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(54) **Shower base**

(57) A shower base (1) is provided, which consists of inflatable sanitary equipment defining a main plane (1a) and a longitudinal axis (1b) and comprising side edges (2) which are skewed with respect to the main plane (1a), a supporting surface (3) parallel to the main plane (1a), contained within the side edges (2) and comprising a plurality of inner chambers (30), wherein the inner chambers (30) comprise at least a first valve (31), each of the pneumatic type and adapted to regulate the passage of air between the inner chamber (30) and the outside, wherein the shower base (1) comprises at least a second valve (4) adapted to regulate the passage of fluid between the supporting surface (3) and the outside, wherein the inner chambers (30) extend along the supporting surface (3) so as to vary the inclination of the supporting surface (30) in a continuous manner along the longitudinal direction (1b) and to channel a fluid along a second plane (3a) which is skewed with respect to the main plane (1a) defined by the supporting surface (3), wherein the supporting surface (3) comprises a plurality of channels (31) extending along the second plane (3a) along the longitudinal direction (1b) on the supporting surface (3) and each connected to a drain hole (32) arranged at the straight line defined by the incidence of the planes (1a,3a), and wherein the drain holes (32) are in fluidic through connection with the second valve (4).

Fig. 1a

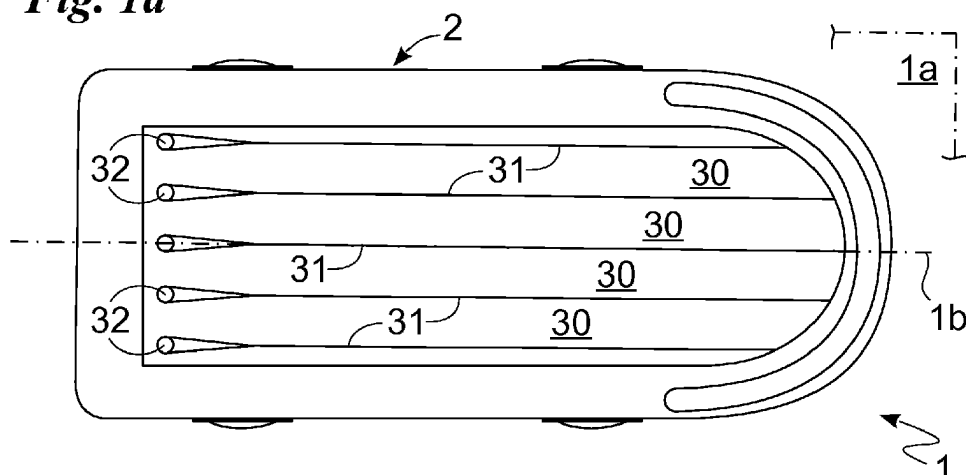


Fig. 1b

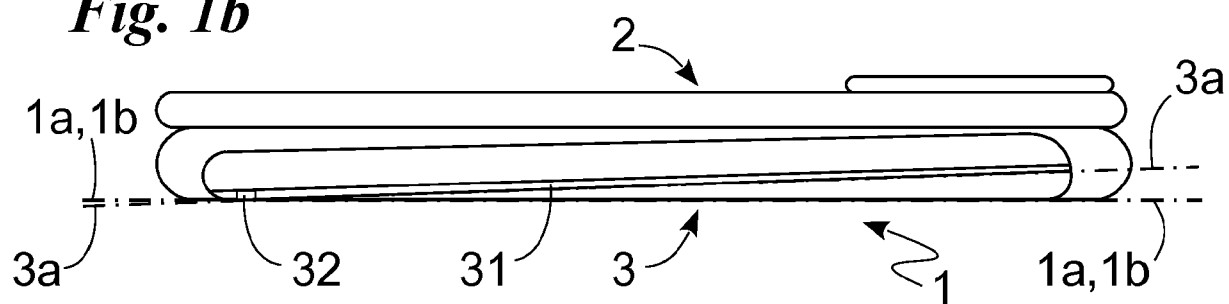


Fig. 2

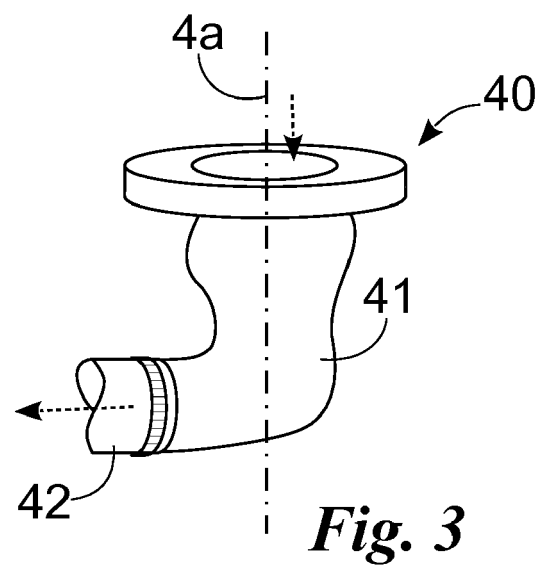
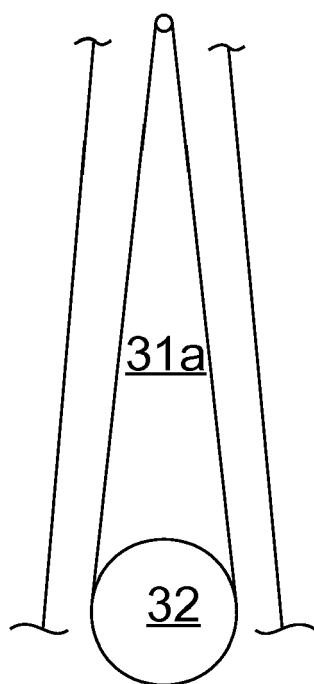


Fig. 3

Description

[0001] The present invention relates to a shower base of the type specified in the preamble of the first claim.

[0002] A device having the same purpose, but different characteristics, is described in patent application JP-A-000H06292696.

[0003] As is known, the washing of hospitalized patients or elderly or other subjects affected by physical disablement or disability is difficult and requires authorized or trained personnel.

[0004] An example of the complexity of this activity is given by the procedures that are implemented in hospitals.

[0005] In detail, a nurse must be generally provided with a double-decker trolley, a bedside table, personal towels, a bath towel, liquid neutral soap, disposable mittens, a basin, three jugs, a thermometer, two bedpans, a urinal, an incontinence pad if necessary, a kidney dish, saline, plasters, ether, vaseline oil, for example, if the person has a nasogastric tube, and what is needed for manicure and pedicure.

[0006] At least a receptacle for waste from the dirty laundry and disposable gloves must also be added to the above list.

[0007] If shaving is also provided, it is essential to have a brush, shaving lather, disposable razor blades and various containers.

[0008] It is also essential to use a screen to ensure patient privacy if there is more than one inpatient.

[0009] The operators in charge must then position the screen and place a clean chair at the end of the bed.

[0010] In order to position the patient, it is generally possible to lower the bed to a suitable height that provides good operativeness and then lower the head of the bed, if it is raised, the patient's health conditions permitting.

[0011] It is also necessary to remove the sheets from the end and the whole upper linen, remove the bedspread and blanket separately folding them and putting them on the chair if they can be reused; when it is appropriate, it is useful to place the bedside table in front of the patient so as to allow both the patient and the operator to proceed smoothly.

[0012] Before washing, it is therefore necessary to prepare warm water in a basin that is positioned on the table, place the towel on the chest above the top sheet, moisten a mitten to wash the patient's face by moving from the forehead, cheeks, chin, face and eyes.

[0013] The described prior art has a few major drawbacks.

[0014] In particular, an operator is forced to perform a multitude of activities with a plurality of specific instruments that increase the difficulty and time for washing a patient.

[0015] In addition, the washing is generally carried out in bed and, therefore, due to partial washing or human error, bacterial proliferation can occur with consequent increase in the chance of infection.

[0016] A further drawback is that for any other equipment, such as the known equipment in hospital baths, to be reached, the patient must be moved.

[0017] Lastly, the washings conceived at the current state of the art may be uncomfortable and cause injury to patients during washing.

[0018] In this context, the technical task underlying the present invention is to devise a shower base, which is capable of substantially obviating at least some of the above-mentioned drawbacks.

[0019] Within the scope of said technical task, a major object of the invention is to obtain a shower base, which is capable of reducing the number of instruments and actions an operator must perform to wash a patient.

[0020] Another important object of the invention is to provide a shower base, which is simplified and easily movable and usable by a patient.

[0021] In conclusion, a further aim of the invention is to provide a shower base that reduces or eliminates any injury to a patient during the washing step and cuts down proliferation of the bacterial flora.

[0022] The technical task and the specified objects are achieved by means of a shower base as claimed in the appended claim 1. Preferred embodiments are described in the dependent claims.

[0023] The features and advantages of the invention will be apparent from the detailed description of preferred embodiments of the invention, with reference to the accompanying drawings, in which:

Fig. 1a shows a top view of a shower base according to the invention;

Fig. 1b is a sectional side view of a shower base according to the invention;

Fig. 2 is a detail of the drain holes of a shower base according to the invention;

Fig. 3 shows a drain valve of a shower base according to the invention;

Fig. 4a shows a sectional rear view of a shower base according to the invention;

Fig. 4b shows a sectional front view of a shower base according to the invention;

Fig. 5a shows the stretching system of a shower base according to the invention, with the shower base in the closed configuration;

Fig. 5b shows the stretching system of a shower base according to the invention, with the shower base in the open configuration;

Fig. 6 is a top view of a covering surface of a shower base according to the invention;

Fig. 7 shows a third drain valve of a covering surface according to the invention;

Fig. 8 is a side view of the water collector for the shower base included in the washing kit;

Fig. 9 is a two-way water pipe included in the washing kit;

Fig. 10 represents washing means included in the washing kit; and

Fig. 11 shows a hot and cold water mixer included in the washing kit.

[0024] In the present document, the measures, values, shapes and geometric references (such as perpendicularity and parallelism), when associated with terms like "about" or other similar terms such as "almost" or "substantially", are to be understood as unless measurement errors or inaccuracies due to production and/or manufacturing defects and, especially, unless a slight difference from the value, measure, shape, or geometric reference with which it is associated. For example, these terms, if associated with a value, preferably indicate a difference not exceeding 10% of the value itself.

[0025] Furthermore, when used, terms such as "first", "second", "higher", "lower", "main" and "secondary" do not necessarily identify an order, a priority relationship or a relative position, but can simply be used to distinguish more clearly the different components from each other.

[0026] The measurements and the data reported in this text are to be considered, unless otherwise indicated, as carried out in the International Standard Atmosphere ICAO (ISO 2533).

[0027] With reference to the Figures, the shower base according to the invention is indicated as a whole with number **1**.

[0028] The shower base **1** preferably comprises inflatable sanitary equipment, i.e. it substantially comprises a small bed comprising at least one inflatable surface adapted to support users mainly during their washing by healthcare professionals.

[0029] The shower base **1** defines a main plane **1a** and a longitudinal axis **1b**.

[0030] The main plane **1a** is preferably defined by the plane on which the shower base **1** rests. Therefore, it corresponds to the bottom of the shower base **1**.

[0031] The longitudinal axis is preferably defined by the direction of greatest extension of the shower base **1**.

[0032] Preferably, it coincides with the direction along which the users who use the shower base lie and therefore coincides with the axis along which the users lie.

[0033] The shower base **1** also comprises side edges **2** and a supporting surface **3**.

[0034] The side edges **2** preferably comprise chambers adapted to contain air, and therefore may comprise at least one valve for introducing and removing air therein/therefrom.

[0035] The side edges **2** may thus be in one piece or may comprise a plurality of different portions and chambers.

[0036] They may be on two different levels and comprise portions **3** used as a headrest for a user, or the like.

[0037] The side edges **2** also preferably comprise grip handles designed to allow easy gripping of the shower base **1** by a user.

[0038] The side edges **2** are preferably arranged along the entire perimeter of the supporting surface **3** and are

therefore designed to surround and delimit the supporting surface **3**.

[0039] Therefore, the side edges **2** substantially form a frame. This frame may have a height of 30 cm and, if a headrest is present, areas with a height of 35 cm. However, these dimensions are solely illustrative and not limitative.

[0040] The materials of the side edges **2**, as well as of the supporting surface **3** and of the parts composing them may also be of different types.

[0041] Preferably, they are made of PVC or vinyl, but rubber or other materials could also be used.

[0042] Therefore, the supporting surface **3** is preferably contained within the side edges **2**. It is contained on the inside along the main plane **1a**. Moreover, the supporting surface **3** is preferably at least partially parallel to the main plane **1a**. Typically, it is parallel to the main plane **1a** at the bottom of the supporting surface **3** forming part of the bottom of the internal shower base **1**.

[0043] The supporting surface **3** may comprise any material and preferably comprises a PVC sheet in the lower portion, i.e. at the bottom, designed to come into contact with an external supporting surface, such as for example a common bed, an operating room table or other medical devices.

[0044] The supporting surface **3** comprises a plurality of inner chambers **30**.

[0045] These inner chambers **30** may be separate from each other or in one piece and divided and separately distinguishable only by their shapes.

[0046] Preferably, the inner chambers comprise a first valve **36**.

[0047] The first valve **36** is, for example, a valve of a known type occurring in beach airbeds.

[0048] In general, the first valve **36** is preferably of the pneumatic type and adapted to regulate the passage of air between the inner chamber **30** and the outside.

[0049] As said, the inner chambers **30** may be in fluidic through connection and, therefore, may all be connected to a single first valve **36**.

[0050] Alternatively, each inner chamber **30** can have its own first valve **36** separately.

[0051] The first valve **36**, as well as the possible valve on the side edges **2**, are preferably adapted to ensure air flow rates of 100-115 Kg to the shower base **1**.

[0052] The inner chambers **30** preferably extend along the supporting surface **3** so as to vary the inclination of at least part of the supporting surface **3** in a continuous manner along the longitudinal direction **1b**.

[0053] In particular, the inner chambers **30** allow a fluid to be channelled along a second plane **3a**, which is skewed with respect to the main plane **1a** defined by the supporting surface **3**.

[0054] The second plane **3a** is thus a plane incident to the main plane **1a**.

[0055] More specifically, the supporting surface **3** comprises a plurality of channels **31** extending along the longitudinal direction **1b** on the supporting surface **3**.

[0056] Preferably, the channels 31 are grooves defined along the supporting surface 3 and adapted to channel a fluid into a predetermined portion.

[0057] These grooves can have, for example, a depth of 2 cm, but could have different depths and inclinations.

[0058] Preferably, the channels 31 are each connected to a drain hole 32.

[0059] The drain hole 32 is preferably a through cavity arranged along the channels 31 and, in particular, preferably arranged along the straight line defined by the incidence of the planes 1a,3a.

[0060] All drain holes 32 are preferably aligned along said incident straight line.

[0061] In a preferred configuration, the inner chambers 30 extend side by side along the longitudinal axis 1b and each have sections perpendicular to the longitudinal axis 1b so as to provide a plane parallel to the second plane 3a and inclined with respect to the main plane 1a.

[0062] This last sentence means that the inner chambers 30, once inflated, provide a support portion for the user, which is substantially inclined.

[0063] In fact, the inner chambers can be, for example, cylindrical and may have variable sections with increasing diameters starting from the area defined by the drain holes 32.

[0064] Preferably, the drain holes 32 are located in an area where the supporting surface 3 has a lower thickness with respect to the most distant thicker area.

[0065] For example, the supporting surface may have a thickness adapted to pass in a continuous manner from 7 cm in the area of the drain holes 32 to 14 cm in the most distant area.

[0066] Typically, the area of the holes is the area designed to accommodate the feet of a user, while the distant area is designed to accommodate the head.

[0067] Moreover, considering the preferred configuration, the channels 31 are grooves defined by the space comprised between the adjacent inner chambers 30. Alternatively, however, the inner chambers 30 may have a constant section and the fluid may be channelled only by the channels 31.

[0068] In this case, the inner chambers 30 would only allow variation of the inclination of the portion of space comprised between two inner chambers 30, i.e. the channels 31 would be portions of space extending over the second plane 3a between two adjacent inner chambers 30 and defining a plane parallel, at the surface, to the main plane 1a.

[0069] Furthermore, in the area of the drain holes 32, the channels 31 preferably comprise a diverging portion 31a.

[0070] The diverging portion 31a is a channel part occurring in the area of the drain holes 32 diverging into the second plane 3a so as to create fluid collection basins at the drain holes 32.

[0071] Preferably, the shower base 1 also comprises a second valve 4.

[0072] The second valve 4 is preferably in fluidic

through connection with the supporting surface 3.

[0073] It may be of any type and is suitable to allow a fluid to be discharged in a controlled manner from its interior.

[0074] For example, the second valve 4 can be a tap. In addition, it can be an independent valve adapted to allow the fluid to be delivered to external containers, or it may be connected to a house drain of a known type.

[0075] Preferably, each drain hole 32 is in fluidic through connection with the second valve 4.

[0076] Preferably, each drain hole 32 is adapted to be arranged in fluidic through connection with the second valve via discharge means 40.

[0077] The discharge means 40 are preferably adapted to convey the fluid to the same valve 40.

[0078] In particular, they comprise, for each drain hole 32, at least one connector 41 and a discharge pipe 42.

[0079] Preferably, the connector 41 is non-deformable. This deformation is neither elastically nor plastically allowed.

[0080] The connector 41 is therefore substantially a siphon suitable for collecting fluid.

[0081] Moreover, the connector 41 is preferably shaped complementarily to a respective drain hole 32.

In this way, the connector 41 can be coupled firmly to the drain hole 32 so as to allow a fluid to flow therein.

[0082] Preferably, moreover, the connector 41 is adapted to convey the fluid into the drain holes 32 along a discharge direction 4a.

[0083] The discharge direction 4a is preferably perpendicular to the main plane 1a. This allows the fluid to flow by gravity into the discharge means 40.

[0084] However, the discharge direction 4a can be changed once the fluid is beyond the supporting surface 3 and the area of the drain holes 32.

[0085] Preferably, indeed, the connectors 41 are substantially L-shaped so as to direct the fluid along the discharge direction 4a perpendicular to the main plane 1a when the fluid is in the area of the drain holes 32 and is passing the supporting surface 3, and parallel to the main plane 1a when the fluid is beyond the supporting surface 3.

[0086] However, simple solutions may be provided in which a rigid, cylindrical sleeve is arranged inside the drain holes and the discharge direction 4a is again perpendicular to the main plane 1a.

[0087] The discharge pipe 42 is preferably elastically deformable. In addition, it connects the connector 41 and the second valve 4.

[0088] In addition to the above, the supporting surface 3 may also comprise a single portion, or it may be divided into a plurality of portions.

[0089] It can comprise a first portion 34, a second portion 35 and an auxiliary portion 33.

[0090] In particular, each of the portions 34,35,33 may comprise inner chambers 30 and may have the characteristics of the supporting surface 3 as previously described, i.e. the inner chambers 30 may be in fluidic

through connection or separate and preferably extend along the longitudinal axis 1b and be arranged side by side so as to form the grooves forming the channels 31.

[0091] Preferably, the auxiliary portion 33 is designed to separate the supporting surface 3 into the first portion 34 and the second portion 35.

[0092] Furthermore, the auxiliary portion 33 may define two different configurations of the shower base 1: an open configuration and a closed configuration.

[0093] In particular, in the closed configuration, the first portion 34 and second portion 35 are adjacent and mutually detachably constrained.

[0094] In the open configuration, instead, the first portion 34 and second portion 35 are not adjacent and are separated by the auxiliary portion 33.

[0095] The auxiliary portion can therefore comprise a foldable sheet extending between the first portion 34 and the second portion 35 and adapted to allow the realization of the closed configuration when the sheet is folded between the first portion 34 and the second portion 35 so as not to occupy any space on the supporting surface 3.

[0096] For example, the sheet can be folded in the lower portion of the supporting surface 3, and the portions 34,35 can be mutually fastened by means of Velcro or other constraints that can be easily resolved.

[0097] In the open configuration, instead, the sheet is tensioned and separates the first portion 34 and the second portion 35 so as to allow the stretching of the supporting surface 3.

[0098] The side edges 2 can also be divided into separate portions and comprise an auxiliary portion so as to allow a simultaneous stretching integral with the supporting surface 3.

[0099] This auxiliary portion 33 allows the supporting surface 3 to stretch along the longitudinal axis 1b. Therefore, the shower base 1 allows users of different heights to lie on the supporting surface 3.

[0100] Preferably, the supporting surface 3 has a longitudinal length comprised between 190 cm, in the closed configuration, and 210 cm, in the open configuration.

[0101] In addition to the above, the shower base 1 comprises a covering surface 5.

[0102] The covering surface 5 is preferably available over the supporting surface 3 so as to entirely cover the area defined by the supporting surface 3.

[0103] It preferably comprises a water-repellent sheet and third valves 50.

[0104] The water-repellent sheet is preferably of the type known in the healthcare sector and is stain-resistant and washable.

[0105] It can have different sizes depending on the size of the respective supporting surface 3. For example, it can have a length of from 190 cm to 210 cm, and a width of 90 cm if the supporting surface 3 is 90 cm wide.

[0106] The covering surface 5 may also have dimensions smaller than the supporting surface 3 and may also be stretched integrally with the supporting surface 3.

[0107] In addition, the covering surface 5 may be

shaped complementarily to the supporting surface 3.

[0108] The third valves 50 are preferably adapted to be engaged inside the drain holes 32 so as to prevent the fluid from spilling on the supporting surface 3.

[0109] Preferably, the third valves can be housed inside the connector 4. For example, they may be shaped complementarily thereto, or be insertable.

[0110] The third valves 50 preferably each comprise a collection bag 51 and control means 52.

[0111] The collection bag 51 is preferably tubular and suitable to convey the fluid from the covering surface 5 to the discharge pipe 42.

[0112] The control means 52 are preferably accessible at the covering surface 5 by a user and are adapted to allow the tensioning or folding of the collection bag 52.

[0113] In this manner, the third valves 50 can be inserted in and removed from the connector 41 without dispersing fluid over the shower base 1 and with no fluid deposit in the folds of the collection bag 52.

[0114] The shower base 1 may be included within a washing kit.

[0115] The washing kit can thus comprise, in addition to the shower base 1, discharge means 6 and washing means 7.

[0116] The discharge means 6 are preferably adapted to make the kit as portable and versatile as possible, avoiding connecting the second valve 4 to external discharge systems.

[0117] Preferably, the discharge means comprise a discharge bin 60.

[0118] The discharge bin 60 is preferably adapted to collect at least part of the fluid.

[0119] It therefore comprises a receptacle 61 and evacuation means 62.

[0120] The receptacle 61 is preferably a tank inside which the fluid coming out of the second valve 4 can be deposited.

[0121] It can be transparent and may have, for example, flow rates of 50 litres.

[0122] Therefore, in use, the receptacle is preferably in fluidic through connection with the second valve 4.

[0123] It therefore defines an inlet, connected to the second valve 4, and an outlet.

[0124] A valve that can be activated on command can also be present at the outlet.

[0125] The evacuation means 62 preferably include a pedal adapted to tilt the receptacle 61, once activated, so that the fluid collected therein comes out through the outlet.

[0126] The discharge bin 60 may further comprise a trolley for supporting the receptacle 61 comprising wheels and a handle to move it.

[0127] The washing means 7 preferably comprise at least one two-way pipe 70, a mixer 71 and an electric pump 72 suitable to allow the washing of a user.

[0128] In particular, the two-way pipe 70 is preferably constrained to a hot water intake and to a cold water intake of a hydraulic system.

[0129] The mixer 71 is preferably connected to the two-way pipe 70 and adapted to mix cold water and hot water.

[0130] Lastly, the electric pump 72 is adapted to allow the outflow of water for the washing of a user and to generate the fluid, which is then collected in the receptacle 61. The shower base 1 according to the invention achieves important advantages.

[0131] Firstly, the use of the shower base 1 does not require the presence of qualified personnel but simply of a common sense operator who, by following the respective instructions for the correct operation of the instrument, can guarantee complete and safe hygiene to the patient while he/she is comfortably lying on his/her bed.

[0132] The shape of the supporting surface 3, as well as of the drain holes 32 connected to discharge pipes 42, which do not communicate with each other and are adapted, together with the connectors 41, to convey the fluid out of the supporting surface 3, prevents the depositing of aqueous residues, for example due to the principle of communicating vessels, and greatly reduces the risk of possible bacterial proliferation.

[0133] The shower base 1 is also easily adaptable to the anthropometric characteristics of the user.

[0134] In fact, the auxiliary portion 33 allows the shower base 1 to be extended and stretched with extreme simplicity and speed.

[0135] Furthermore, a plurality of users could benefit from the same shower base 1, for instance hospital facilities or multiple users residing at the same address, thanks to the covering surface 5.

[0136] The use of this surface ensures guaranteed hygiene to the user, avoiding any contagious diseases such as mycosis, cutaneous and vaginal infection, dermatitis or other diseases that may be transmitted due to poor hygiene of the shower item between successive users.

[0137] Furthermore, the third valves prevent the water or infected fluid from directly flowing onto the supporting surface 3 of the shower base 1, thus eliminating the risk of contagious diseases.

[0138] The washing kit thus offers great portability, in fact, the discharge bin 60 can be used to collect the water when showering if one's bathroom has no shower base or no other waste water discharge means.

[0139] In general, an important advantage of the shower base 1 is to significantly reduce the time spent for healthcare activities, considerably improving hygiene quality, since by eliminating any bacterial proliferation possible contagious diseases are avoided, which as of today are often bacteria-resistant, and their treatment is too costly.

[0140] For users, especially the elderly, who have a particularly fragile and delicate skin, the use of the shower base reduces the risk of skin lesions that instead could occur with the usual moving equipment used for showering and bathing.

[0141] In conclusion, the shower base 1 avoids psychological discomfort to the user and his/her close relatives, which discomfort is related to the need to renovate

the bathroom with possible inclusion of health care accessories such as suction cup handles, non-slip mats, seats, bathtub lift chairs and other existing medical equipment.

[0142] The shower base eliminates, for those who use it, all states of stress related to transfers required for taking a shower or bath, since with such a medical equipment showering takes place in the user's bed.

[0143] The invention is susceptible of variations falling within the scope of the inventive concept as defined by the claims.

[0144] In this context, all details are replaceable by equivalent elements and the materials, shapes and dimensions may be any materials, shapes and dimensions.

Claims

1. A shower base (1) comprising inflatable sanitary equipment defining a main plane (1a) and a longitudinal axis (1b) and comprising:

- side edges (2) which are skewed with respect to said main plane (1a), and

- a supporting surface (3) at least partially parallel to said main plane (1a), contained within said side edges (2) and comprising a plurality of inner chambers (30),

- said inner chambers (30) comprising at least a first valve (36), each of the pneumatic type and adapted to regulate the passage of air between said inner chamber (30) and the outside,

- said shower base (1) comprising at least a second valve (4) adapted to regulate the passage of fluid between said supporting surface (3) and the outside,

and being **characterised in that**

- said inner chambers (30) extend along said supporting surface (3) so as to vary the inclination of at least part of said supporting surface (3) in a continuous manner along said longitudinal direction (1b) and to channel a fluid along a second plane (3a) which is skewed with respect to said main plane (1a) defined by said supporting surface (3),

- said supporting surface (3) comprises a plurality of channels (31) extending along said second plane (3a) along said longitudinal direction (1b) on said supporting surface (3) and each connected to a drain hole (32) arranged at the straight line defined by the incidence of said planes (1a,3a),

- said drain holes (32) are in fluidic through connection with said second valve (4).

2. The shower base (1) according to claim 1, wherein said inner chambers (30) extend side by side along said longitudinal axis (1b) and each have sections

perpendicular to said longitudinal axis (1b), and whose extension varies in a continuous manner along said longitudinal axis (1a), so as to provide a plane parallel to said second plane (3a) and inclined with respect to said main plane (1a).

3. The shower base (1) according to at least one of the preceding claims, wherein said channels (31) are grooves defined by the space comprised between said adjacent inner chambers (30).
4. The shower base (1) according to at least one of the preceding claims, comprising discharge means (40) suitable to place said drain holes (32) and said second valve (4) in fluidic through connection and comprising, for each drain hole (32), at least one connector (41) and a discharge pipe (42), said connector (41) being non-deformable, shaped complementarily to said drain hole (32) and adapted to convey said fluid into said drain holes (32) along a discharge direction (4a) perpendicular to said main plane (1a), and said discharge pipe (42) being elastically deformable and connecting said connector (41) and said second valve (4).
5. The shower base (1) according to at least one of the preceding claims, wherein said supporting surface (3) comprises an auxiliary portion (33) adapted to separate said supporting surface (3) into a first portion (34) and a second portion (35), each comprising a plurality of said inner chambers (30), and defines an open configuration and a closed configuration, said first portion (34) and said second portion (35) being adjacent and mutually detachably constrained in said closed configuration, and said first portion (34) and said second portion (35) being non-adjacent and separated by said auxiliary portion (33) when said supporting surface (3) is in the open configuration.
6. The shower base (1) according to at least one of the preceding claims, wherein said auxiliary portion (33) comprises a foldable sheet extending between said first portion (34) and said second portion (35) and adapted to allow the realisation of said closed configuration when said sheet is folded between said first portion (34) and said second portion (35) so as not to occupy any space on said supporting surface (3), and of said open configuration when said sheet is tensioned and separates said first portion (34) and said second portion (35) so as to allow the stretching of said supporting surface (3) along said longitudinal axis (1b).
7. The shower base (1) according to at least one of the preceding claims, comprising a covering surface (5) available over said supporting surface (3) so as to entirely cover the area defined by said supporting

surface (3), said covering surface (5) including a water-repellent sheet and comprising third valves (50) adapted to be engaged inside said drain holes (32) so as to prevent said fluid from spilling on said supporting surface (3).

8. The shower base (1) according to at least one of the preceding claims, wherein said third valves (50) can be housed inside said connector (41) and comprise a collection bag (51) and control means (52), said collection bag (51) being tubular in shape and adapted to convey said fluid from said covering surface (5) to said discharge pipe (42), and said control means (52) being accessible at said covering surface (5) by a user and adapted to allow the tensioning or folding of said collection bag (51).
9. A washing kit comprising a shower base (1) according to at least one of the preceding claims, discharge means (6) and washing means (7), said discharge means (6) comprising at least one discharge bin (60) suitable for collecting at least part of said fluid, and said washing means (7) comprising at least one two-way pipe (70), a mixer (71) and an electric pump (72) suitable to allow the washing of a user.
10. The washing kit according to at least one of the preceding claims, wherein said discharge bin (60) comprises a receptacle (61) and evacuation means (62), said receptacle (60) being available in fluidic through connection with said second valve (4) and defining an inlet and an outlet for said fluid coming from said shower base (1), said evacuation means (62) including a pedal adapted to tilt said receptacle (61) on command so that said fluid comes out of said receptacle (61), said two-way pipe (70) is constrained to a hot water intake and to a cold water intake of a hydraulic system, said mixer (71) is connected to said two-way pipe (70) and adapted to mix said cold water and said hot water, and said electric pump (72) is adapted to allow the outflow of water for the washing of a user and to generate said fluid.

Amended claims in accordance with Rule 137(2) EPC.

1. A shower base (1) comprising an inflatable sanitary equipment defining a main plane (1a) and a longitudinal axis (1b) and comprising:
 - a supporting surface (3) at least partially parallel to said main plane (1a) comprising a plurality of inner chambers (30), and
 - side edges (2) being skewed with respect to said main plane (1a) and arranged along the entire perimeter of the supporting surface (3) so as to surround and delimit said supporting sur-

face (3),

- said inner chambers (30) comprising at least a first valve (36), each of the pneumatic type and adapted to regulate the passage of air between said inner chamber (30) and the outside,

- said shower base (1) comprising at least a second valve (4) adapted to regulate the passage of fluid between said supporting surface (3) and the outside,

- said inner chambers (30) extending along said supporting surface (3) varying an inclination of at least part of said supporting surface (3) in a continuous manner along said longitudinal direction (1b) to channel a fluid along a second plane (3a) which is skewed with respect to said main plane (1a) defined by said supporting surface (3),

and said shower base (1) being **characterised in that**

- said supporting surface (3) comprises a plurality of channels (31) extending along said second plane (3a) along said longitudinal direction (1b) on said supporting surface (3) and each connected to a drain hole (32) arranged at a straight line defined by incidences of said planes (1a, 3a),
- said drain holes (32) being in fluidic through connection with said second valve (4).

2. The shower base (1) according to claim 1, wherein said inner chambers (30) extend side by side along said longitudinal axis (1b) and each have sections perpendicular to said longitudinal axis (1b), and whose extension varies in a continuous manner along said longitudinal axis (1a), so as to provide a plane parallel to said second plane (3a) and inclined with respect to said main plane (1a).
3. The shower base (1) according to at least one of the preceding claims, wherein said channels (31) are grooves defined by the space comprised between said adjacent inner chambers (30).
4. The shower base (1) according to at least one of the preceding claims, comprising discharge means (40) suitable to place said drain holes (32) and said second valve (4) in fluidic through connection and comprising, for each drain hole (32), at least one connector (41) and a discharge pipe (42), said connector (41) being non-deformable, shaped complementarily to said drain hole (32) and adapted to convey said fluid into said drain holes (32) along a discharge direction (4a) perpendicular to said main plane (1a), and said discharge pipe (42) being elastically deformable and connecting said connector (41) and said second valve (4).

5. The shower base (1) according to at least one of the preceding claims, wherein said supporting surface (3) comprises an auxiliary portion (33) adapted to separate said supporting surface (3) into a first portion (34) and a second portion (35), each comprising a plurality of said inner chambers (30), and defines an open configuration and a closed configuration, said first portion (34) and said second portion (35) being adjacent and mutually detachably constrained in said closed configuration, and said first portion (34) and said second portion (35) being non-adjacent and separated by said auxiliary portion (33) when said supporting surface (3) is in the open configuration.

6. The shower base (1) according to at least one of the preceding claims, wherein said auxiliary portion (33) comprises a foldable sheet extending between said first portion (34) and said second portion (35) and adapted to allow the realisation of said closed configuration when said sheet is folded between said first portion (34) and said second portion (35) so as not to occupy any space on said supporting surface (3), and of said open configuration when said sheet is tensioned and separates said first portion (34) and said second portion (35) so as to allow the stretching of said supporting surface (3) along said longitudinal axis (1b).

7. The shower base (1) according to at least one of the preceding claims, comprising a covering surface (5) available over said supporting surface (3) so as to entirely cover the area defined by said supporting surface (3), said covering surface (5) including a water-repellent sheet and comprising third valves (50) adapted to be engaged inside said drain holes (32) so as to prevent said fluid from spilling on said supporting surface (3).

8. The shower base (1) according to at least one of the preceding claims, wherein said third valves (50) can be housed inside said connector (41) and comprise a collection bag (51) and control means (52), said collection bag (51) being tubular in shape and adapted to convey said fluid from said covering surface (5) to said discharge pipe (42), and said control means (52) being accessible at said covering surface (5) by a user and adapted to allow the tensioning or folding of said collection bag (51).

9. A washing kit comprising a shower base (1) according to at least one of the preceding claims, discharge means (6) and washing means (7), said discharge means (6) comprising at least one discharge bin (60) suitable for collecting at least part of said fluid, and said washing means (7) comprising at least one two-way pipe (70), a mixer (71) and an electric pump (72) suitable to allow the washing of a user.

10. The washing kit according to at least one of the preceding claims, wherein said discharge bin (60) comprises a receptacle (61) and evacuation means (62), said receptacle (60) being available in fluidic through connection with said second valve (4) and defining an inlet and an outlet for said fluid coming from said shower base (1), said evacuation means (62) including a pedal adapted to tilt said receptacle (61) on command so that said fluid comes out of said receptacle (61), said two-way pipe (70) is constrained to a hot water intake and to a cold water intake of a hydraulic system, said mixer (71) is connected to said two-way pipe (70) and adapted to mix said cold water and said hot water, and said electric pump (72) is adapted to allow the outflow of water for the washing of a user and to generate said fluid.

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Fig. 1a

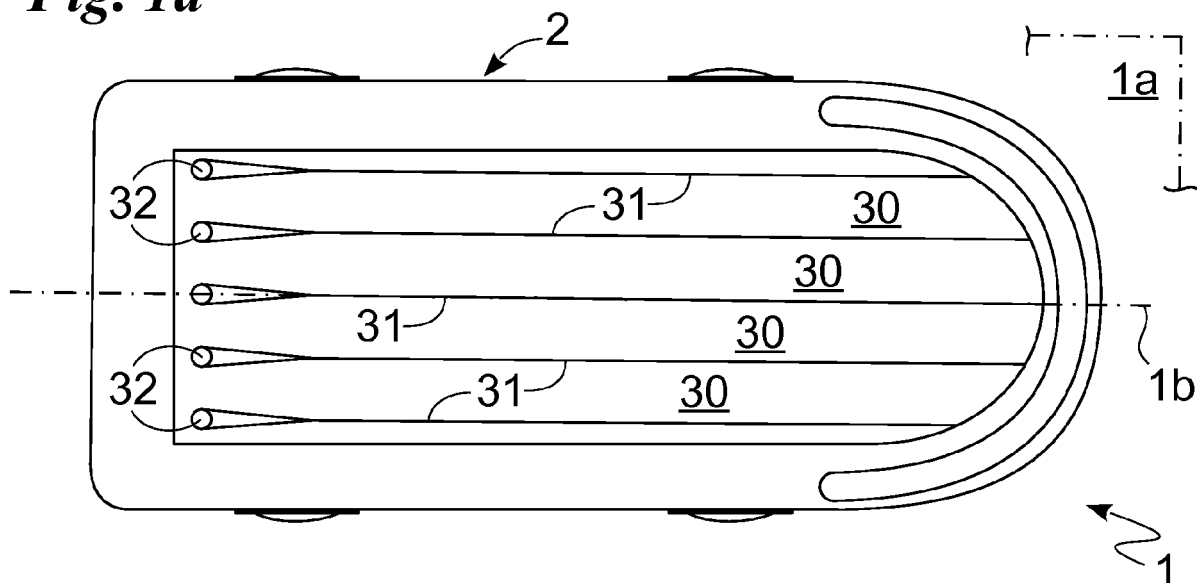


Fig. 1b

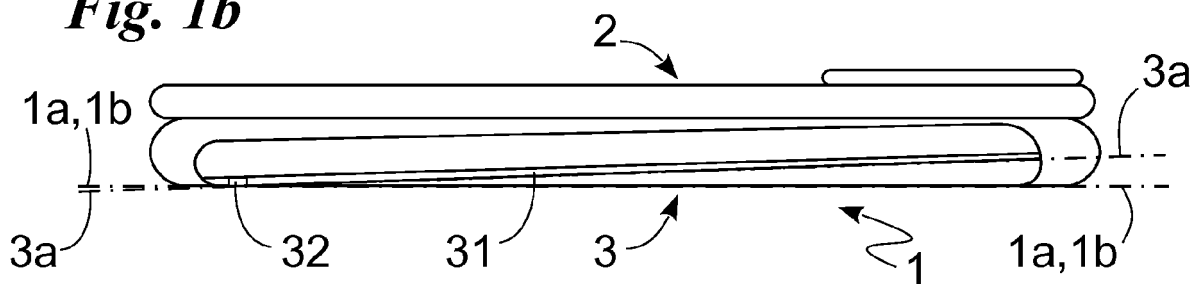


Fig. 2

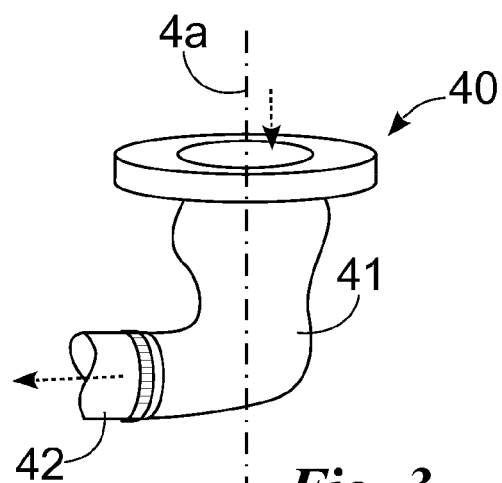
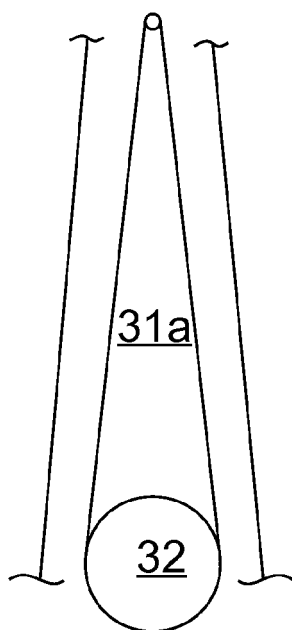
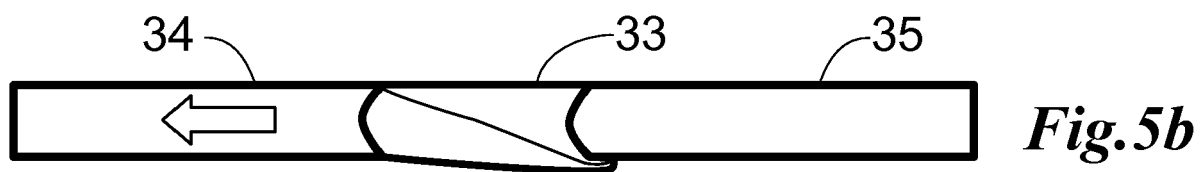
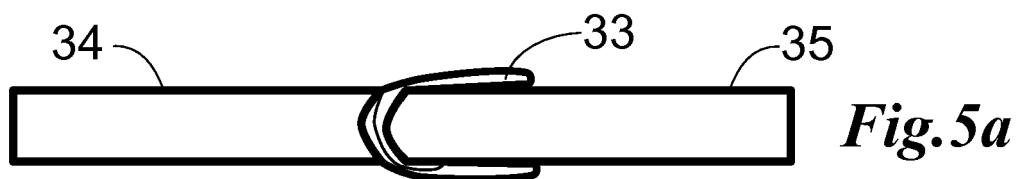
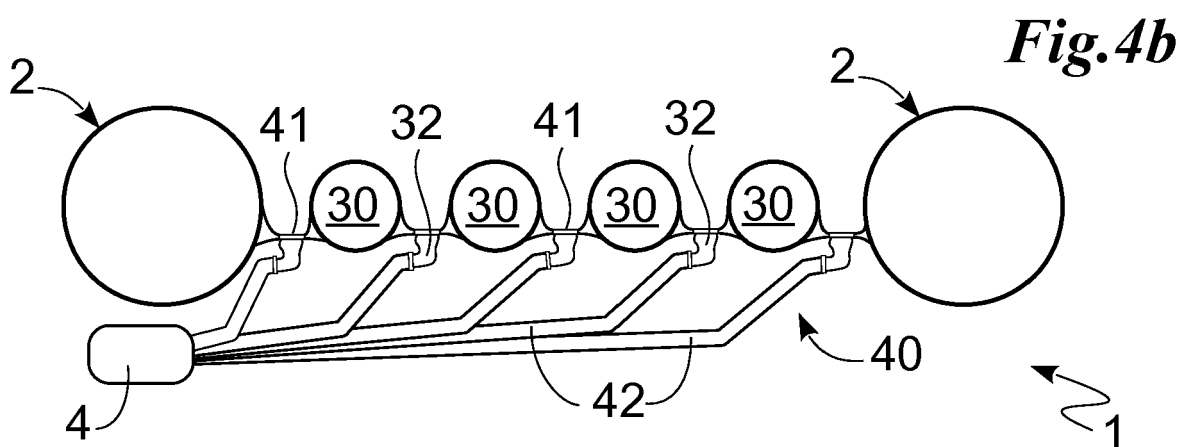
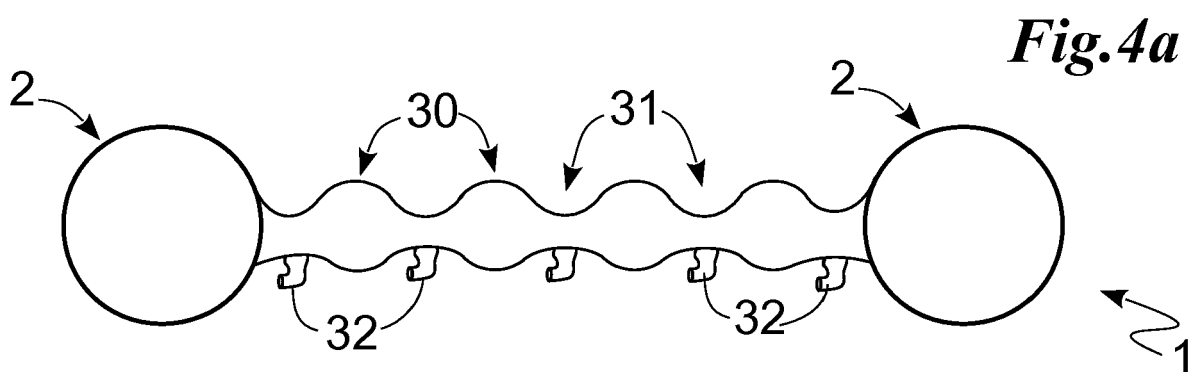
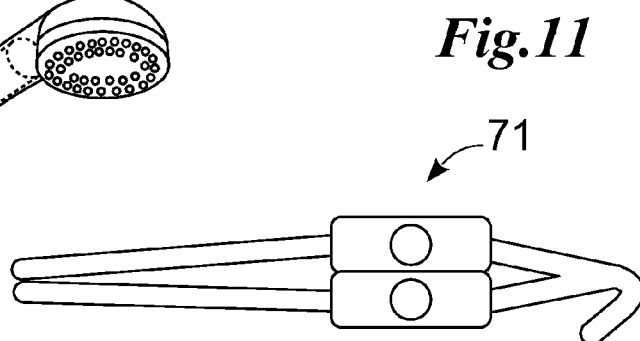
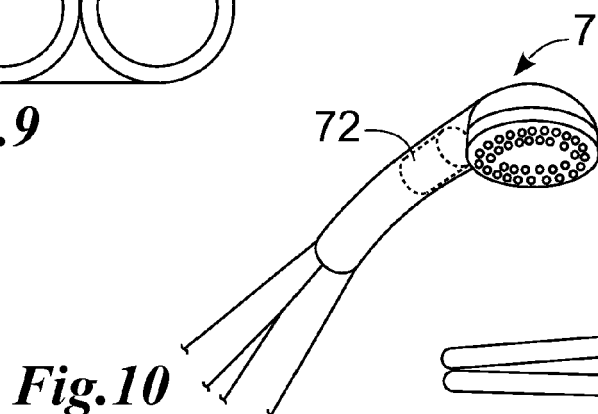
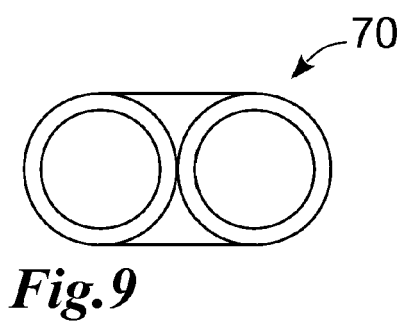
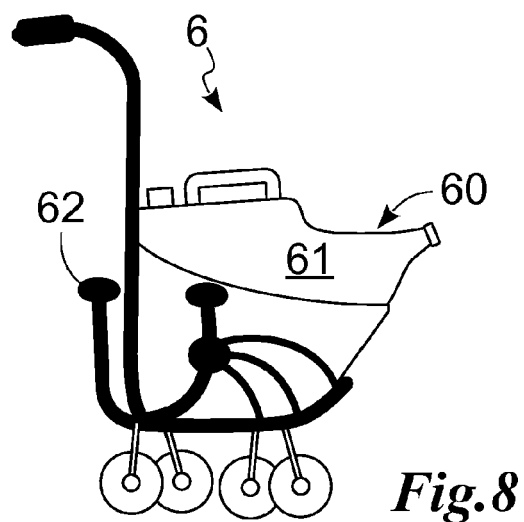
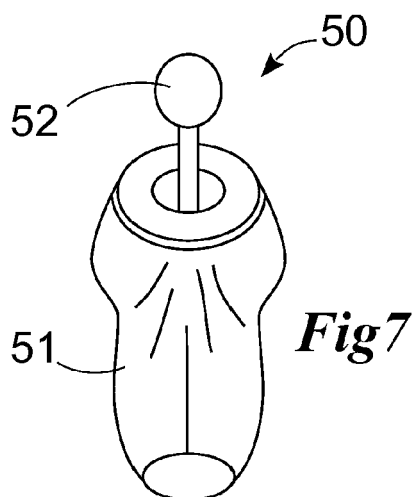
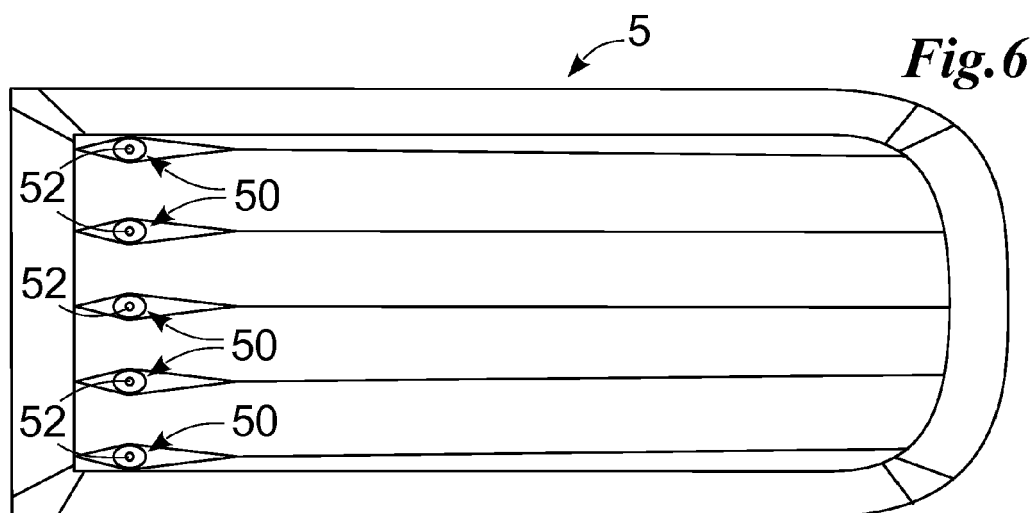


Fig. 3







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Application Number
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			TECHNICAL FIELDS SEARCHED (IPC)
			A47K
The present search report has been drawn up for all claims			
Place of search		Date of completion of the search	Examiner
The Hague		11 June 2018	Munteh, Louis
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			

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REFERENCES CITED IN THE DESCRIPTION

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