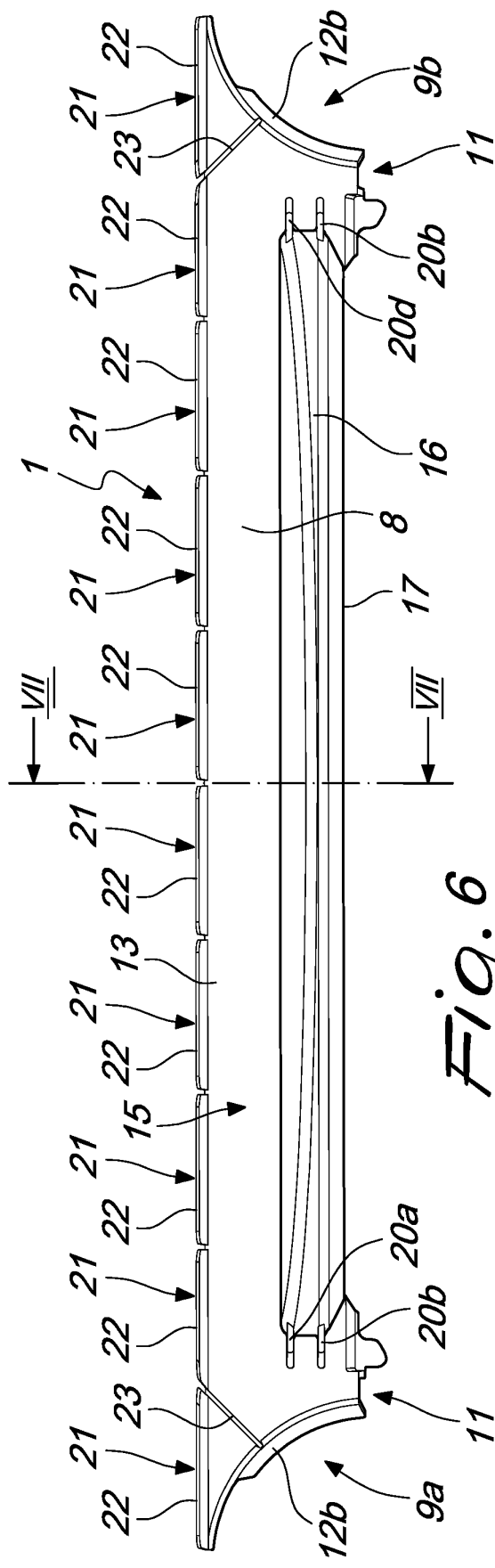
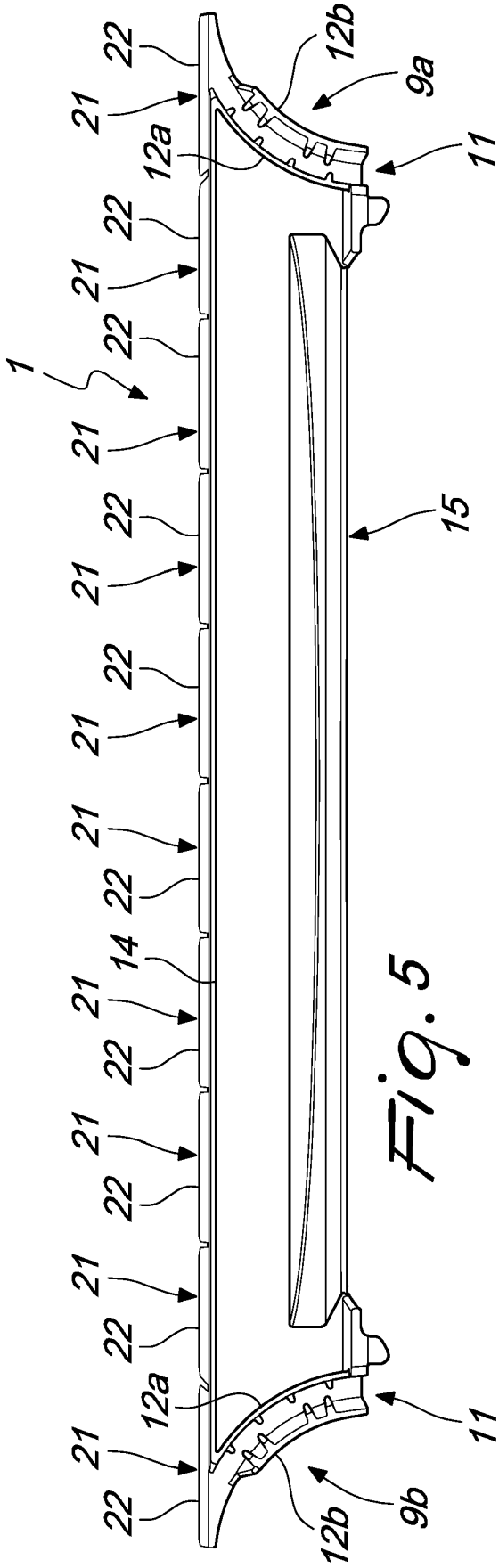


Fig. 4



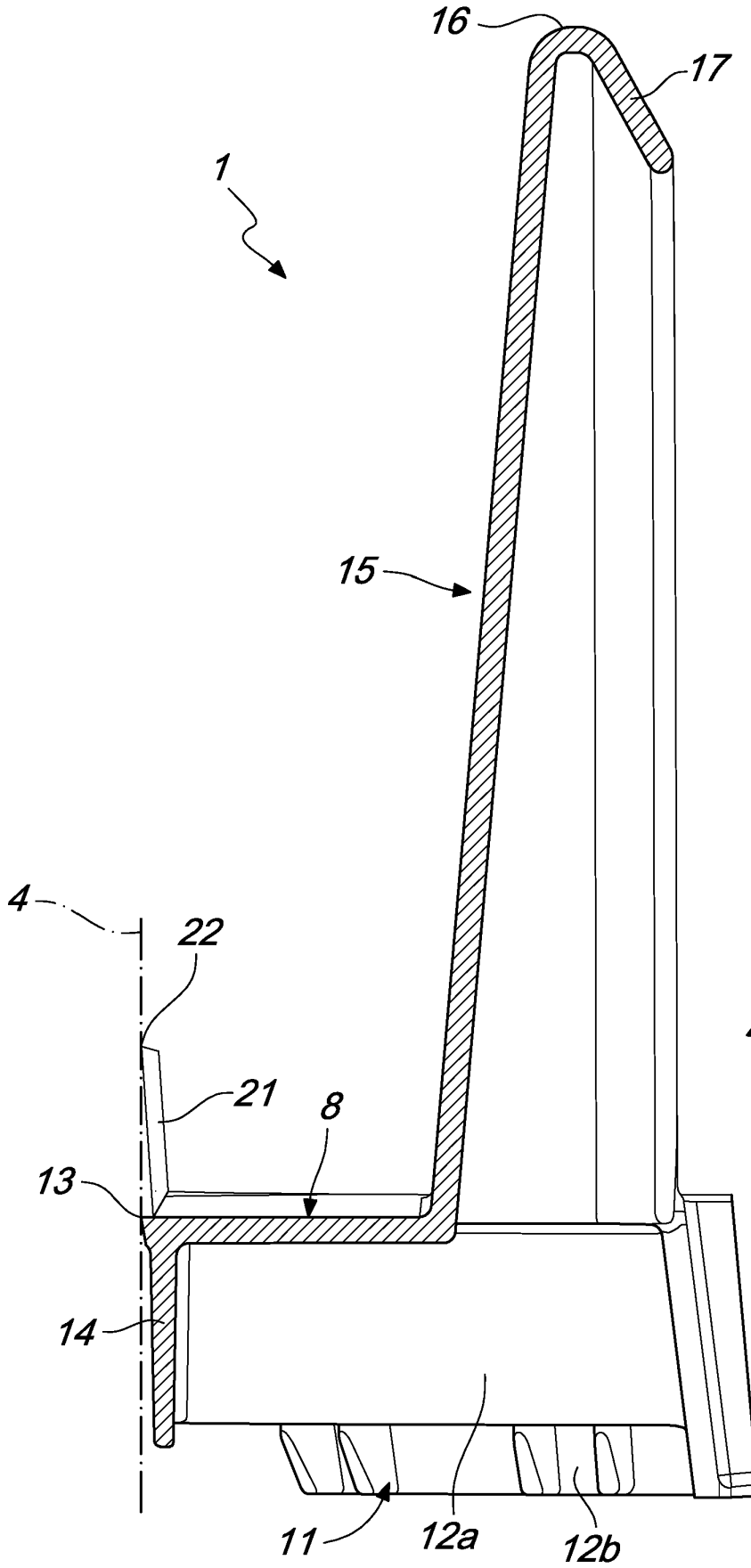


Fig. 7

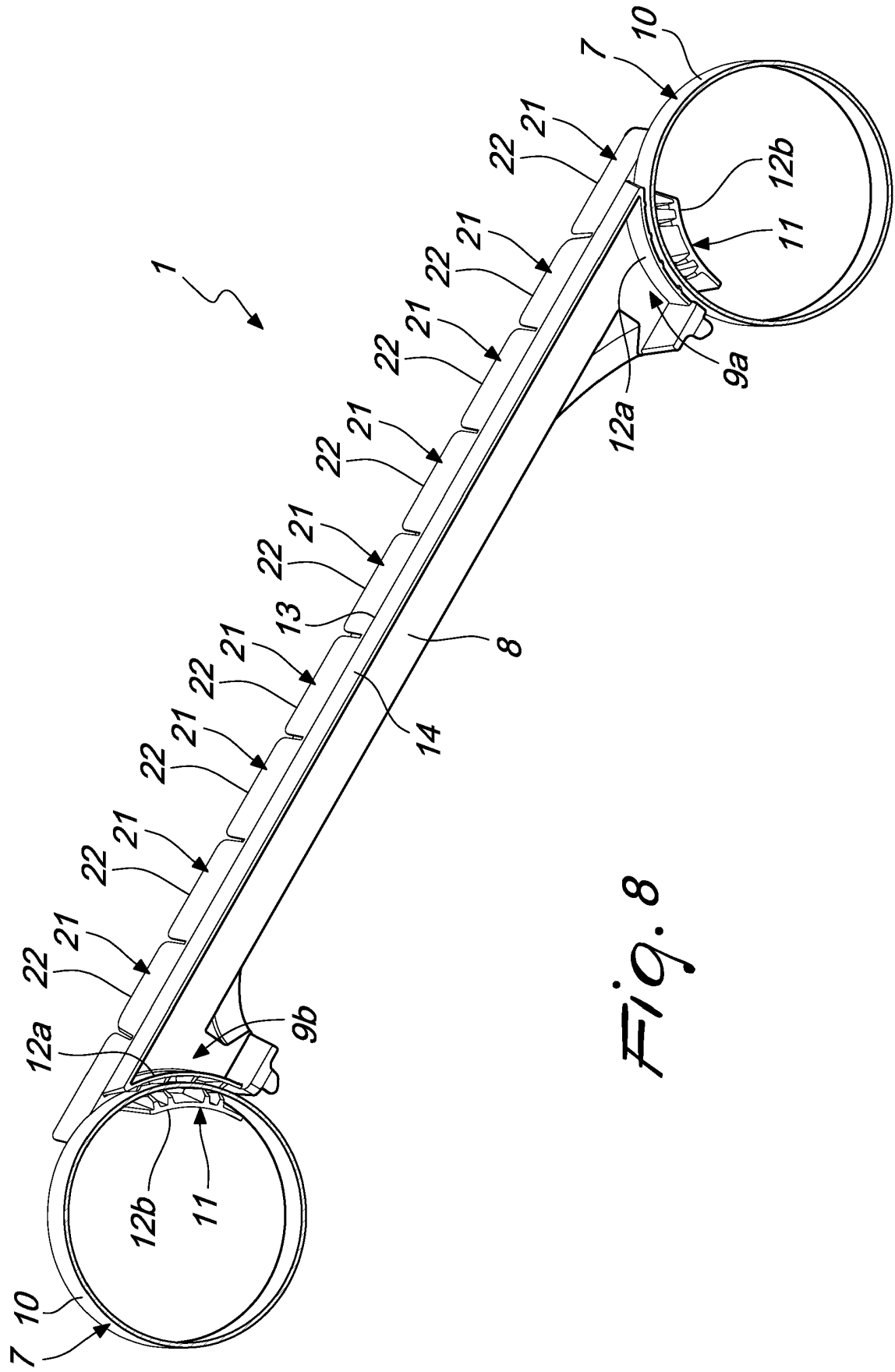
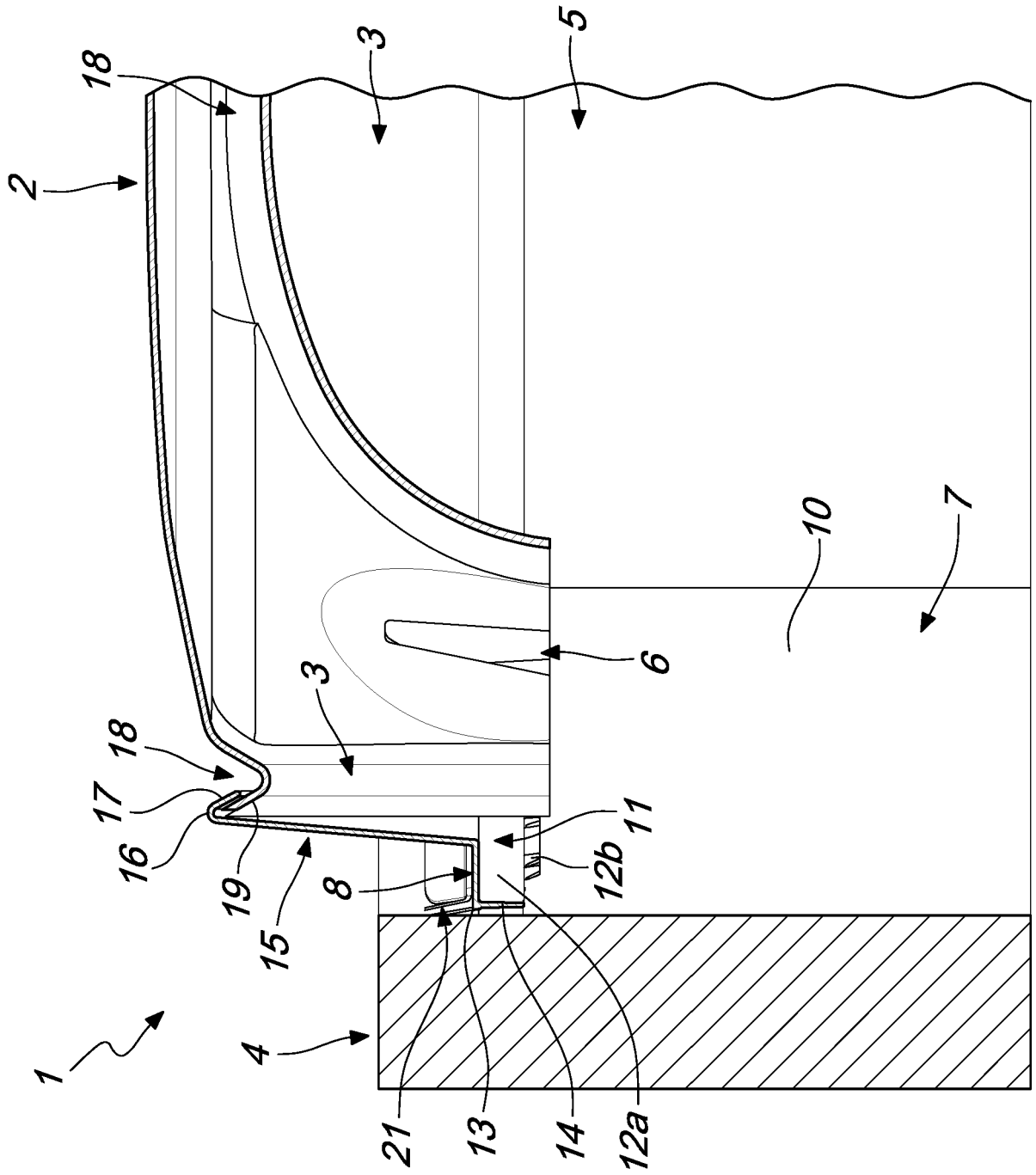


Fig. 8

Fig. 9



REFERENCES CITED IN THE DESCRIPTION

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