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(54) **Drainage assembly, coupling part, end part, kit and method for the placement thereof**

(57) An improved device of a drainage assembly, a coupling part and an end part therefore, as well as an improved method for the placement of a drainage assembly.

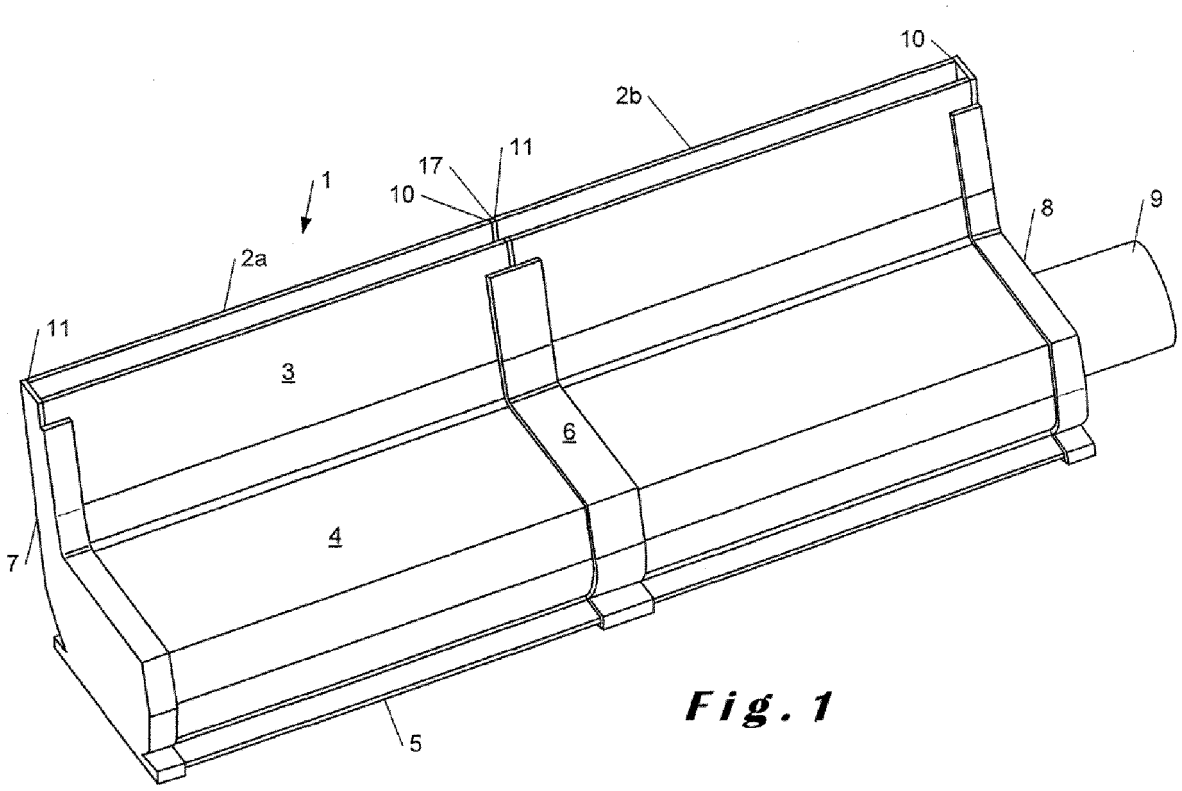

Fig. 1

EP 2 781 665 A1

Description

TECHNICAL FIELD

[0001] In a first aspect, the present invention relates to an improved device of a drainage assembly, a coupling part and an end part therefore. In a second aspect, the present invention relates to an improved method for the placement of a drainage assembly.

BACKGROUND

[0002] Such drainage assembly is generally known and used for example for the drainage of terraces, paths or plazas. The drainage channels are usually of a standard dimension, so that it is necessary to connect multiple drainage channels with each other in order to guarantee the draining of the entire surface to be drained. The known drainage channels are welded or glued together by means of coupling parts.

[0003] Known drainage assemblies often comprise two separate parts, namely an upright part and a drainage channel, which need to be glued together, welded and/or sealed. Typically, the drainage channel consists of e.g. polyester concrete, plastic or concrete and the upright part typically of e.g. galvanized steel, stainless steel or aluminum.

[0004] A disadvantage of the known assembly is that the welding together, gluing or sealing of the various drainage channels and/or upright parts needs to be done with due care and needs to be done in order to avoid leaks. Such care requires, of course, the necessary time and is therefore labor intensive and expensive.

[0005] The invention aims to realize a drainage assembly that allows an easier mounting.

SUMMARY OF THE INVENTION

[0006] In a first aspect, the invention relates to a drainage assembly comprising at least a first and a second drainage channel and a first coupling part, said drainage channels each are provided with a first and a second longitudinal end and wherein the first coupling part is provided in order to be arranged on the second longitudinal end of the first drainage channel and the first longitudinal end of the second drainage channel, in order to connect the first and second drainage channel with each other, wherein the first coupling part is shiftable over said first and second longitudinal end according to the longitudinal direction of both drainage channels and that the first coupling part obstructs a transverse movement of said first and second longitudinal end of the respective second and first drainage channel.

[0007] Because the first coupling part is shiftable along the longitudinal direction and is obstructed in the transverse direction, the drainage channels are suitable to be shifted together and to be aligned. This provides a simple alignment and positioning of both drainage channels and hence allows for a faster mounting and/or optionally dismounting of the drainage assembly.

[0008] In a preferred embodiment, the invention relates to a drainage assembly wherein the first and the second drainage channel are provided with an upright part and wherein the drainage assembly comprises a second coupling part, which is suitable for arrangement to the upright part of the second longitudinal end of the first drainage channel and to the upright part of the first longitudinal end of the second drainage channel, wherein this connects by clamping to said upright parts in order to fix the upright parts of the first and second drainage channel, preferably in line with each other.

[0009] By arranging the second coupling part to the upright parts of both drainage channels, these are coupled by the second coupling part, and fixed by the clamping of the second coupling part. This offers the advantage of an extra firm coupling between both drainage channels. This also provides a more sustainable and simple mounting of the drainage assembly.

[0010] In a second aspect, the invention relates to a coupling part as part of a drainage assembly.

[0011] In a third aspect, the invention relates to an inspection hatch as part of a drainage assembly.

[0012] In a fourth aspect, the invention relates to a method for the placement of a drainage assembly which at least comprises the following steps:

- optionally applying elastic sealant on the second longitudinal end of the first drainage channel and/or on the first longitudinal end of the second drainage channel;
- optionally applying elastic sealant on the first coupling part;
- shifting the first coupling part over the second longitudinal end of the first drainage channel and on the first longitudinal end of the second drainage channels in order to shift said drainage channels towards each other and to couple them;
- optionally arranging the second coupling part between both drainage channels.

[0013] This offers the advantage of a simple and faster mounting of a drainage assembly.

DESCRI PTI ON OF THE FIGURES

[0014] The invention will now be further explained by means of the drawings wherein two example embodiments of a drainage assembly according to the invention are shown.

Figure 1 shows a perspective view of a drainage assembly according to the invention in mounted state.
Figure 2 shows a perspective view of a first coupling part as part of the drainage assembly according to the invention of Figure 1.
Figure 3 shows a perspective view of an end part as

a part of the drainage assembly according to the invention of Figure 1.

Figure 4 shows a perspective view of an end part provided with a drain pipe and

Figure 5 shows the spectrum of the material used for the first coupling part of Figure 2. In the drawing, the same reference number is assigned to an identical or analogous element.

Figure 6 shows a perspective view of an alternative drainage assembly according to the invention in mounted state, said assembly comprising a first and a second coupling part.

Figure 7 shows a perspective view of a first coupling part as part of the drainage assembly according to the invention of Figure 6.

Figure 8 shows a perspective view of an alternative preferred embodiment of a first coupling part as part of the drainage assembly according to the invention.

Figure 9 shows a perspective view of a second coupling part as part of the drainage assembly according to the invention of Figure 6.

Figure 10 shows a perspective view of a drainage assembly according to the invention in mounted state, said assembly comprising a first and second coupling part and inspection hatch.

Figure 11 shows a cross-sectional view of a drainage channel according to the invention.

DETAILLED DESCRIPTION

[0015] In a first aspect, the invention relates to a drainage assembly comprising at least a first and a second drainage channel and a first coupling part, said drainage channels each are provided with a first and a second longitudinal end and wherein the first coupling part is provided to be arranged on the second longitudinal end of the first drainage channel and the first longitudinal end of the second drainage channel, in order to connect the first and second drainage channel with each other, wherein the first coupling part is shiftable over said first and second longitudinal end along the longitudinal direction of both drainage channels and that the first coupling part obstructs a transverse movement of said first and second longitudinal end of the respective second and first drainage channel.

[0016] Because the first coupling part is shiftable along the longitudinal direction and is obstructed in the transverse direction, the drainage channels are suitable to be shifted together and to be aligned. This provides a simple alignment and positioning of both drainage channels and allows for a shorter placement time.

[0017] In a preferred embodiment, the drainage assembly comprises drainage channels of different length. It is to be understood that with the present invention, it is also meant: a drainage assembly having multiple connected drainage channels, wherein each individual drainage channel corresponds to a drainage channel as described in the present invention. Hence, it is possible to construct an arbitrary length for a drainage assembly.

[0018] In a preferred embodiment, the invention relates to a drainage assembly wherein the first and the second drainage channel are provided with an upright part and wherein the drainage assembly comprises a second coupling part, which is suitable for arranging to the upright part of the second longitudinal end of the first drainage channel and to the upright part of the first longitudinal end of the second drainage channel, wherein it connects by clamping to said upright parts in order to fix the upright parts of the first and second drainage channel, preferably in line with each other.

[0019] By arranging the second coupling part to the upright parts of both drainage channels, they are coupled by the second coupling part, and fixed by the clamping of the second coupling part. This offers the advantage of an extra firm coupling between both drainage channels. This also provides a more sustainable and simple mounting of the drainage assembly. Furthermore, it also provides an extra alignment between both drainage channels.

[0020] In a preferred embodiment, elastic sealant is applied to the second longitudinal end of the first drainage channels and/or to the first longitudinal end of the second drainage channels in order to obtain a watertight seal between the first and second drainage channel.

[0021] By the term "elastic sealant", in the present invention, is meant a viscous material suitable for bonding and sealing, said material having an elastic behavior. Examples of such elastic sealants are e.g. MS polymer sealant, silicone or polyurethane. The elastic sealant will provide bonding of the drainage channels and/or a watertight seal, so that no leakage can/will occur.

[0022] In a preferred embodiment, the first coupling part and/or the second coupling part are made out of plastic, preferably high density polyethylene or PVC, more preferably plastic with a hardness which lies between 40 and 45 Shore D.

[0023] Plastic is a material that is particularly well suited for injection molding, as a result of which the manufacturing of the coupling parts is easy to realize. This leads to an economically more advantageous drainage placement as a more sustainable assembly.

[0024] In a preferred embodiment, the drainage channels are made out of aluminum, preferably anodized aluminum.

[0025] Anodized aluminum is resistant to oxidation and therefore provides a more sustainable drainage assembly.

[0026] In a preferred embodiment, the drainage channel and the first coupling part comprise a supporting base. Said supporting base provides stability when placing the drainage assembly. In a preferred embodiment, the supporting base of the first coupling part is shiftable over the supporting base of the drainage channel.

[0027] In a preferred embodiment, at one or two ends of the combination of drainage channels, an inspection hatch is provided.

[0028] By the term "inspection hatch" in the present invention is meant a ground cover which is suitable to provide access to the drainage of the assembly from the terrain surface. Preferably, it comprises a bottom part, which is provided to connect a drainage channel thereon, an outer cover and an inner cover. Said inner cover is suitable to be filled with terrain material such as tiles, pavers, turf,... By lifting the inner cover out of the outer cover, the drainage assembly can be maintained and cleaned of all sorts of dirt that accumulates therein. A more sustainable drainage assembly is thus obtained.

[0029] In a preferred embodiment, the drainage assembly further comprises an end part provided to be arranged on a longitudinal end in order to seal said longitudinal end, said longitudinal end is made out of plastic having such a resilience that it is shiftable over said first and second longitudinal end and when positioned on said first and second longitudinal end, it connects thereto by clamping in order to obtain a watertight seal between the drainage channel and the end part.

[0030] This also allows for a fast, simple and reliable way to arrange end parts to the drainage channel.

[0031] In a second aspect, the invention relates to a coupling part as part of a drainage assembly.

[0032] In a third aspect, the invention relates to an inspection hatch as part of a drainage assembly. In a preferred embodiment, a drain pipe is arranged on an outer wall of the inspection hatch.

[0033] This offers the advantage that said drainage channels are suitable to be connected to the sewer system via such a drain pipe in order to drain the water collected by the drainage channels to the sewer system.

[0034] In a fourth aspect, the invention relates to an end part as part of a drainage assembly.

[0035] In a fifth aspect, the invention relates to a kit of one or more drainage channels and/or one or more coupling parts and/or one or more end parts and/or one or more inspection hatches.

[0036] In a sixth aspect, the invention relates to a method for the placement of a drainage assembly which at least comprises the following steps:

- optionally applying elastic sealant on the second longitudinal end of the first drainage channel and/or to the first longitudinal end of the second drainage channel;
- optionally applying elastic sealant to the first coupling part;
- shifting the first coupling part over the second longitudinal end of the first drainage channel and on the first longitudinal end of the second drainage channels in order to shift said drainage channels towards each other and to connect them;
- optionally arranging the second coupling part between both drainage channels.

[0037] In a preferred embodiment, a drainage assembly is provided with a grouting strip, which is removed after placement of the assembly.

[0038] By the term "grouting strip" in the present invention is meant a strip for the protection of the interior of the drainage assembly, which is preferably made out of plastic.

[0039] This offers the advantage that the drainage assembly and corresponding drainage channels are protected during placement of paving or tiling.

EXAMPLES

EXAMPLE 1

[0040] The drainage assembly (1) shown in Figure 1 according to the invention comprises a first (2a) and a second (2b) drainage channel. It is to be understood that the invention is not limited to a drainage assembly having only two drainage channels and that also more than two drainage channels may be provided. For reasons of clarity, the description will, however, be limited to a drainage assembly having only two drainage channels.

[0041] In the example embodiment according to Figure 1, the drainage channel comprises an upright part (3) and a base part (4). The base part is provided with a supporting base (5). The latter displays the profile of a shoe sole, thereby on the one hand allowing a stable placement on a substrate and on the other hand the outermost edge of said profile allows for the anchoring of the drainage channel, either by means of clamping, such as for example, applied to rails, or by the pouring of concrete. The presence of the upright part (3) offers space to arrange tiling or paving in the distance created thereto, so that only a narrow gutter, formed by the upper edge of the upright part, is visible. The water is then able to end up in the drainage channel via an upper edge of the upright part, where it then is able to flow to the base part in order to be further drained there. Preferably, the drainage channel is made out of extruded aluminum so that not only a sustainable product is obtained but also that the water can flow unhindered into the drainage channel. After all, by extrusion, smooth inner and outer walls are obtainable in an economic and efficient manner.

[0042] The drainage channel is provided with a first (10) and a second (11) longitudinal end against which a first coupling part (6) or an end part (7, 8) is to be arranged. Indeed, the first coupling part is arranged to connect two successive (2a, 2b) drainage channels with each other. The end part is arranged at the beginning and the end of the drainage channel, whereby at the beginning of a fully closed end part (7) is arranged, while at the end, preferably an end part (8) provided with a drain pipe (9) is arranged. The latter is then suitable to be connected to the sewer system in order to drain the water collected by the drainage channels to the sewer system.

[0043] Figure 2 shows an example embodiment of a first coupling part as part of a drainage assembly according to the invention. The first coupling part and the end

part have a contour that corresponds to that of the drainage channel in order to connect to the drainage channel. Therefore, the first coupling part and the end part also show a first (13) and a second (22) upright part and an upright base part (14), as well as a support base (15). First coupling part and end part are of such dimensions that they are able to shift over the drainage channel.

[0044] The first coupling part (6) comprises an inner edge (19) from which a rib (16) extends. The rib preferably extends over the entire inner circumference of the inner edge and is arranged in the middle of the inner edge. When linking two successive drainage channels, the rib is thus situated between the longitudinal ends of the drainage channels and thus contributes to a watertight connection between the two drainage channels. The rib is preferably made out of the same material as the first coupling part which is preferably obtained by means of injection molding. In a further preferred embodiment of the first coupling part, the rib extends further above an upper edge of the first coupling part and thus exhibits two protrusions (17). As shown in Figure 1, said protrusions (17) are to be located exactly between the longitudinal ends of the upright parts of the drainage channels. The first coupling part shows an upper edge that is slightly lower than the upper edge of the upright part (3) of the drainage channel so that it does not constitute an obstacle for a paving or tiling.

[0045] The first coupling part is made out of plastic with such a resilience that it is shiftable over the first and second longitudinal end when mounting the first coupling part between two consecutive drainage channels. Then, when the first coupling part is positioned on the first and second longitudinal end of two consecutive drainage channels, the plastic material ensures, because of its resilience, that the first coupling part connects by clamping to the first and second longitudinal end, thereby obtaining a watertight seal between the consecutive first and second drainage channels. The first coupling part is preferably made out of high density polyethylene (HDPE) with a hardness which lies between 40 and 45 Shore D.

[0046] Pressure tests carried out on the first coupling part have shown that in order to press the upper side of the base part 5 mm, a force which lies between 21 and 23 N is necessary. In order to press the upright base part (14) and the second (22) upright part 5 mm, a force which lies between 14 and 16 N, respectively 6 and 8 N is necessary.

[0047] The plastic material further shows a melting point situated around 137°C. The spectrum of the material out of which the first coupling part is made was determined by using infra-red. Figure 5 illustrates the according measured spectrum.

[0048] As shown in Figures 3 and 4, the drainage assembly comprises, in accordance with the invention, another end part (7, 8) provided to be arranged in each case on a longitudinal end of the drainage channel in order to obtain a watertight seal. End part (8) differs from the end part (7) in that it further comprises the drain pipe (9). The end parts are made out of the same material as the first coupling part and displays a profile that corresponds to that of the drainage channel. This also allows the end parts to be arranged on the drainage channel by clamping to thus achieve a watertight seal.

[0049] Both the first coupling part as well as the end part are preferably provided with a protrusion (20), respectively (21), which is located at the height of an upper edge of the upright part of the drainage channel. As a result, it is avoided that an opening is created, which is too large and which may be troublesome for, for example, high heeled shoes.

EXAMPLE 2

[0050] The drainage assembly (1) shown in Figure 6 according to the invention comprises a first (2a) and a second (2b) drainage channel, analogous to Figure 1. The drainage channel comprises an upright part (3) and a base part (4), which is provided with a support base (5), analogous to the base part of Figure 1. Preferably, the drainage channel is made out of extruded aluminum so that not only a sustainable product is obtained but also that the water can flow unhindered into the drainage channel. The drainage channel is provided with a first (10) and a second (11) longitudinal end to which a first coupling part (30), a second coupling part (40) and an end part (7, 8) are arranged.

[0051] The first coupling part (30) is arranged to align and fix two consecutive drainage channels (2a, 2b) by means of elastic sealant, which is applied between the edges of the longitudinal ends (10,11) of the drainage channels (2a, 2b) and between the two coupling parts and the channels (2a, 2b). The end parts (7) and (8) correspond to the end parts of respectively Figures 3 and 4.

[0052] Figure 7 shows a perspective view of the first coupling part (30) as part of the drainage assembly according to the invention of Figure 6. The first coupling part has a contour that corresponds to the base part (5) of both drainage channels (2a, 2b). The first coupling part is of such dimensions that it is shiftable over the drainage channel. Said coupling part (30) relates to a flat plate or ground surface (31), which is provided on two opposite sides of an overhanging structure (32), which induces a slot (33) between the overhanging structure (32) and the ground surface (31). Preferably, during installation, elastic sealant is applied in said slots (33) in order to fix both drainage channels to each other and to achieve a watertight assembly (1).

[0053] Figure 8 shows a perspective view of an alternative preferred embodiment of a first coupling part (30) as part of the drainage assembly according to the invention. The first coupling part (30) has a construction analogous to the coupling part of Figure 7. However, the coupling part (30) is different in the sense that the overhanging structures (32) are not provided over the entire width of the coupling part (30). The overhanging structures (32) are provided from the one edge (34) of the ground surface

(31), but do not continue up to the opposite edge (35).

[0054] When installing a drainage assembly (1), the first coupling part (30) is, at the (34) side shifted, clamped and/or glued over the base part (5) of the first drainage channel (2a). Subsequently, the second drainage channel (2b) can be shifted into the slots (33) on the opposite (and still free) side (35). The second drainage channel (2b) can now be shifted at an angle different from 0° with respect to the ground surface, to ultimately be positioned in the extension of the first drainage channel (2a). The advantage is a more efficient, better and smooth installation of a drainage assembly (1).

[0055] Figure 9 shows a perspective view of a second coupling part as part of the drainage assembly according to the invention of Figure 6. This relates to a rectangular block (40), wherein the lateral width substantially corresponds to the width between the parallel plates of the upright parts (3) of the drainage assembly (1). As a result, said second coupling part can be clamped in both drainage channels (2a,2b) and, in that manner, couple and fix both channels. In a preferred embodiment, some surfaces are curved. This offers the advantage of an easier arrangement of the second coupling part (40) between the upright parts (3) of the longitudinal ends (10,11). In that way, for example, a lateral width between the parallel plates is 12.0 mm. For the lateral width of the second coupling part, 11.9 mm can then be selected with a tolerance of -0.05 mm and +0.10 mm.

[0056] Figure 10 shows a perspective view of a drainage assembly (1) according to the invention in the mounted state, said assembly comprising a first and second coupling part (30,40) and an inspection hatch (50). The drainage assembly (1) is at one end provided with an inspection hatch (50). This relates to a ground cover which is suitable to provide access to the drainage of the assembly from the tiles or paving. This bottom part comprises a base part (5) analogous to the drainage channels (2a, 2b) and is provided with an open and a closed side-part (54). The upper part of said inspection hatch (50) comprises an inner cover (56) which rests within an outer cover (55). Said inner cover (56) is suitable to be filled with terrain material, such as for example tiles, pavers, turf,... It also comprises two lifting elements (51) in which a bolt (52) is arranged. By optionally removing this, a custom key can lift said inner cover (56) out of the outer cover (55). In that way, the drainage assembly can be maintained and cleaned of all kinds of dirt that accumulates therein. A sustainable drainage assembly is thus obtained. To said inspection hatch (50), a drain pipe (9) is arranged. The latter can be connected to the sewer system in order to drain the water collected by the drainage channels to the sewer system.

EXAMPLE 3

[0057] Figure 11 shows a cross-sectional view of a drainage channel (2) according to the invention. Said channel (2) is analogous to that of preceding figures. However, in said embodiment, at the inner wall, a pH-sleeve (60) is provided. This consists preferentially of plastic and is of such dimensions that, in cross-section, it is substantially equal to the cross-section of the interior of the channel, so that said pH-sleeve clamps little when arranging into the channel. Said pH-sleeve protects the inner wall of the drainage channel (2) and thus provides a more sustainable drainage assembly (1).

[0058] Typically, aluminum drainage channels (2) are anodized to prevent oxidation. Hereby, the aluminum is provided with an oxide layer. However, the oxide layer thickness obtained on the inner wall is typically smaller than at the outer wall. In other words, the inner wall of a drainage channel is less protected and thus less sustainable than the outer wall, thus more prone to oxidation and hence of inferior quality. By applying a pH-sleeve, these disadvantages are avoided.

[0059] An aluminum drainage channel (2) provided with such a pH-sleeve is suitable to be applied in chlorine -rich environments, such as, for example, a swimming pool. This offers the advantage that a more economical and more sustainable drainage assembly can be achieved.

[0060] Said pH-sleeve is preferably, after manufacturing of the drainage channel, shifted into the channel. The removal of the drainage slits (61), for example by a milling process, occurs preferably at the drainage channel where the pH-sleeve is shifted into. This enhances the construction and solidity of the pH-sleeve.

Claims

1. Drainage assembly (1) comprising at least a first and a second drainage channel (2a,2b) and a first coupling part (6,30), said drainage channels (2a,2b) each are provided with a first and a second longitudinal end (10,11) and wherein the first coupling part (6,30) is provided to be arranged on the second longitudinal end (11) of the first drainage channel (2a) and the first longitudinal end (10) of the second drainage channel (2b), in order to connect the first and second drainage channel (2a, 2b) with each other, **characterized in that** the first coupling part (6,30) is shiftable over said first and second longitudinal end (10,11) along the longitudinal direction of the two drainage channels (2a,2b) and that the first coupling part (6,30) obstructs a transverse movement of said first and second longitudinal end (10,11) of the respective second and first drainage channel (2b,2a).

2. Drainage assembly (1) according to claim 1, **characterized in that** the first and the second drainage channel (2a,2b) are provided with an upright part (3) and that the drainage assembly comprises a second coupling part (40), which is suitable to be arranged to the upright part (3) of the second longitudinal end

(11) of the first drainage channel (2a) and to the upright part (3) of the first longitudinal end (10) of the second drainage channel (2b), wherein it connects by clamping to these upright parts (3) in order to fix the upright parts (3) of the first and second drainage channel (2a,2b), preferably in line with each other and when positioned on said first and second longitudinal end (10,11) connects thereto by clamping in order to fix the upright part (3) of the first and second drainage channel (2a,2b), preferably in line with each other.

3. Drainage assembly (1) according to claim 1 or 2, **characterized in that** elastic sealant is applied to the second longitudinal end (11) of the first drainage channel (2a) and/or to the first longitudinal end (10) of the second drainage channel (2b) in order to obtain a watertight seal between the first and second drainage channel (2a,2b).

4. Drainage assembly (1) according to one of claims 1 to 3, **characterized in that** the first coupling part (6,30) and/or the second coupling part (40) are made out of plastic, preferably high density polyethylene or PVC, more preferably plastic with a hardness which lies between 40 and 45 Shore D.

5. Drainage assembly (1) according to one of claims 1 to 4, **characterized in that** the drainage channels (2a,2b) are made out of aluminum, preferably anodized aluminum.

6. Drainage assembly (1) according to one of claims 1 to 5, **characterized in that** the drainage channel (2a,2b) and the first coupling part (6,30) comprise a supporting base.

7. Drainage assembly (1) according to claim 6, **characterized in that** the supporting base of the first coupling part (6,30) is shiftable over the supporting base (5) of the drainage channel (2a,2b).

8. Drainage assembly (1) according to one of claims 1 to 7, **characterized in that** at one or two ends of the combination of drainage channels (2a,2b) an inspection hatch (50) is provided.

9. Drainage assembly (1) according to one of claims 1 to 8, **characterized in that** it further comprises an end part (7,8) provided to be arranged on a longitudinal end (10,11) in order to seal this longitudinal end (10,11), said end part (7,8) is made out of plastic having such a resilience that it is shiftable over said first and second longitudinal end (10,11) and when positioned on said first and second longitudinal end (10,11) connects thereto by clamping in order to obtain a watertight seal between the drainage channel (2a,2b) and the end part (7,8).

10. Drainage assembly (1) according to one of claims 1 to 9, **characterized in that** the first coupling part (6,30) which is positioned on said first and second longitudinal end (10,11) connect thereto by clamping in order to fix the first and second longitudinal end (10,11), preferably in line with each other.

11. Drainage assembly (1) according to one of claims 1 to 10, **characterized in that** the first coupling part (6,30) comprises an inner edge from which a rib (16) protrudes which is arranged in such a manner that, upon coupling of the first and the second drainage channel (2a,2b) it is located between the longitudinal ends (10,11).

12. Drainage assembly (1) according to claim 11, **characterized in that** the rib (16) further extends above an upper edge of the first coupling part (6, 30).

13. Coupling part (6, 30, 40) as part of a drainage assembly (1) according to one of claims 1 to 12.

14. End part (7,8) as part of a drainage assembly (1) according to claim 9.

15. Inspection hatch (50) as part of a drainage assembly (1) according to claim 8.

16. Inspection hatch (50) according to claim 15, **characterized in that** a drain pipe (9) is arranged to an outer wall of the inspection hatch (50).

17. Kit of one or more drainage channels (2a,2b) according to the preceding claims 1 to 12 and/or one or more coupling parts (6,30,40) according to claim 13 and/or one or more end parts (7,8) according to claim 14 and/or one or more inspection hatches (50) according to claims 15 and 16.

18. Method for placing a drainage assembly (1) according to one of claims 1 to 12, **characterized in that** it at least comprises the following steps:

- optionally applying elastic sealant on the second longitudinal end (11) of the first drainage channel (2a) and/or on the first longitudinal end (10) of the second drainage channel (2b);
- optionally applying elastic sealant on the first coupling part (6, 30);
- shifting the first coupling part (6,30) over the second longitudinal end (11) of the first drainage channel (2a) and on the first longitudinal end (10) of the second drainage channel (2b), in order to shift said drainage channels (2a,2b) towards each other and to couple them;
- optionally arranging the second coupling part (40) between both drainage channels (2a,2b).

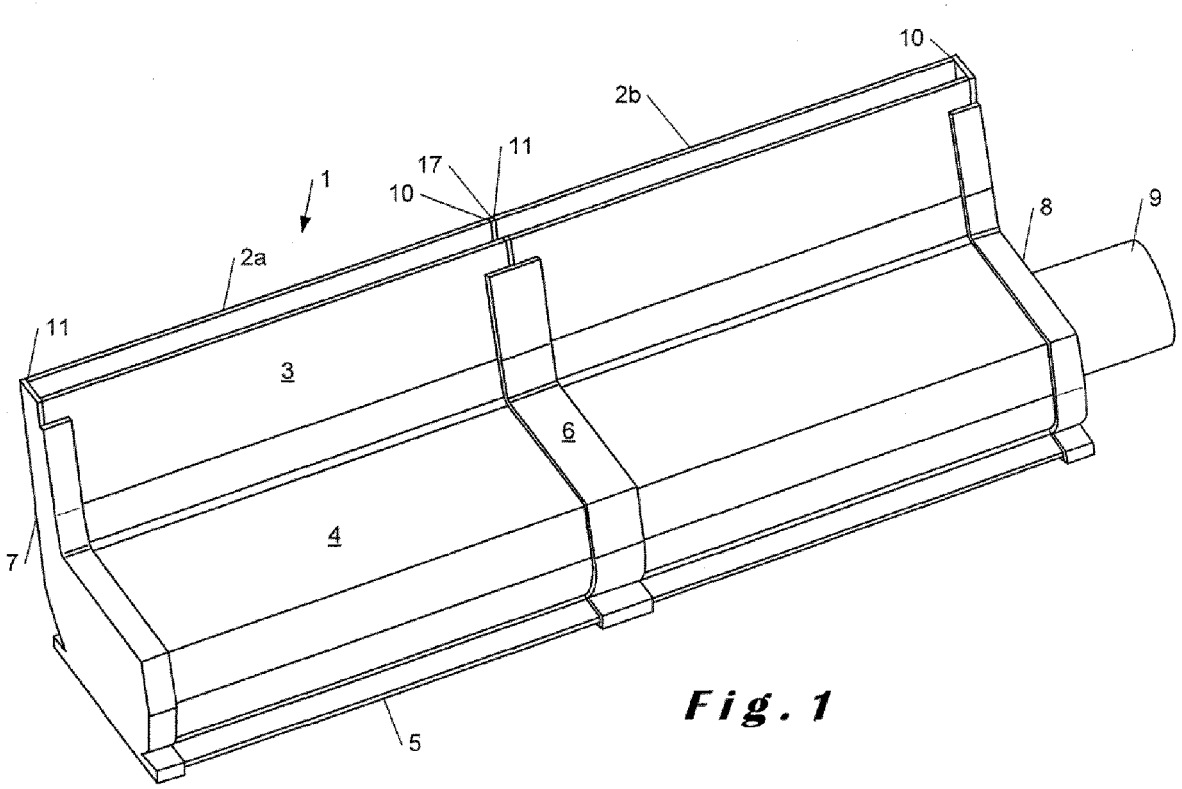

Fig. 1

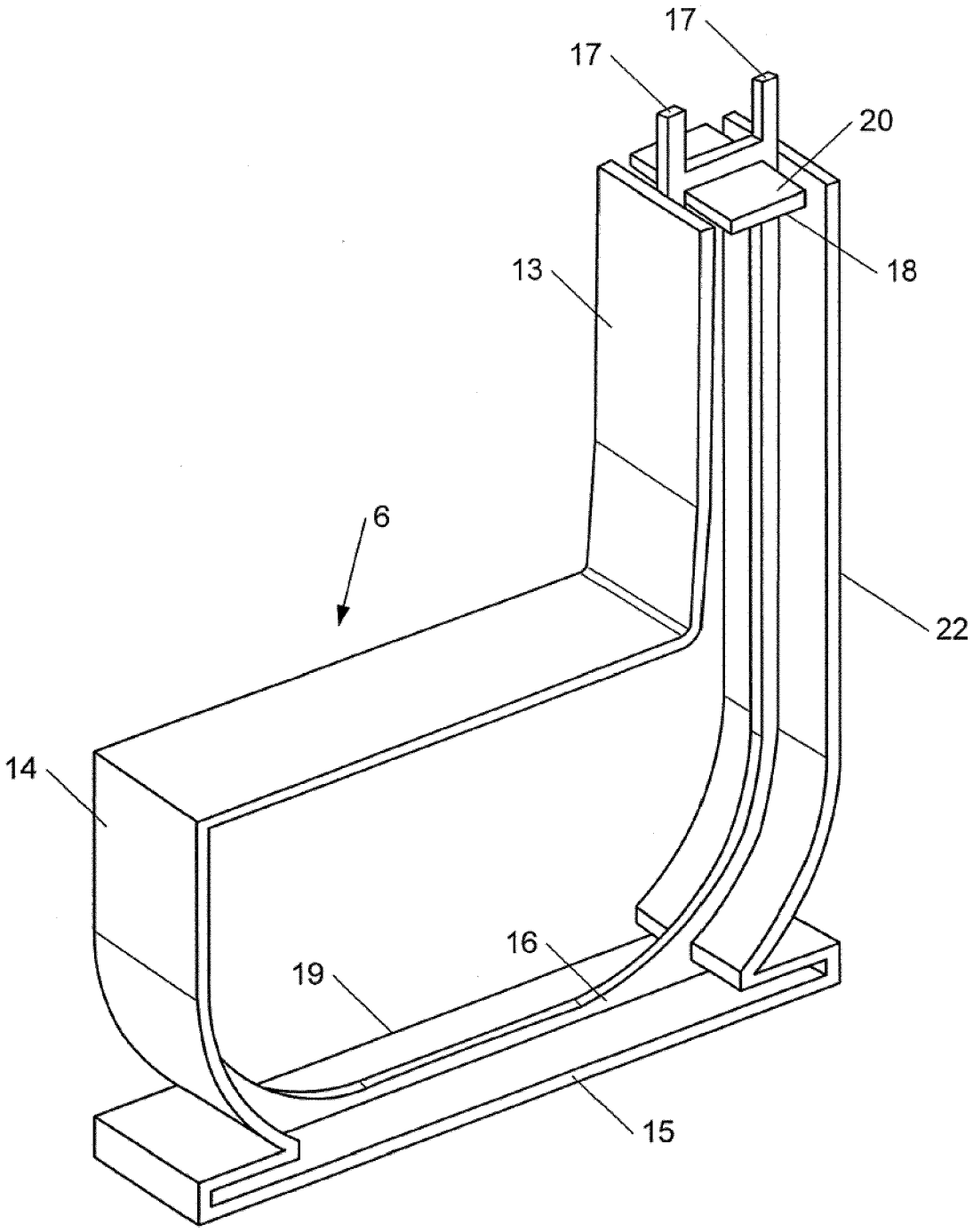

Fig. 2

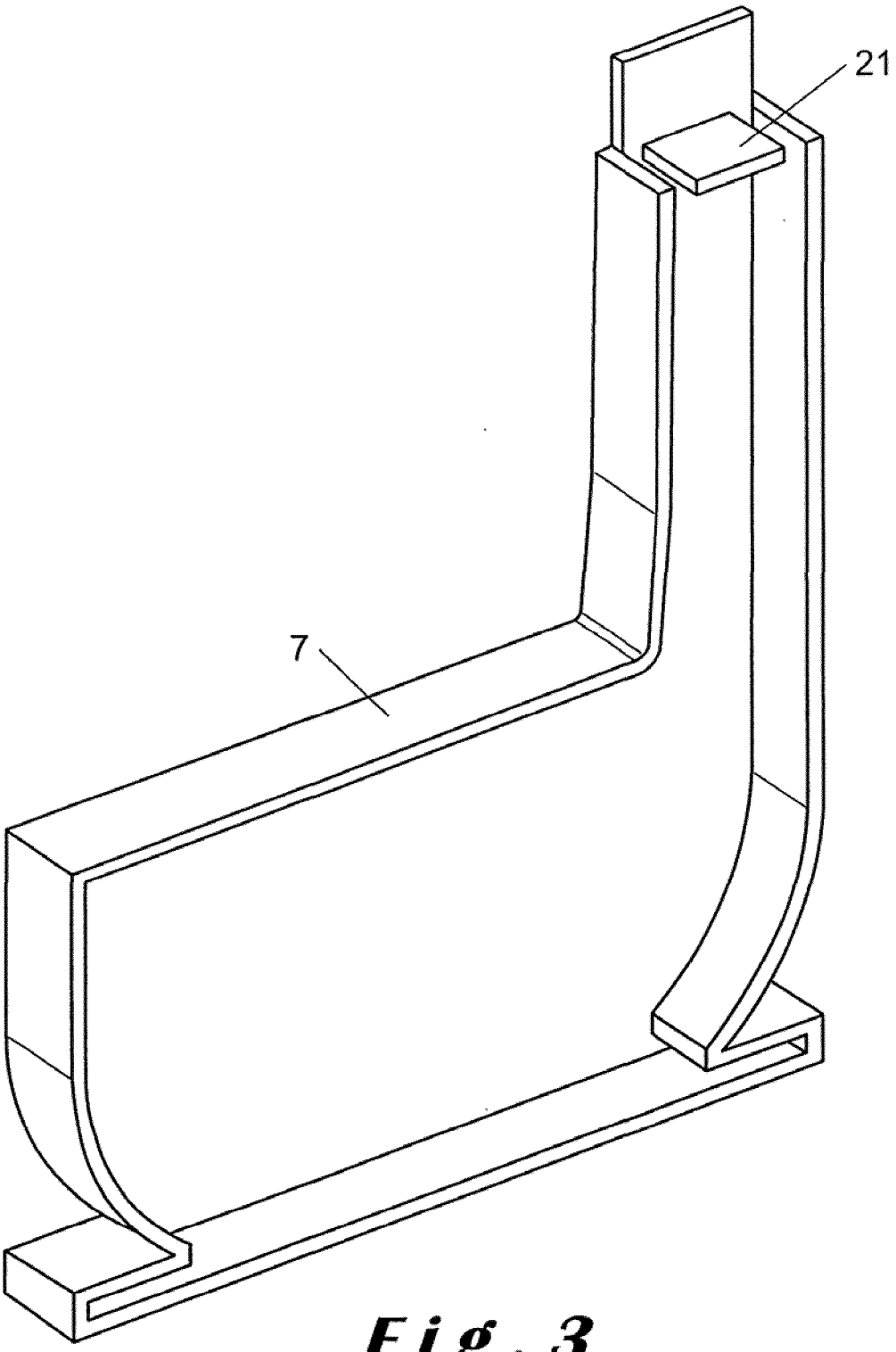

Fig. 3

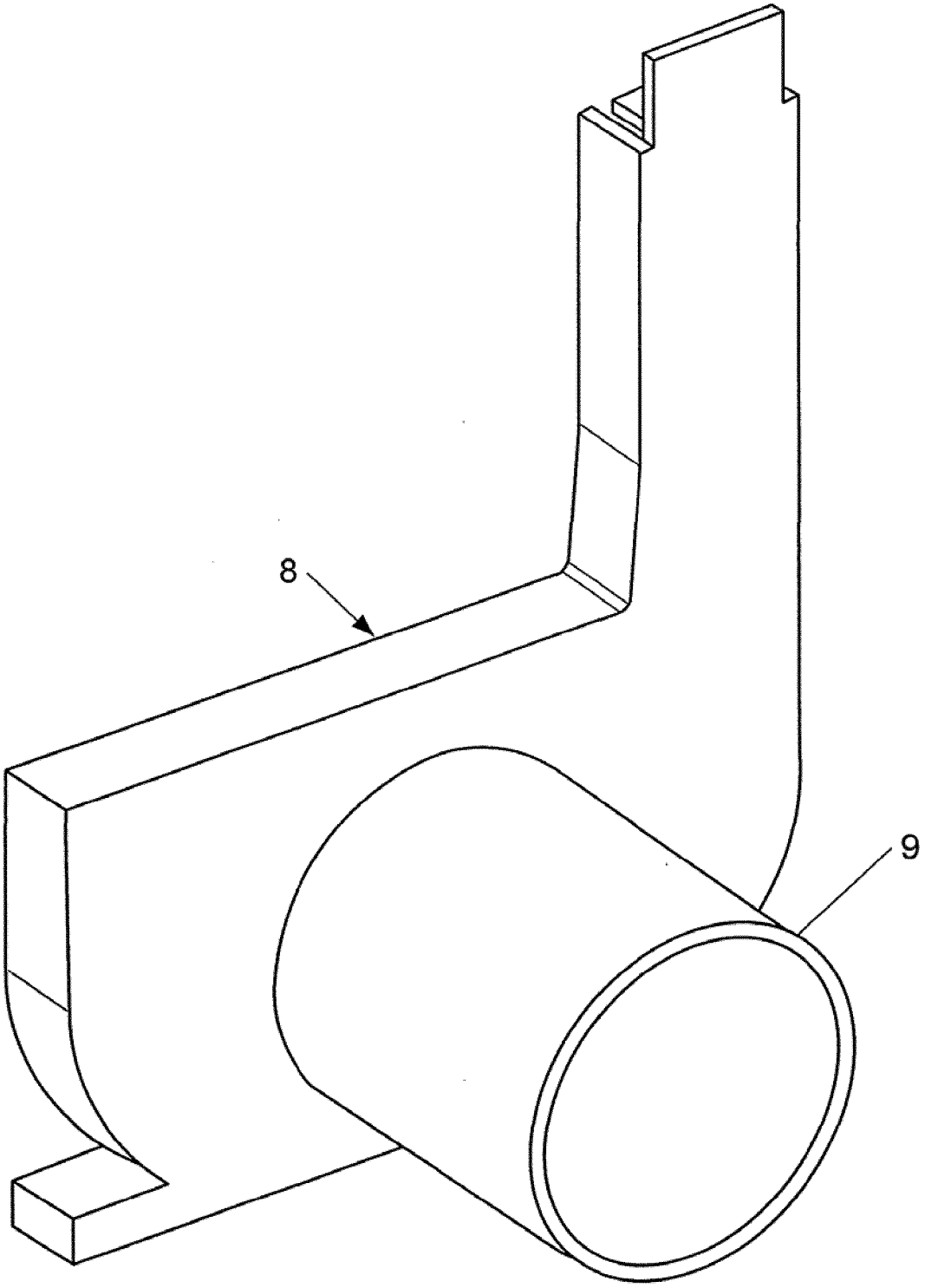

Fig. 4

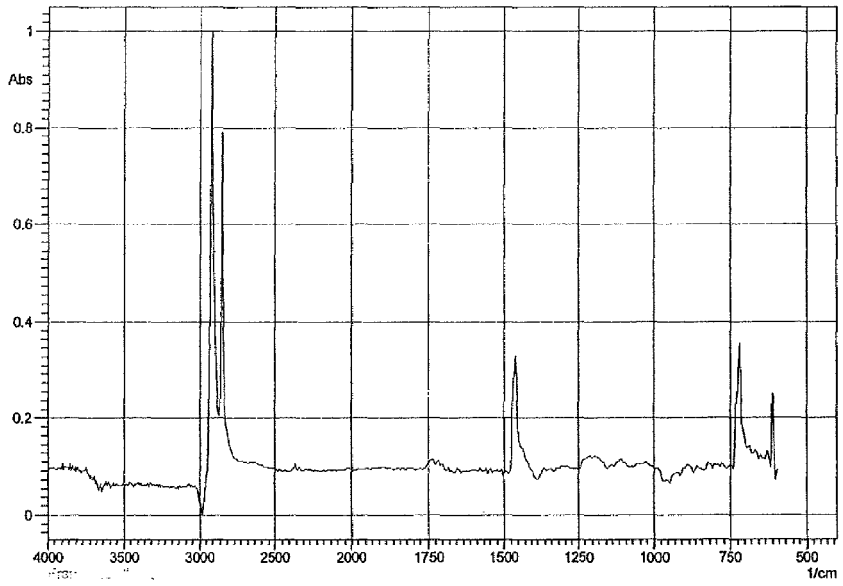
Abs
1
0.8
0.6
0.4
0.2
0
4000
3500
3000
2500
2000
1750
1500
1250
1000
750
500
1/cm

Fig. *5*

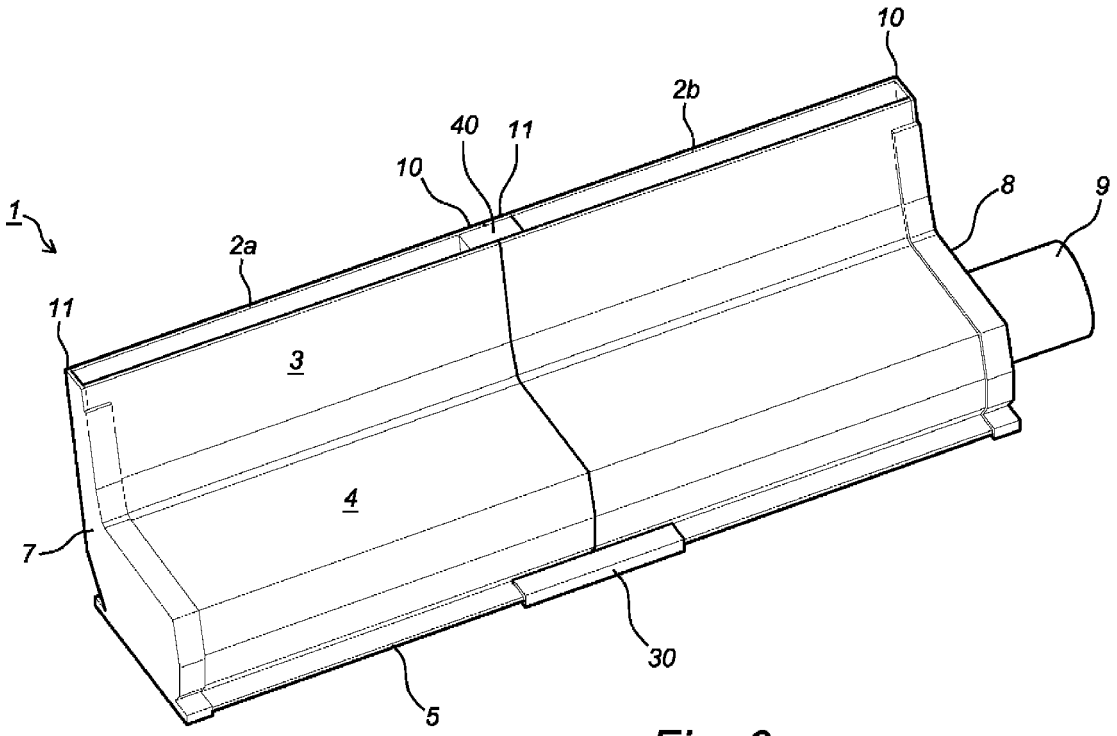

Fig. 6

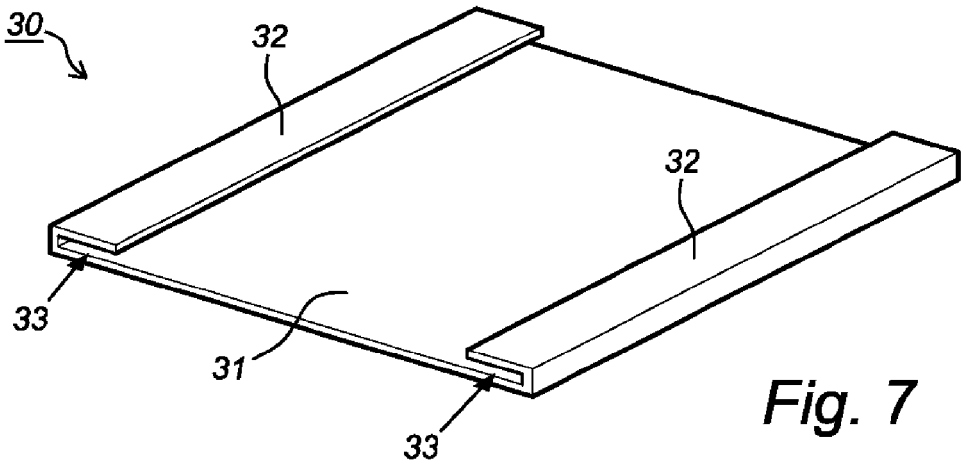

Fig. 7

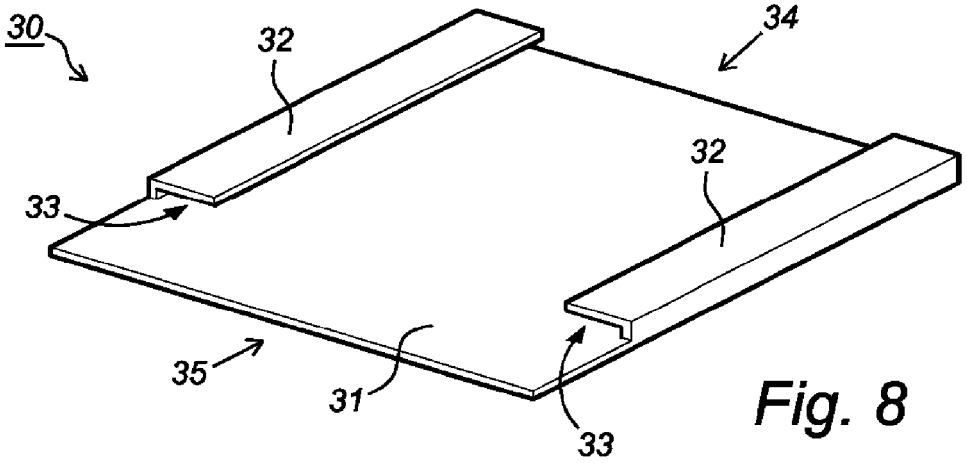

Fig. 8

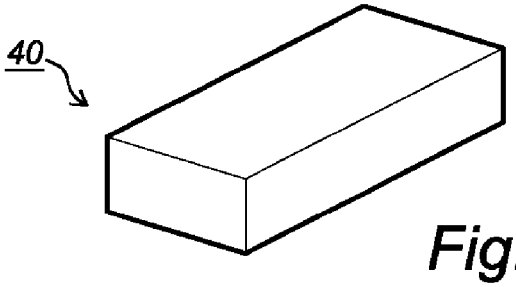

Fig. 9

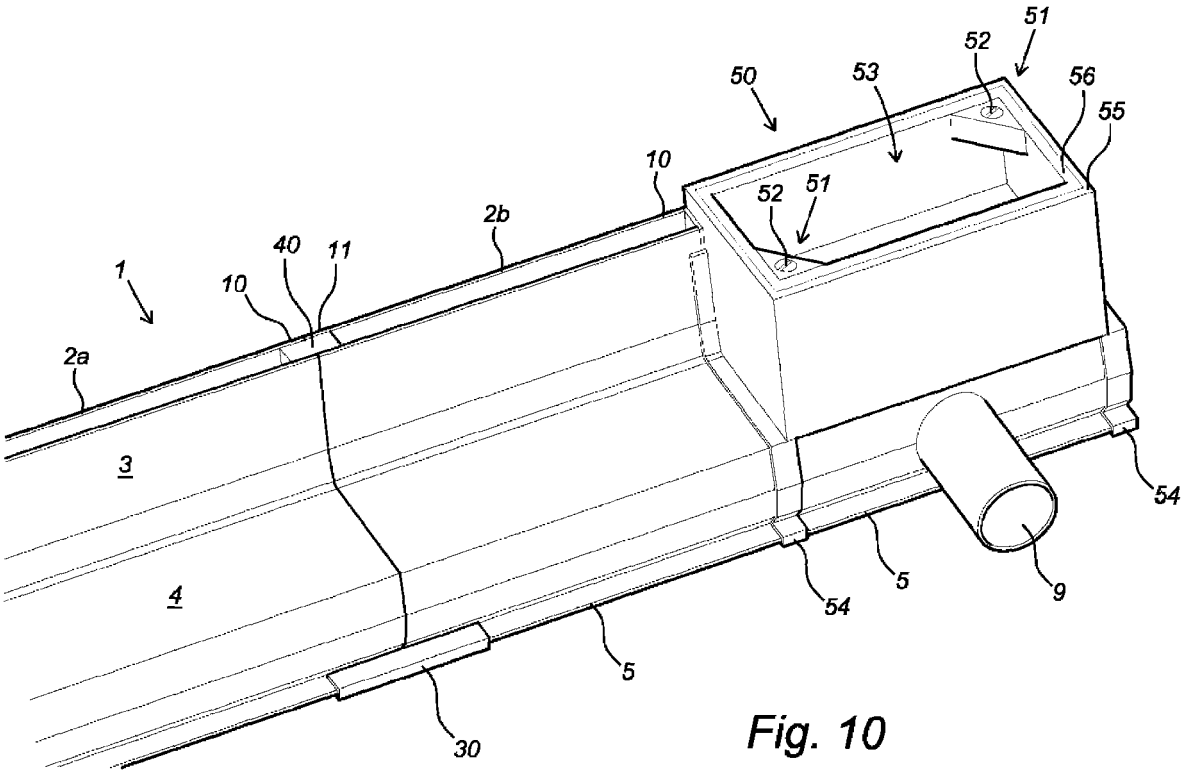

Fig. 10

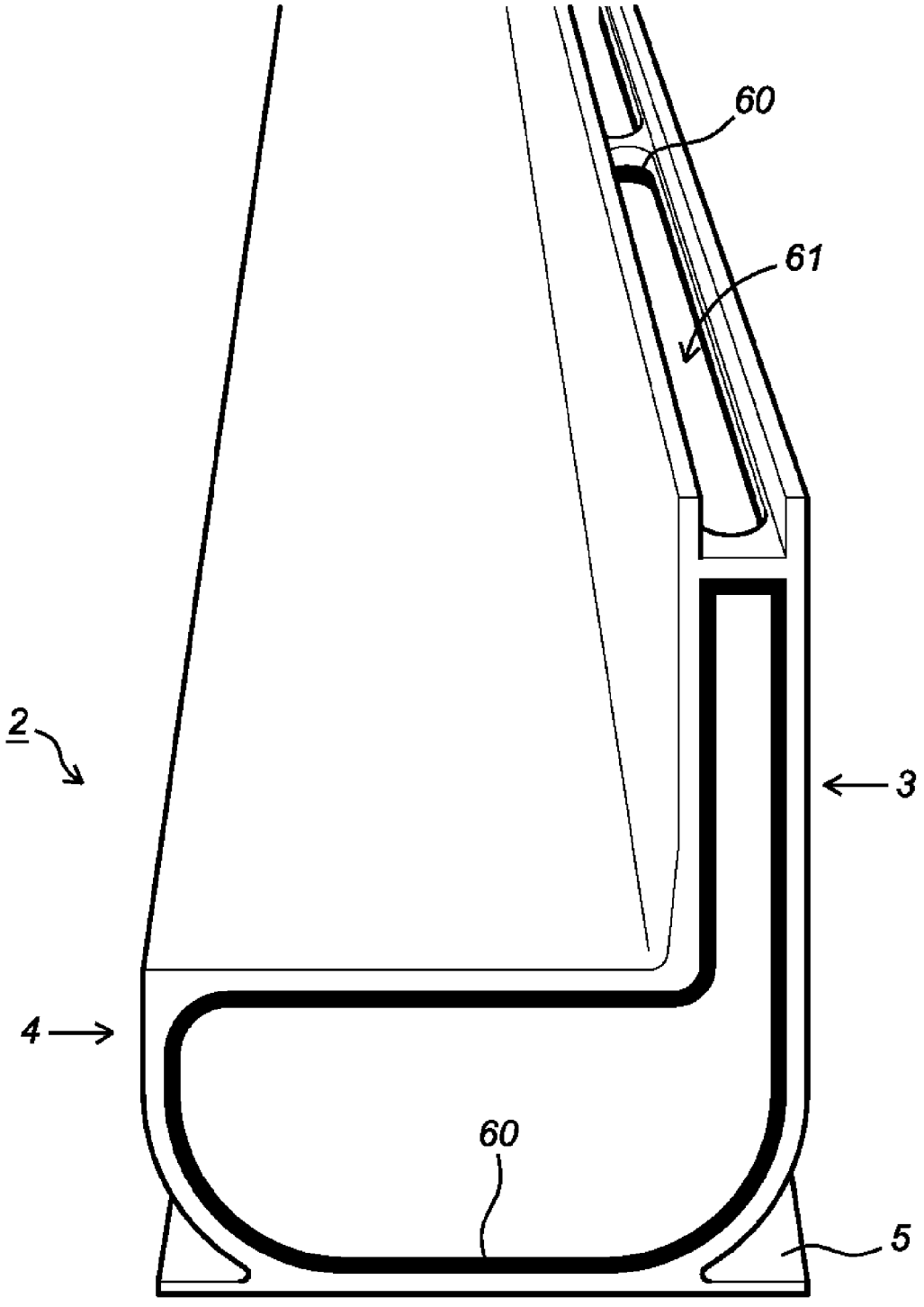

Fig. 11

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EUROPEAN SEARCH REPORT

Application Number
EP 14 16 0737

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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
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