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EP-A1- 2 826 702
WO-A1-2013/094534
FR-A1- 2 726 804
GB-A- 1 215 530
US-A1- 2003 089 290
Anonymous: "Delivery of M/Y SIBELLE - Heesen Yachts", , 26 March 2015 (2015-03-26), XP055335134,
Retrieved from the Internet: URL:https://www.heesenyachts.com/news-even ts/super-yacht-sibelle-is-delivered/
[retrieved on 2017-01-13]

DESCRIPTION

[0001] The present application relates to a yacht, comprising a hull and a superstructure, with the hull defining a stern and a bow.

[0002] Such yachts are commonly known, wherein the bow may have, in side view, an upwardly reclining shape, as shown in figure 1, relative to a section of the bow with water at the waterline. This known embodiment of a yacht 1 comprises a hull 2, a superstructure 3 and a bow 4. As shown, the bow 4 is upwardly reclining from the waterline. As a consequence such yachts have a relatively long waterline L1, which is beneficial for a low sailing resistance, higher speeds, and lower fuel consumption. On the other hand, waves are known to easily roll onto the main deck on the hull or elsewhere. Interior space is decreased at the bow just under the deck.

[0003] Alternatively, yachts 5 as shown in figure 2 are commonly known, to have a hull 2 and a superstructure 3, where the hull defines a bow 6 in an upwardly protruding orientation, in side view. Then the waterline L2 is relatively shorter, but this inherent shape prevents waves from rolling onto the main deck too easily. Interior space is reduced at the waterline L2.

[0004] As a third prior art embodiment in figure 3, yachts 7 are can have a vertically oriented bow 8. All such prior art yachts exhibit in front view a V-shape, as indicated in figure 4.

[0005] Consumers in this market of normally high end yachts are always yearning for innovations. Their prize possession of a yacht should distinguish the owners over other yacht owners.

[0006] A yacht is acknowledged to be known from for example FR-2726804, of which the bow is recessed in side view. This is to say that the bow has - in side view - a shape, starting at the waterline, reclining upwardly backward into the hull of the ship, and then, progressing further upward, turning into a forward protruding orientation.

[0007] The yacht of the present disclosure further exhibits the feature that the hull comprises a stepped shoulder. Such a stepped shoulder contributes to synergetic limiting of amounts of spray coming off the lower part of the bow and waves rolling there over, which lower part of the bow is backward reclining, where such spray and waves would otherwise reach the deck. Moreover, the stepped shoulder contributes to an air and/or water flow away from the hull, and as a side consideration a more appealing, innovative and distinguishing appearance is provided. Additionally, relatively more interior space in the width of the hull is provided above the stepped shoulder, and below the main deck level, while the hull portion under the water line can have a slim width, reducing drag and water resistance when sailing.

[0008] In combination with the stepped shoulder in the hull the yacht of the present disclosure exhibits the further feature that the stepped shoulder defines an elongate overhang of a higher

portion of the hull relative to a lower portion of the hull. This is a relatively simple and elegant embodiment of the stepped shoulder, and highly effective to limit in particular additional spray and waves that can be attributed to the presence of the lower lying and reclining portion of recess of the bow.

[0009] Yachts according to the present disclosure may have many embodiments shapes and forms, some of which will be highlighted in the below description of preferred embodiments and in appended dependent claims. However, no features of any of the preferred embodiments are to be interpreted as limiting the scope of protection according to the appended independent claim, which scope should instead also include functional alternatives of defined features in the appended independent claim.

[0010] In a specific, non-limiting embodiment, the stepped shoulder in the hull the yacht of the present disclosure may exhibit the further feature that the stepped shoulder extends from the bow, essentially in the direction of the stern of the hull. The stepped shoulder does not need to extend all the way back to the stern, but the appearance resulting from this technical feature, if the stepped shoulder does extend all the way back to the stern, may be considered quite distinguishable for the yacht.

[0011] In such an embodiment with the stepped shoulder in the hull the yacht of the present disclosure may exhibit the alternative or further feature that the stepped shoulder extends across the bow and away from the bow on both sides of the hull. Then the portion of the stepped shoulder extending across the bow also contributes to limiting spray onto the deck, by down force as well as air and/or water turbulence in a downward orientation or at least away from the hull.

[0012] In a specific, non-limiting embodiment the yacht of the present disclosure may exhibit the feature of elongate protrusions on opposing outsides of the hull relative to the bow. These protrusions may contribute to down force on water that would otherwise splash up onto the deck. Additionally, such protrusions may contribute to an air and/or water turbulence turning water down or at least away from the hull.

[0013] In such an embodiment with protrusions the yacht of the present disclosure may exhibit the further feature that the elongate protrusions extend in an essentially horizontal orientation. Thereby a maximisation of the effect turning water down or away from the hull.

[0014] In such an embodiment with protrusions the yacht of the present disclosure may exhibit the further feature that the elongate protrusions extend from a distance behind the bow, at least towards the bow. Preferably, then, a pair of protrusions on opposing sides of the hull are joint at the bow to define a single protrusion across the bow.

[0015] In such an embodiment with protrusions the yacht of the present disclosure may exhibit the further feature that two or more strip shaped protrusions are arranged on one side of the hull. Preferably, then, the two or more strip shaped protrusions are arranged on the side of the

hull at distinct level above a waterline extending along the hull.

[0016] In such an embodiment with protrusions the yacht of the present disclosure may exhibit the further feature that the elongate protrusions are essentially half-tubular in cross section.

[0017] Below, aspects of embodiments of the present disclosure are described in relation to the appended non-limiting drawing. It is again emphasized that the embodiment drawing and description are by no means limiting on the scope of protection of the present disclosure. The drawing comprises a plurality of figures, in which elements, components and/or functional aspects of distinct embodiments may be indicated using the same reference numbers, regardless of other differences amongst the distinct embodiments. In the drawing:

Figures 1 - 4 exhibit schematic representations of prior art yachts;

Figure 5 shows a schematic side view of a yacht and in particular a bow thereof, according to the present disclosure;

Figure 6 shows a schematic perspective view of a yacht and in particular a bow thereof, according to the present disclosure;

Figure 7 shows a frontal view of a yacht according to the present disclosure along arrow VII in figure 6;

Figure 8 shows a more detailed side view of a part of the bow in figure 7 along arrow VIII;

Figure 9 shows a cross sectional view of a protrusion in figure 8 along arrows IX-IX; and

Figure 10 shows a worked open view along arrow X in figure 8.

[0018] Figure 5 shows in side view a part of a yacht 10, comprising a hull 2 and a superstructure 3. The hull 2 has a bow 11. The hull 2 defines a bow 11 and a stern 12. The bow 11 exhibits a recess 13 in side view relative to the yacht 10. This is to say that the bow 11 has a shape, starting at the waterline 15, reclining upwardly backward into the hull of the ship at bow portion 14, and then, progressing further upward, turning into a forward protruding orientation at bow portion 16.

[0019] The hull 2 comprises, in the shown embodiment of figures 5, 6, and 7 a stepped shoulder 17. The stepped shoulder 17 defines an elongate overhang.

[0020] The stepped shoulder 17 extends from the bow 11, essentially in the direction of the stern 12 of the hull 2.

[0021] The stepped shoulder 17 extends across the bow at stepped shoulder portion 18 and on both sides 19, 20 of the hull 2.

[0022] In addition to and/or as an alternative for the stepped shoulder 17, the yacht 10 according to the present disclosure may further comprise elongate protrusions 21, 22, 23, 24 on opposing outsides of the hull 2 relative to the bow. The elongate protrusions 21 - 24 extend in an essentially horizontal orientation. The elongate protrusions 21 - 24 extend from a distance behind the bow, at least towards the bow. All protrusions may extend across the bow 11. In the shown embodiment of figure 6, 7, only an uppermost protrusion 21 extends across the bow 11. Other protrusions 22 - 24 do not extend across the bow 11, but extend only from a distance behind the bow 11 towards the bow 11 to terminate at a distance from the actual bow 11.

[0023] To form the uppermost protrusion 21, protrusions on opposing sides of the hull 2 are joint at the bow 11 to define a single protrusion across the bow 11.

[0024] As evident from figures 6, 7 and 8, two or more strip shaped protrusions 21 - 24 are arranged on one side of the hull 2. The two or more strip shaped protrusions 21 - 24 are arranged on at least one side of the hull at distinct levels above a waterline 15 extending along the hull 2.

[0025] Figure 9 shows that elongate protrusions 21 - 24 may be arranged on the hull 2 and could be essentially half-tubular in cross section.

[0026] Figure 10 shows a worked open view along arrow X in figure 8. Therein the protrusion is shown to be formed by a solid piece 25, which may be welded, glued or otherwise adhered to the hull 2. The hull 2 is also shown to comprise a finish layer 26. The solid piece 25 defines an attachment for the half-tubular protrusion 21-24. The half-tubular protrusions 21-24 may be adapted to the slope of the hull 2, and consequently deviate from being precisely half-tubular. The half-tubular protrusions 21 - 24 may be welded, glued or otherwise adhered to the hull 2 and/or to the solid connecting piece 25.

[0027] It is noted that many additional and/or alternative embodiments than the ones described above and shown in the appended drawing are within the scope of protection of the appended independent claim, including alternatives for specifically defined features in the appended independent claim. Such additional and/or alternative embodiments are all considered to be comprised in the scope of the appended independent claim.

REFERENCES CITED IN THE DESCRIPTION

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Patent documents cited in the description

- FR2726804 [0006]

Patentkrav

1. En yacht (10), der omfatter et skrog (2) og en overstruktur (3), hvor skroget (2)
 5 definerer en agterstavn (12) og en forstavn (11), hvor forstavnen (11) i
 sidevisningen omfatter en fordybning (13), der er defineret af en form, der starter
 ved vandlinjen (15), liggende opadgående og bagud ind i skibets skrog og
 fortsætter derefter længere opad, hvor den skifter til at gå i en fremad
 fremspringende retning (16),
 10 hvori skroget omfatter en trindelt ansats (17), der definerer et aflangt udhæng af
 en højere del af skroget i forhold til en lavere del af skroget, strækkende sig fra
 forstavnen (11) hovedsageligt i retning af bagstavnen (12) af skroget.

KENDETEGNET VED, AT

den trindelte ansats (17) strækker sig fra en mest fordybet del (13) af forstavnen
 15 (11), hvor den opadgående bagudgående form (14), der løber ind i skibets skrog,
 skifter til at gå i en fremad fremspringende retning (16).

2. Yachten i henhold til krav 1, hvori den trindelte ansats strækker sig tværs over
 forstavnen ved den mest fordybede del af forstavnen i sidevisningen og væk fra
 20 forstavnen på begge sider af skroget.
3. Yachten i henhold til krav 1 eller 2, som desuden omfatter aflange fremspring på
 modsatte ydersider af skroget i forhold til forstavnen.
- 25 4. Yachten i henhold til krav 3, hvori de aflange fremspring strækker sig i
 hovedsageligt i en grundlæggende vandret retning.
5. Yachten i henhold til krav 3 eller 4, hvori de aflange fremspring strækker sig fra
 en afstand bag forstavnen, mindst fremad mod forstavnen.

6. Yachten i henhold til krav 5, hvori et par fremspring på modsatte sider af skroget forenes ved forstavnen for at definere et enkelt fremspring tværs over forstavnen.

5 7. Yachten i henhold til ethvert eller mere end én af de forrige krav 3 - 6, hvori to eller flere stribeformede fremspring er arrangeret på én side af skroget.

8. Yachten i henhold til krav 7, hvori de to eller flere stribeformede fremspring er arrangeret på siden af skroget ved et niveau klart over en vandlinje, der strækker sig langs skroget.

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9. Yachten i henhold til ethvert eller mere end ét af de forrige krav 3 - 8, hvori de aflange fremspring hovedsageligt er halvt rørformede i tværsnit.

DRAWINGS

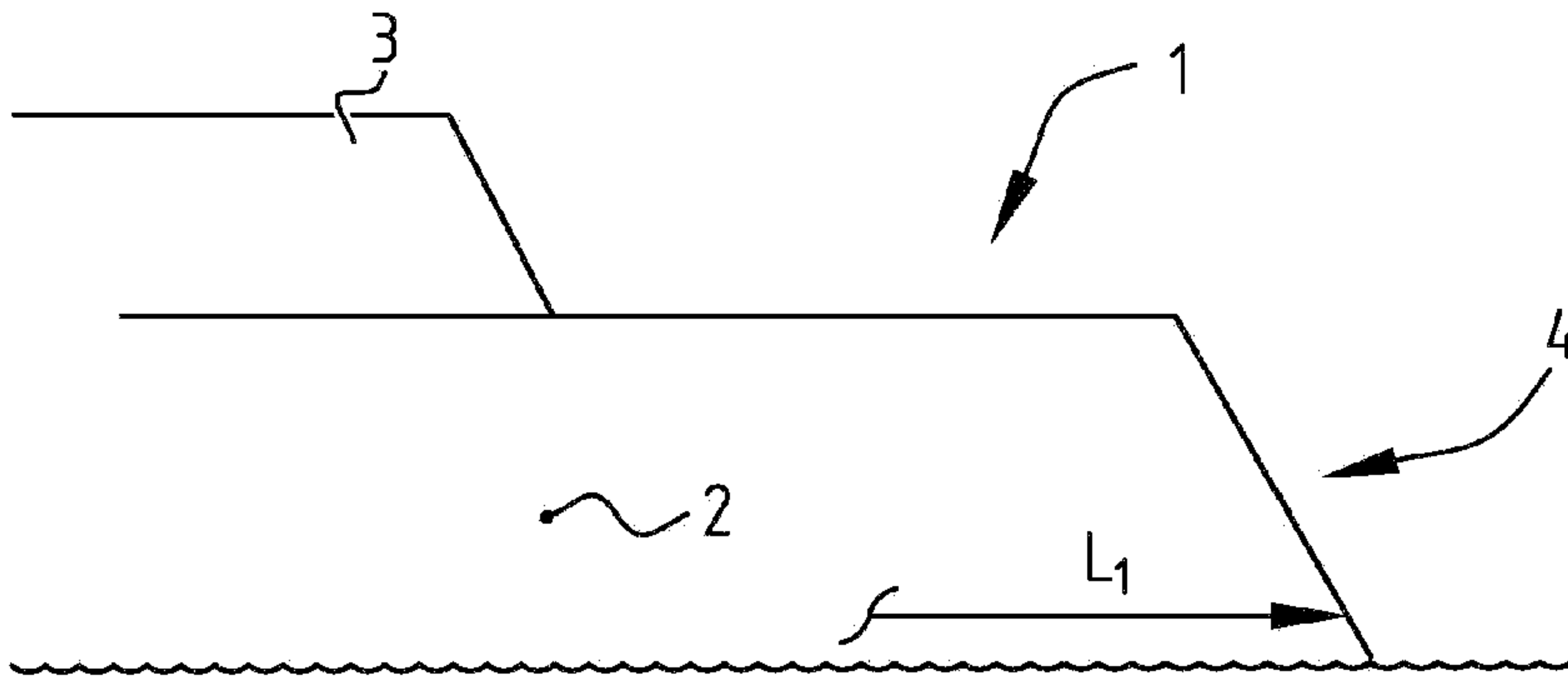


FIG. 1

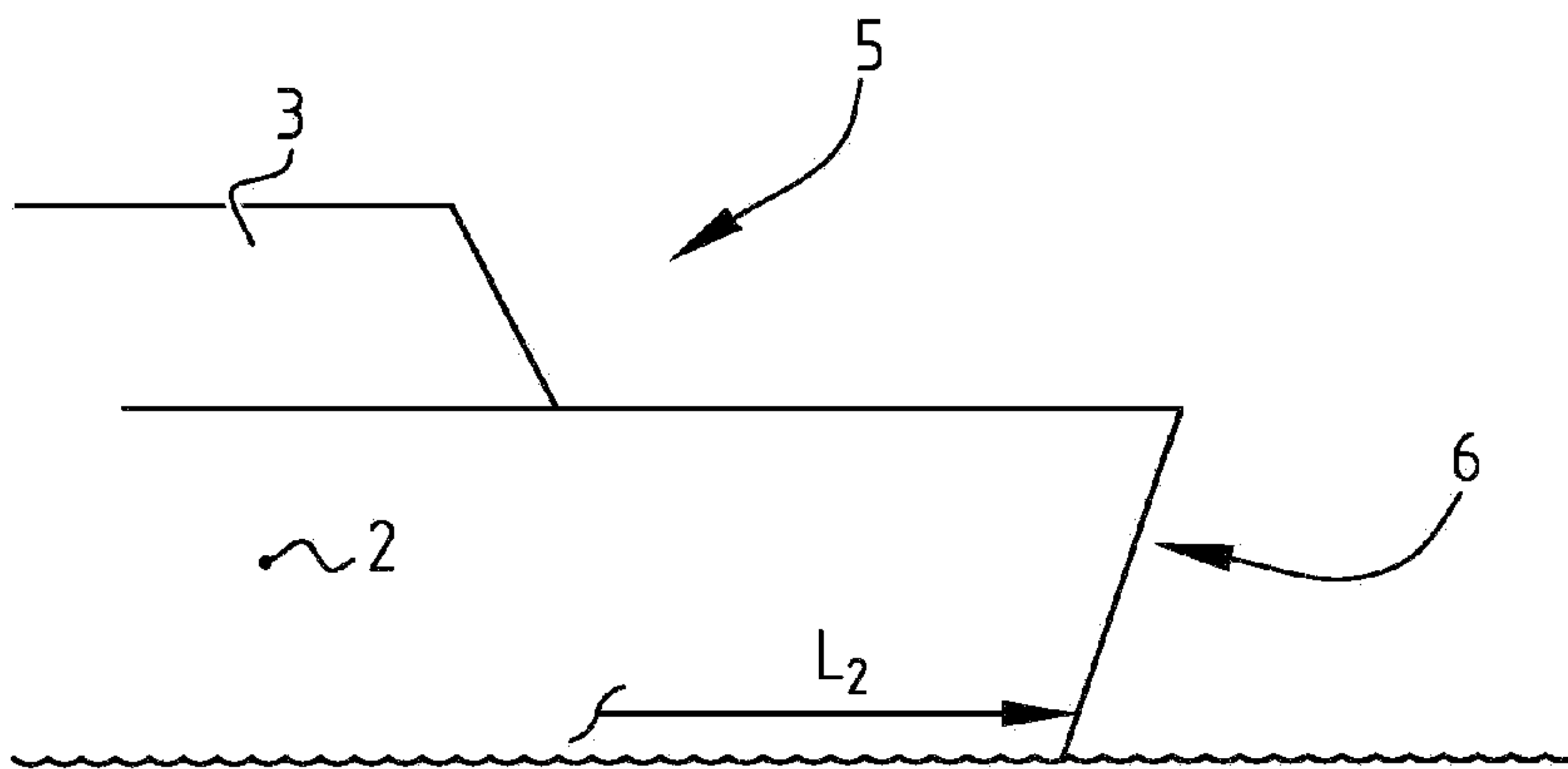


FIG. 2

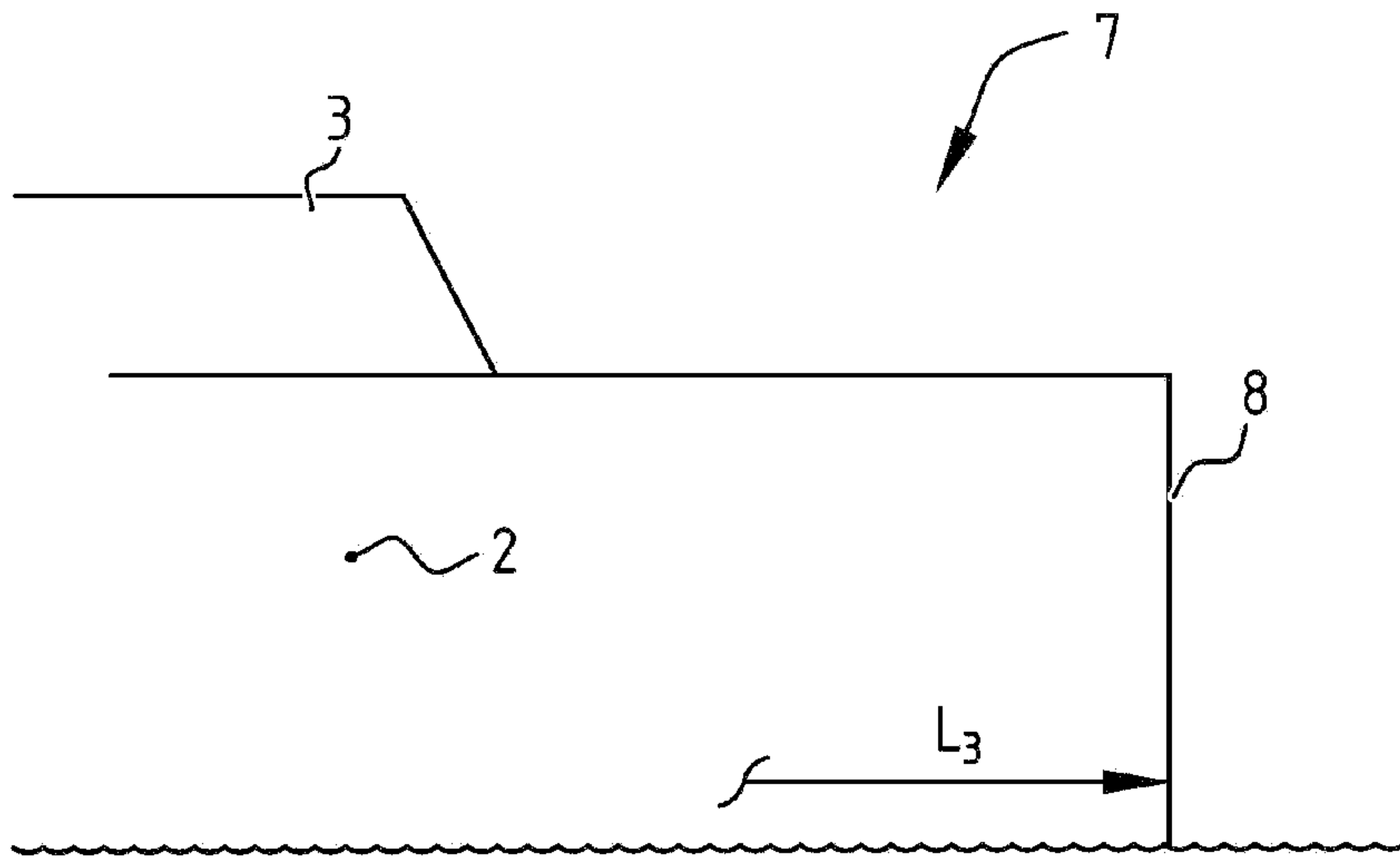


FIG. 3

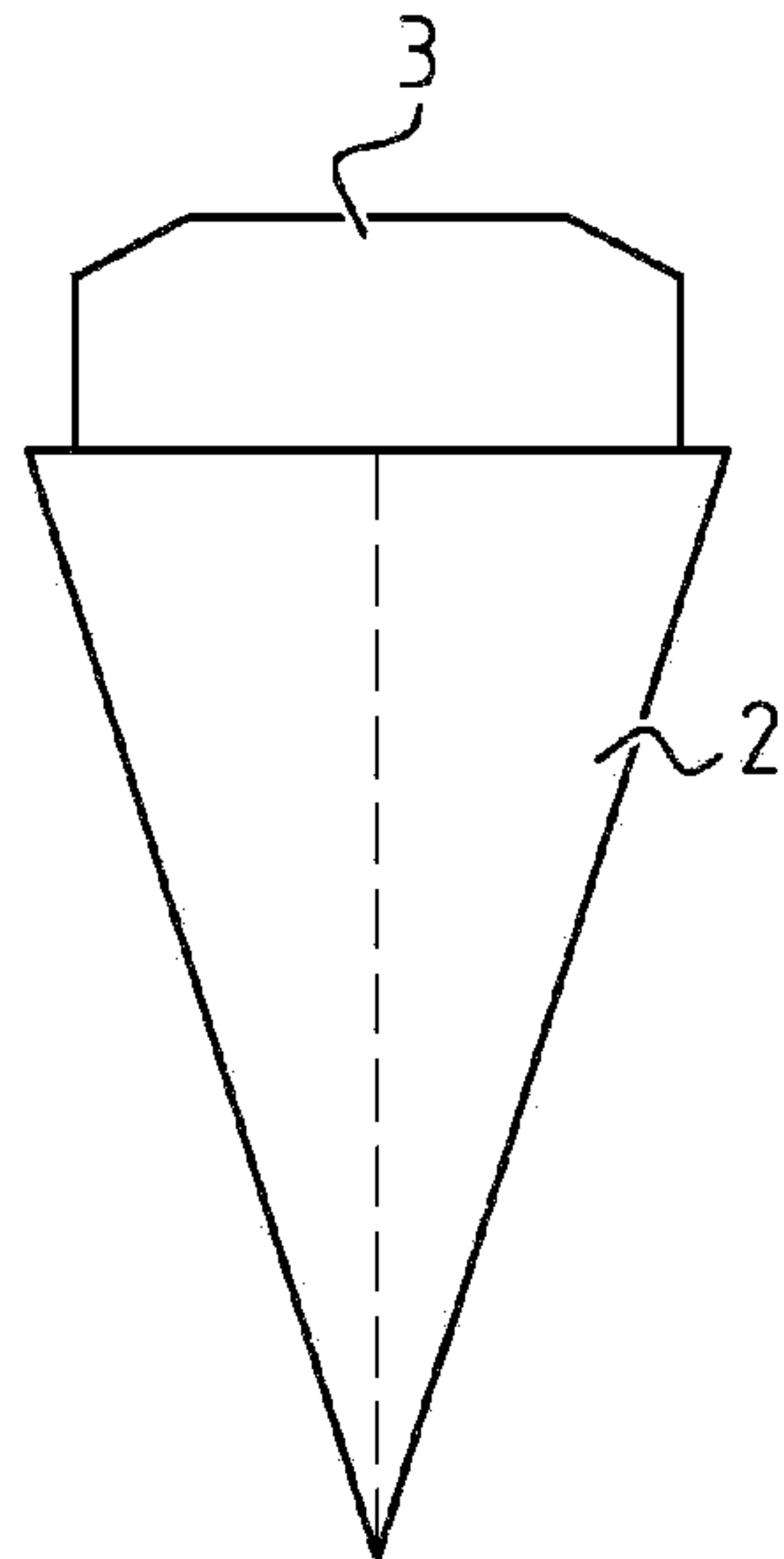
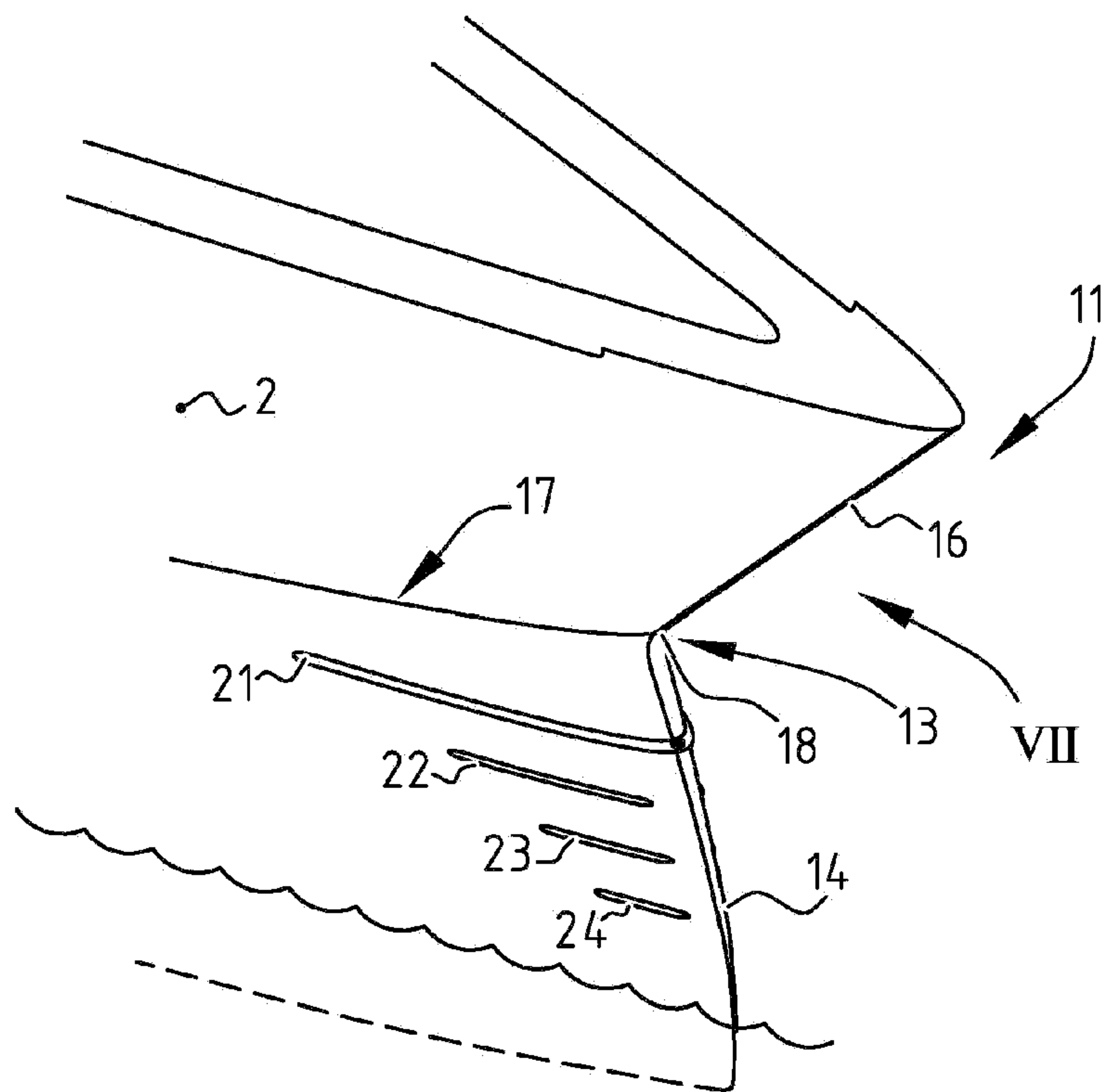
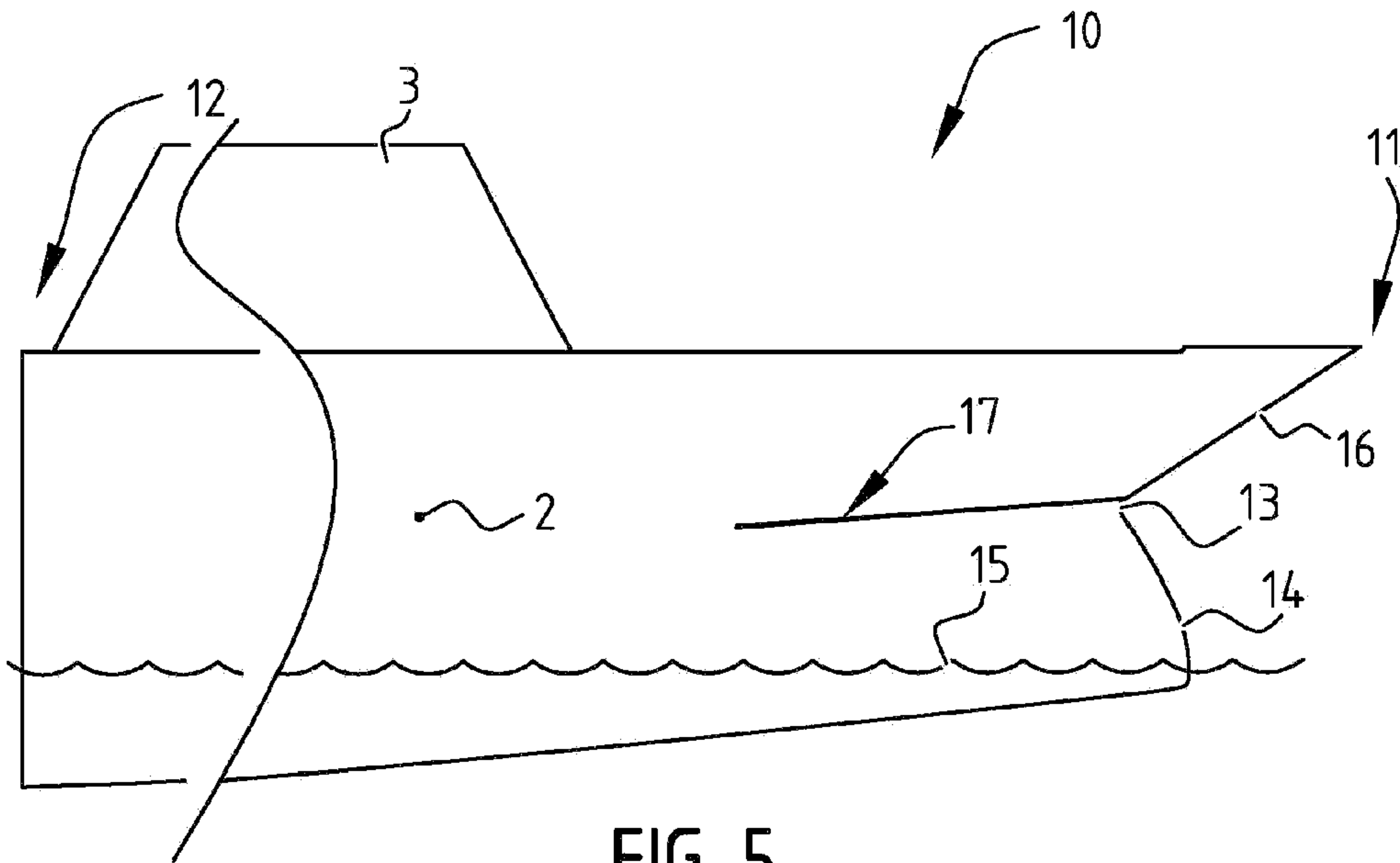


FIG. 4



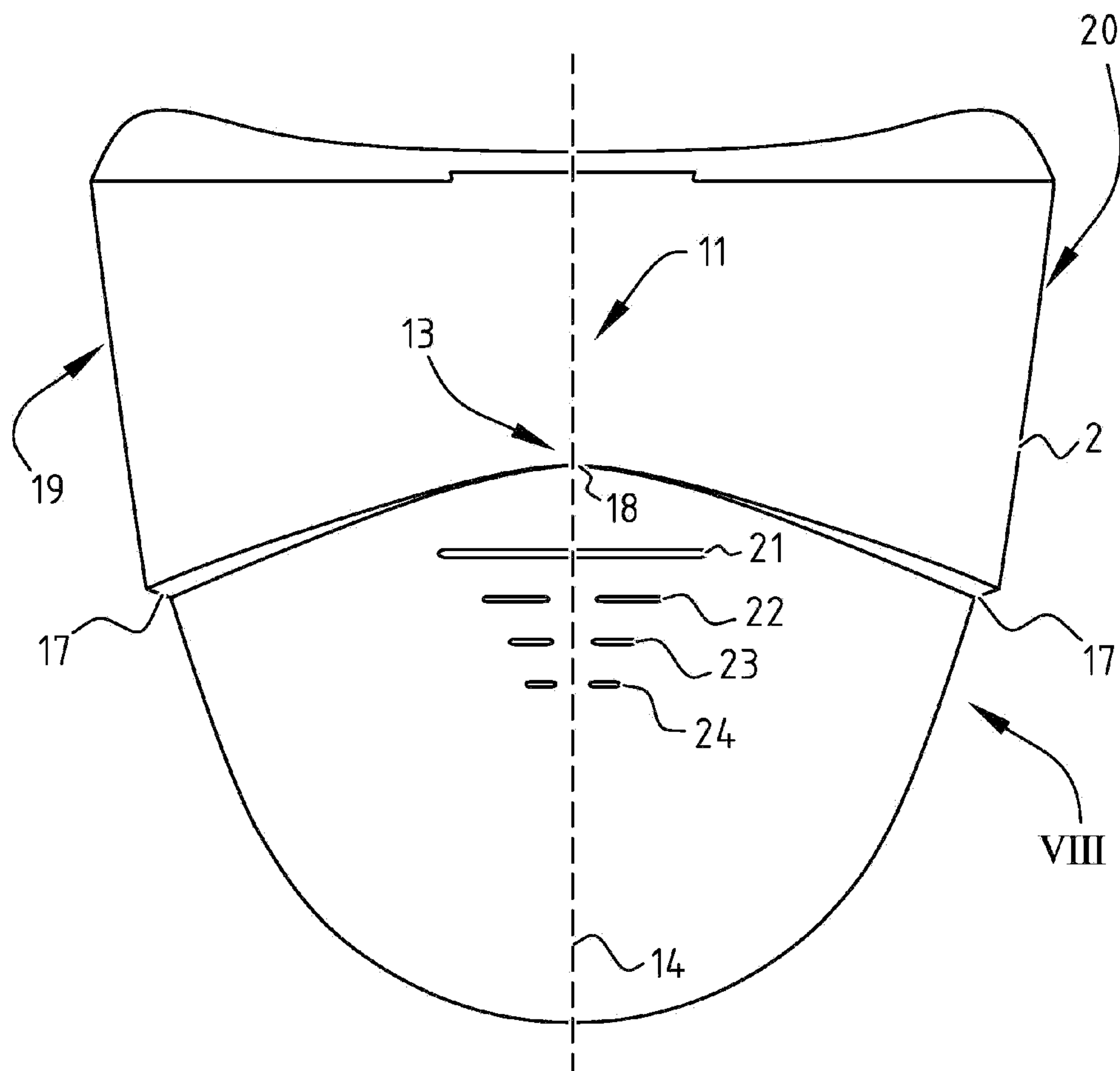


FIG. 7

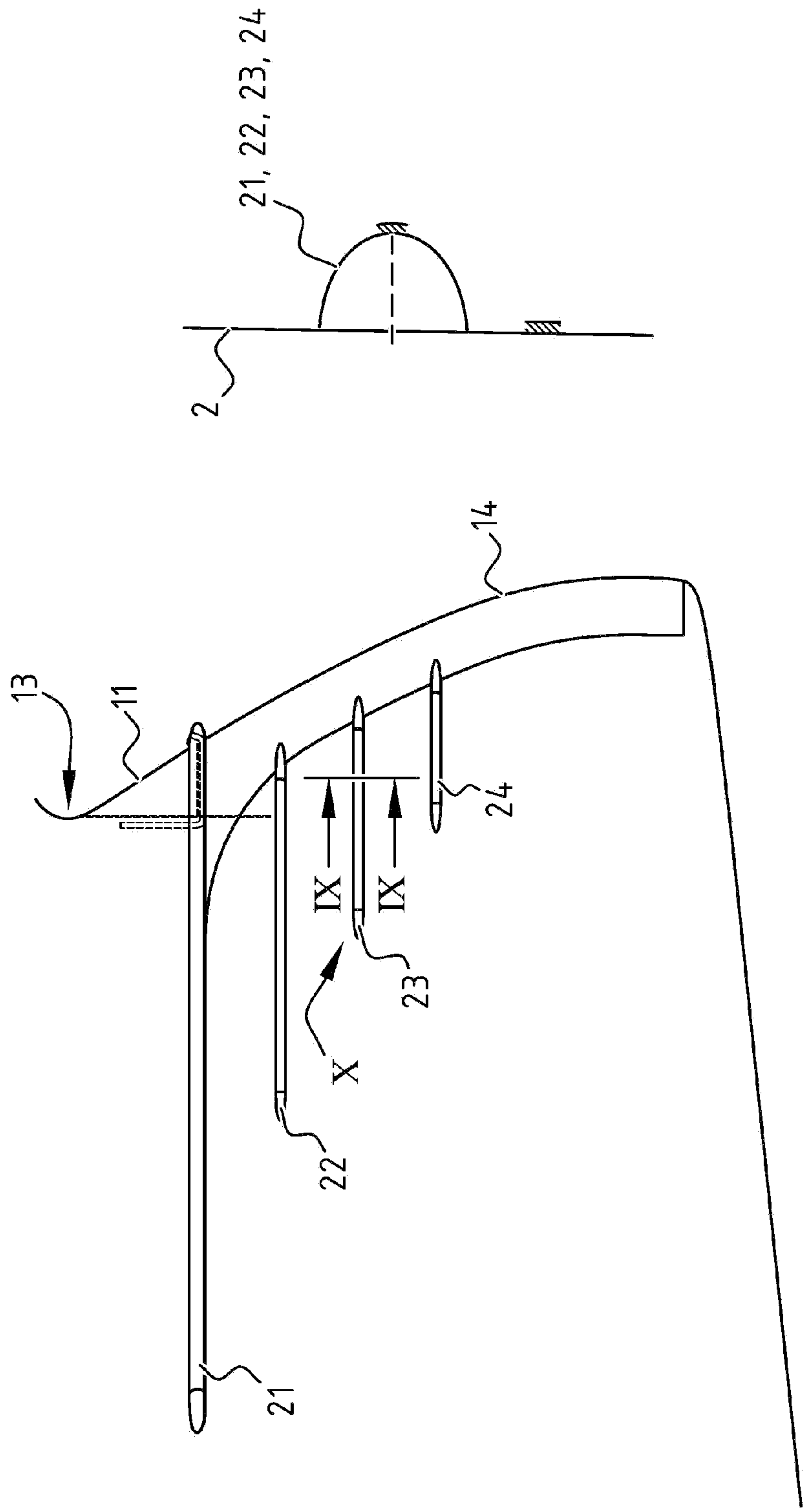


FIG. 8

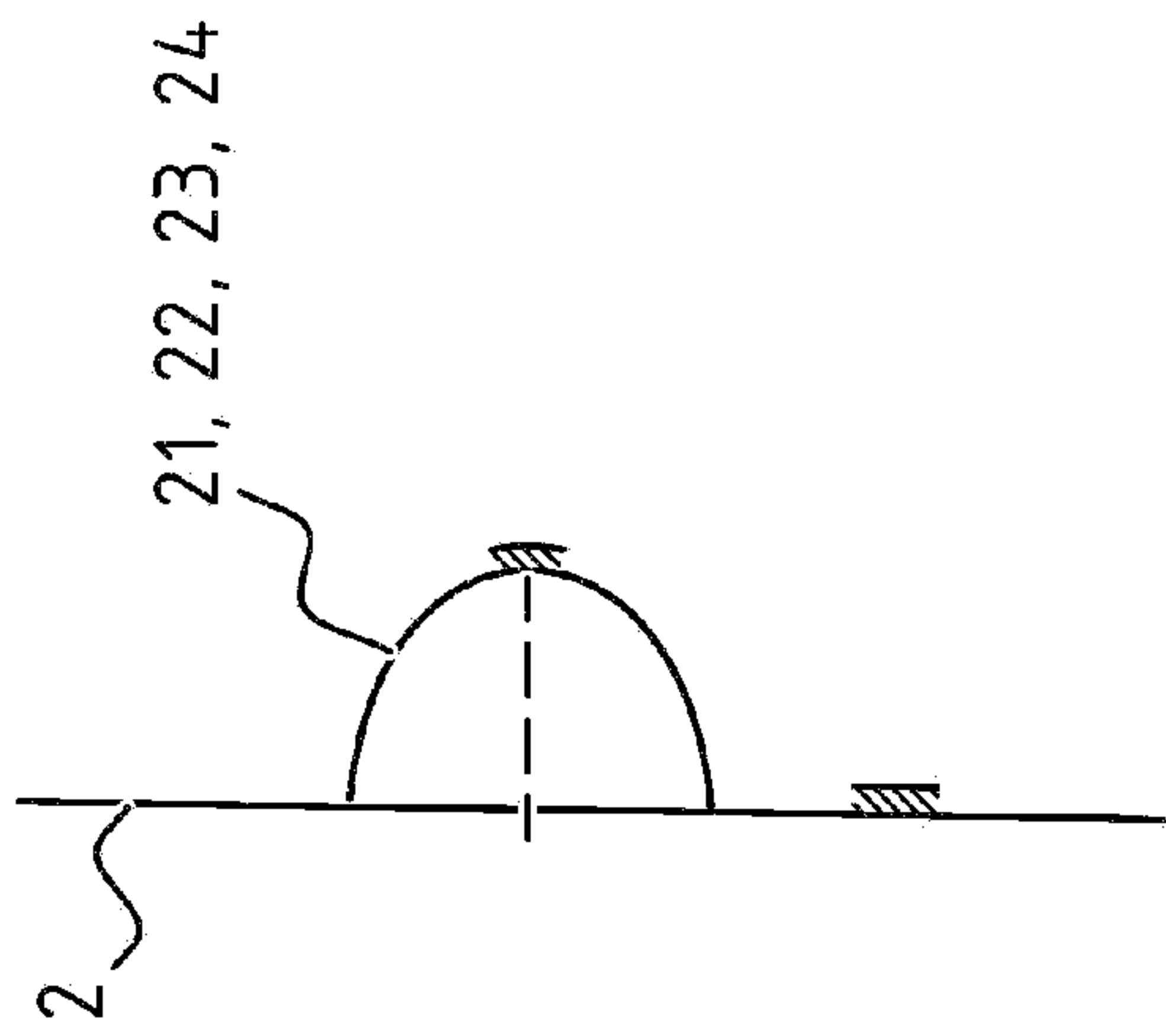


FIG. 9

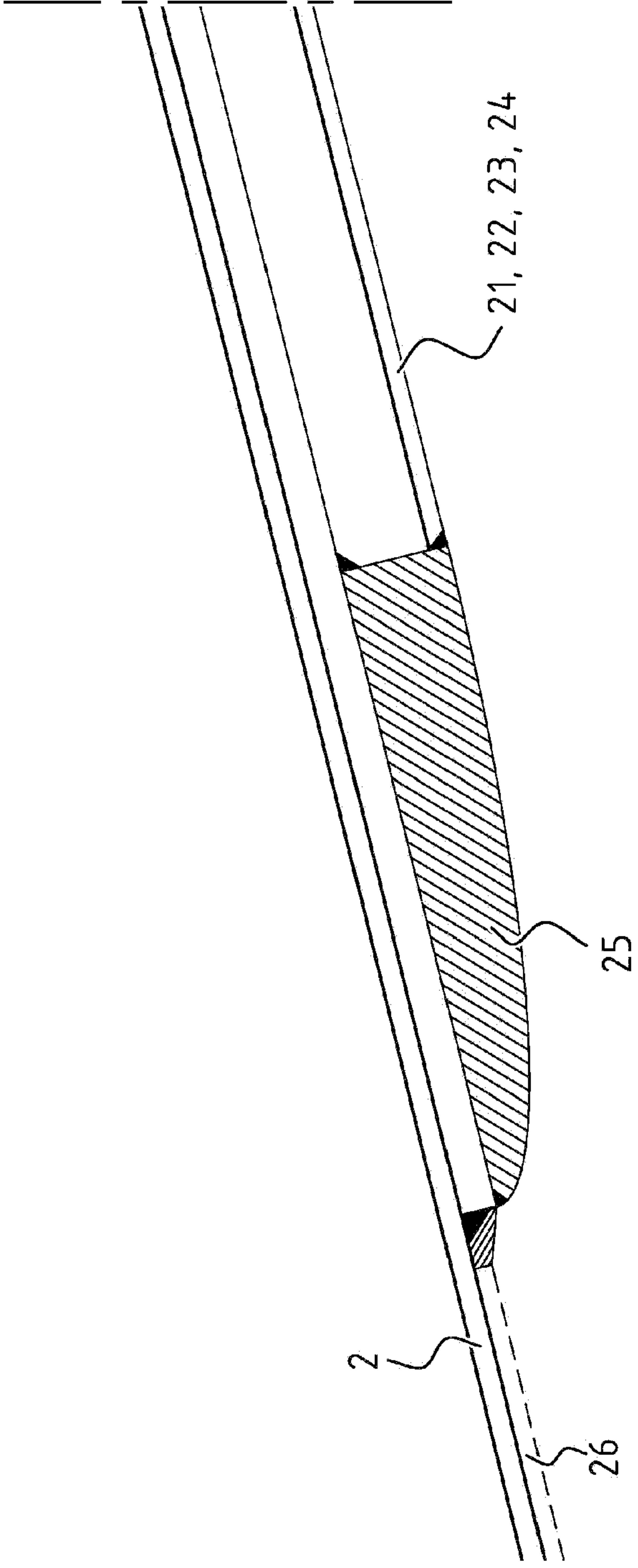


FIG. 10