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(54) INFLATABLE MASSAGE POOL

(57) The present disclosure provides an inflatable massage pool. The inflatable massage pool comprises: a pool body comprising a pool wall and a pool bottom, wherein the pool bottom and the pool wall define an inflatable chamber; and a control box. The inflatable massage pool further comprises an accommodating cavity provided in the pool wall and isolated from the inflatable chamber in a sealed manner, wherein the control box is located in the accommodating cavity.

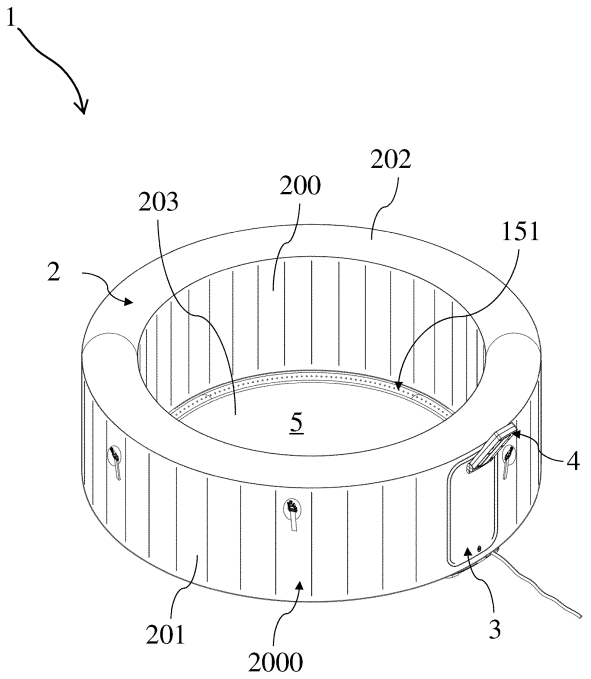

FIG. 1

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Description

Technical Field

[0001] The present disclosure generally relates to the technical field of above-ground pools, and in particular to an inflatable massage pool.

Background Art

[0002] A portable massage (SPA) pool is a standalone pool holding warm or hot water in which one or more people are partially immersed. A massage pool product of the existing design comprises an inflatable SPA pool having a massage function, which has an inflatable pool body, with an inner wall or a bottom portion of the body being provided with a massage nozzle that can spray air or water to achieve a local massage function. An existing inflatable massage pool in the market generally has a control box placed next to the pool. The control box is generally equipped with a water pump, a heater, an air pump, etc., so as to achieve functions of filtering, heating and massage. Such a control box is usually placed outside a pool body of the massage pool. More specifically, the massage control box and the pool body are arranged separately, occupying a large area during use. Furthermore, the existing inflatable massage is complicated for installation and inconvenient for operation for a user.

Summary of the Invention

[0003] The purpose of the present disclosure is to propose an improved inflatable massage pool, in which at least one of the drawbacks in the conventional inflatable massage pool is overcome..

[0004] An inflatable massage pool according to the present invention is defined by independent claim 1 as appended. Further preferable embodiments are given in the dependent claims.

Brief Description of the Drawings

[0005] Other features and advantages of the present disclosure will be better understood from the alternative embodiments described in detail below with reference to the accompanying drawings, in which:

FIG. 1 is a schematic external view of an inflatable massage pool according to an embodiment of the present disclosure;

FIG. 2 is a schematic view of the inflatable massage pool in FIG. 1 from another perspective;

FIG. 3 is a schematic exploded view of the inflatable massage pool in FIG. 1;

FIG. 4A is a schematic plan view of a sheet that forms a chamber upper wall;

FIG. 4B is a schematic plan view of a sheet that forms a chamber surrounding wall;

FIG. 4C is a schematic exploded view of the chamber upper wall and the chamber surrounding wall;

FIG. 5A is a schematic plan view of a sheet that forms a protective wall;

FIG. 5B is a schematic view of the protective wall;

FIG. 6 is a schematic view of a control box;

FIG. 7 is a schematic exploded view of fittings of a water intake end and a water output end of the control box;

FIG. 8 is a schematic cross-sectional view of the control box, and shows a schematic exploded view of the fitting of the water intake end; and

FIG. 9 is a schematic enlarged view of part A in FIG. 8.

FIG. 10 shows a perspective view of an inflatable massage pool;

FIG. 11 shows an exploded view of an inflatable massage pool;

FIG. 12 shows an exploded view of a control box accommodating cavity;

FIG. 13 shows a perspective view of a protective wall;

FIG. 14 shows a perspective view of a control box;

FIG. 15 shows a perspective view of a control box, where a housing of the control box is hidden;

FIG. 16 shows a cross-sectional view of a connection between a control box water outlet connector and a pool water outlet connector;

FIG. 17 shows a perspective view of a pool water outlet connector;

FIG. 18 shows a perspective view of a control box water outlet connector;

FIG. 19 shows a perspective view of a first axial sealing member;

FIG. 20 shows a perspective view of a water outlet fixing member;

FIG. 21 shows a perspective view of a connection between a control box and a water bypass assembly, where a pool body is hidden;

FIG. 22 shows a cross-sectional view of a connection between a control box water inlet connector and a pool water inlet connector;

FIG. 23 shows a perspective view of a pool water inlet connector;

FIG. 24 shows a perspective view of a control box water inlet connector;

FIG. 25 shows a perspective view of a water inlet fixing member;

FIG. 26 shows a perspective view of a second axial sealing member;

FIG. 27 shows a cross-sectional view of a connection between a control box air inlet connector and a pool air inlet connector;

FIG. 28 shows a perspective view of a control box air inlet connector;

FIG. 29 shows a perspective view of a pool air inlet connector;

FIG. 30 shows a perspective view of a radial sealing connector;

FIG. 31 shows a perspective view of a threaded fastener;

FIG. 32 shows a perspective view of an axial sealing connector;

FIG. 33 shows a cross-sectional view of a connection between a control box inflation connector and an accommodating cavity inflation connector;

FIG. 34 shows a perspective view of a control box inflation connector;

FIG. 35 shows a perspective view of an accommodating cavity inflation connector;

FIG. 36a is a perspective view of a first fastener;

FIG. 36b is a perspective view of a second fastener; and

FIG. 37 shows a perspective view of an inflation sealing member.

Detailed Description of Embodiments

[0006] The implementation and application of the embodiments will be discussed in detail below. However, it should be understood that the specific embodiments discussed are merely illustrative of particular ways of the implementation and application of the present disclosure, and are not intended to limit the scope of the claims as appended. In the description, the expressions of the structural positions of components, e.g., upper, lower, top, bottom, etc., are not absolute but relative. When the components are arranged as shown in the figures, these directional expressions are appropriate, but when the positions of the components in the figures change, these directional expressions also change accordingly.

[0007] The expression "inner" herein refers to a direction toward a water holding chamber or water placement zone or water receptacle defined by a pool wall and a pool bottom, and "outer" refers to a direction toward the exterior of the whole pool. The term of "air" refers to air flow, etc., that can be introduced from the outside atmosphere or by an apparatus, and "fluid" refers to liquid flow, such as water flow.

[0008] The expressions "first", "second", etc. herein are not used to limit the order and number of assemblies, unless otherwise stated.

[0009] The expression "a plurality of" herein means two or more, unless specifically defined otherwise.

[0010] In the description of the embodiments, it should also be noted that the terms "arrange", "connected", and "connection" should be understood in a broad sense, unless otherwise explicitly specified and limited. For example, the connection can be a fixed connection, a detachable connection, or an integral connection; or can be a mechanical connection or an electrical connection; and can be directly connected, or indirectly connected by means of an intermediate medium, or communication between interiors of two elements. For those of ordinary skill in the art, the specific meaning of the terms mentioned above in the embodiments should be understood in specific cases.

[0011] It should be appreciated that the existing massage pool has a control box disposed outside a pool body, and thus occupies a large space, is inconvenient for a user to store and use, and is inconvenient for the user to operate massage and other functions during use.

[0012] The present invention being described in the present disclosure is based on a new concept that the control box is integrated within the pool body. Based on this concept, an inflatable massage pool having an integrally disposed control box is proposed, in which a chamber is formed in a pool wall of a pool body to accommodate the control box, so that the product has reduced overall occupied space and improved appearance, and provides convenient control and operation for a user.

[0013] An embodiment of an inflatable massage pool 1

is shown in conjunction with FIGS. 1 and 2. The inflatable massage pool 1 comprises a pool body 2, the pool body 2 comprising a water holding chamber or water placement zone or water receptacle 5 defined by a pool wall 2000 and a pool bottom 203. The pool wall 2000 is formed by a top wall 202, an outer wall 201 and an inner wall 200 which are disposed in an enclosing manner, and forms an air chamber (inflatable chamber) with the pool bottom 230. Although the pool wall 2000 is circular in shape when viewed from above, it is not limited to this, and may have other shapes such as a square, triangle, or ellipse. A plurality of tensioning members 6 (FIG. 3) may be provided in the air chamber to provide support and structural strength.

[0014] Specifically, a top portion of the outer wall 201 and a top portion of the inner wall 200 are welded to the top wall 202, and a bottom portion of the outer wall 201 and a bottom portion of the inner wall 200 are welded to the pool bottom 203 to form the air chamber inside the pool wall 2000. The plurality of tensioning members 6 may be arranged at fixed or variable intervals within the air chamber of the pool wall 2000. The opposite ends of each tensioning member 6 are welded to the outer wall 201 and the inner wall 200, respectively. In the illustrated example, each tensioning member 6 extends in a radial direction of the pool wall 2000.

[0015] In addition, the pool bottom 203 is provided with an air passage 151 to provide a massage function with bubbles. Additionally or alternatively, such an air passage may be provided in the inner wall 200 of the pool wall 2000. The control box 4 is arranged in an accommodating chamber or cavity 3 provided in the pool wall 2000. The accommodating cavity 3 is isolated from the air chamber in a sealed manner. The control box 4 may be configured to control at least the massage function of the inflatable massage pool 1. The control box 4 may be configured to circulate water in the water receptacle 5 and/or supply air into the water receptacle 5, for example, by controlling fluid to enter or exit the water receptacle 5 and/or controlling air to enter the air passage 151. The control box 4 may further be configured to inflate the pool by controlling air to enter the air chamber.

[0016] In some embodiments, the accommodating cavity 3 may be separated from the air chamber by a chamber wall or accommodating wall 340 (FIG.3). The accommodating wall 340 separates the accommodating cavity 3 from the air chamber. Preferably, the accommodating wall 340 extends between the outer wall 201 and the inner wall 200 and is connected to both the outer wall 201 and the inner wall 200. The accommodating wall 340 may be made of a weldable material such as a PVC material or a PVC composite material, and is connected to the pool body by welding to form an integrated structure. As shown in FIGS. 3 to 4C, in some embodiments, the accommodating wall 340 comprises a chamber surrounding wall or side wall 305 so shaped as to surround the control box 4. The side wall 305 may be formed by a single sheet disposed in an enclosing manner. FIG. 4B shows the side wall 305 in a deployed state, for example, a sheet of a rectangular PVC material or a PVC composite material, with two short sides of the rectangular sheet being connected to each other in an enclosing manner to form the side wall 305. Preferably, the side wall 305 is connected to both the outer wall 201 and the inner wall 200 of the pool body 2000, respectively, along an outer wall welding line 321 and an inner wall welding line 322. In addition, a low portion of the side wall 305 is provided with a bottom wall welding line 324 to be connected to the pool bottom 203 in a sealing manner so as to form a first hole or opening 306 through which the control box 4 can be put into the accommodating cavity 3. The pool bottom 203 may comprise a second hole or opening 205 as an access opening, corresponding to the first opening 306, as shown in FIG. 3. Additionally or alternatively, such an access opening may be arranged in the outer wall 201 so as to correspond to a front hole or opening 307 formed in the side wall 305.

[0017] In some embodiments, parts of the side wall 305 may be cut along the outer wall welding line 321 and the inner wall welding line 322 so as to form the third opening 307 and a fourth opening (back hole) 308 in the side wall 305. In this way, the side wall 305 may be connected to the outer wall 201 of the pool wall 2000 via the outer wall welding line 321 and to the inner wall 200 of the pool wall 2000 via the inner wall welding line 322.

[0018] In some embodiments, a top opening 326 of the side wall 305 may be connected to the top wall 202 of the pool body 2000 along the upper wall welding line 323 so as to close the opening 326. Alternatively, the accommodating wall 340 may include an upper wall 302 facing the top wall 202 of the pool wall 2000. More specifically, the opening 326 can be connected to the chamber upper wall (cavity upper wall) 302 along the upper wall welding line 323, and the chamber upper wall 302 is made of a weldable material such as a PVC material or a PVC composite material and is correspondingly provided with a side wall welding line 3022. In this way, the upper wall 302 and the side wall 305 together define the accommodating cavity 3, and the control box 4 is adapted to enter the accommodating cavity 3 through the second opening 205 in the pool bottom 203 of the pool body and is then integrated with the pool body. The accommodating wall 340 having upper wall 302 is preferable, because the height of the accommodating cavity 3 can be tailored to the height of the control box 4. This is particularly advantageous when the pool wall 2000 has a height much higher than that of the control box 4, because the side wall 305 is not necessary to extend to reach the top wall 202 of the pool wall 2000.

[0019] As can be seen from FIGS. 3 and 4B, the side wall 305 may include an air supply port 325. In this case, the control box 4 includes a first air supply end (inner inflation hole) 407 (FIG. 6) to be in communication with the air chamber of the pool body via the air supply port 325 and an air supply pipe 350 (FIG. 3) connected to the first air supply end 407.

[0020] In some embodiments, the control box 4 may include a control panel 404 (FIG. 6). Preferably, the control panel 404 is foldable with respect to the main body of the control box 4. The control panel 404 is so configured for users as to operate at least some of the functions of the inflatable massage pool, such as water filling function or massage function during use. Preferably, the pool body has an opening through which the control panel 404 extends out of the pool wall 2000. In the illustrated embodiment, the outer wall 201 is provided with a fifth opening (panel hole) 206 (FIG. 3), and the control panel 404 passes through the third opening 307 in the side wall 305 and the fifth opening 206 in the outer wall 201 and then extends out of the pool wall as shown in FIG. 1. The foldable control panel 404 may be foldable to align with the outer wall 201 of the pool wall 2000, particularly when not in use. Additionally or alternatively, such an opening through which the control panel 404 extends out may be provided in the chamber upper wall 302 and the top wall 202 depending on the location and shape of the control panel 404.

[0021] In some embodiments, a protective wall 7 is arranged between the accommodating wall 340 and the control box 4. Preferably, the protective wall 7 matches the contour of the accommodating wall 340 so as to prevent air leakage from the pool body caused by friction between the accommodating wall 340 and the control box 4. The protective wall 7 may be made of a weldable material such as PVC material or PVC composite material, and be connected to the pool body by welding so as to form an integrated structure. In conjunction with FIGS. 3, 5A and 5B, the protective wall 7 may be formed by a single sheet or strip and connected to both the outer wall 201 and the inner wall 200 of the pool body. FIG. 5A shows the protective wall 7 in the deployed state. The protective wall 7 may be connected to the inner wall 200 and the outer wall 201 along the side edges of the protective wall 7 and with an inner welding line 331 and an outer welding line 332. FIG. 5B shows the shape of the protective wall 7 when welded to the pool body.

[0022] It should be understood that the size and shape of the accommodating cavity defined by the accommodating wall 340, the size and shape of the protective wall 7 exemplarily shown in the figures to match the outer contour of the control box 4, and the size and shape of the control box may be changed accordingly depending on different needs.

[0023] As shown in FIGS. 2, 3 and 6, the inner wall 200 of the pool body is provided with one or more openings or holes through which a pipeline passes. FIG. 3 exemplarily shows three openings, one of which is marked with 231. A water inlet assembly (pool water inlet connector) 11 is connected to a water inlet end (control box water inlet connector) 10 of the control box 4 through an opening in the inner wall. Through the water inlet assembly 11 and the water inlet end 10, water is supplied from the control box 4 into the water receptacle 5. A water outlet assembly (pool water outlet connector) 9 is connected to a water outlet end (control box water outlet connector) 8 of the control box 4 through another opening in the inner wall. Through the water outlet assembly 9 and the water outlet end 8, water in the water receptacle is discharged. The inner wall 200 is tightly clamped between the water inlet assembly 11 and the water inlet end 10, and/or between the water outlet assembly 9 and the water outlet end 8 of the control box 4 so as to achieve sealing. In order to enhance the sealing effect, a sealing member can be provided on the water inlet assembly 11 and/or the water inlet end 10 of the control box 4, and a sealing member can be provided on the water output assembly 9 and/or the water outlet end 8 of the control box 4.

[0024] In some embodiments, intermediate members are fixedly welded at the opening of the inner wall 200. In conjunction with the embodiment shown in FIG. 6, the water inlet assembly 11 and the water outlet assembly 9 are connected to the water inlet end 10 and the water outlet end 8 of the control box 4, respectively, by means of a water inlet intermediate member (axial sealing assembly) 100 and a water outlet intermediate member (axial sealing assembly) 800, so as to achieve filling and drainage of the water receptacle. The control box 4 further comprises a first air supply end (inner inflation hole) 407 in communication with the air chamber (inflation chamber) for inflating the air chamber, and a second air supply end (air inlet hole) 409 in communication with the air passage 151. The second air supply end 409 is in communication with the air passage 151 via an air inlet bag (connection channel) 152 and a corresponding air inlet assembly 510 (FIG. 3) and via another opening on the inner wall 200 and a corresponding air delivery pipe (pool air inlet connector) 15, such that the air is sprayed from through holes in the air passage to form wave-making bubbles, providing a massage effect to the user's soles.

[0025] It should be understood that, in the illustrated embodiment, the control box 4 integrates the functions of inflation, air supply, and water filling and drainage. In some embodiments, these functions can also be achieved by different control pumps, that is, based on the concept of the present disclosure, if the spatial and structural layout allows, more than one control pump can be arranged in the accommodating cavity to respectively achieve one or more of the functions described above or other functions such as heating. In some embodiments, more than one accommodating chamber may be provided to respectively hold control pumps that achieve different functions.

[0026] In the illustrated embodiment, the air passage 151 is shown in the shape of a circular ring in plan view. However, this is not intended to be a limitation, and depending on different needs, the air passage may be in the shape of a closed ring, an open ring, a four-sided ring or any other polygonal ring, or any other suitable form for providing users with a relaxing massage in the pool. Similarly, the inflatable massage pool is shown as an example in a circular shape, but other shapes such as a rectangular shape or other polygonal shapes are not

excluded.

[0027] One or more of the pool body, the air passage and the air inlet bag are made of a weldable material such as a PVC material or a PVC composite material The pool wall can be connected to the pool bottom by means of hot-melt welding, etc. to form the pool body, and the air passage can be formed at the pool bottom, preferably near or at the corner between the pool bottom 203 and the inner wall 200.

[0028] FIGS. 7 to 9 show the fittings of the water outlet end (water outlet connection) and the water inlet end (water inlet connection) of the control box 4. As described above, the water inlet assembly (pool water inlet connector) 11 and the water outlet assembly (pool water outlet connector) 9 are connected to the water inlet end 10 and the water outlet end 8 of the control box 4, respectively, by means of the water inlet intermediate member (axial sealing assembly) 100 and the water outlet intermediate member (first axial sealing assembly) 800. The water inlet intermediate member 100 and the water outlet intermediate member 800 may be welded or adhered to the inner wall 200 of the pool body. The water inlet assembly 11 and the water outlet assembly 9 may be welded or adhered to the water inlet end 10 and the water outlet end 8 of the control box 4, respectively, with the water inlet intermediate member 100 and the water outlet intermediate member 800 being interposed therebetween. Alternatively, the water inlet assembly 11 may be detachably attached to the water inlet end 10, and/or the water outlet assembly 9 may be detachably attached to the water outlet end 8. In FIG. 9 in which the water outlet assembly 9 is removed from the water outlet end 8, the water outlet intermediate member 800 may include a sealing ring 809 to prevent water leakage at the connection. Advantageously, the water outlet end 8 may also be provided with a sealing ring 808e to further prevent water leakage.

[0029] In the design of the present disclosure, the control box is disposed in the pool body to form an integrated structure, so that the product is aesthetically pleasing in overall appearance, occupies small space, and is convenient for the user to operate; and the control box is separated from the air chamber of the pool body in a sealing manner, achieving safe and reliable use.

[0030] It should be understood that the embodiments as shown in the figures only show the alternative shapes, sizes and arrangements of the alternative components of the inflatable massage pool according to the present disclosure, which are merely illustrative but not restrictive, and other shapes, sizes and arrangements may be used without departing from the idea and scope of the present disclosure. The components and features described herein may be made of multiple materials including, but not limited to, polymers exemplified above and other suitable materials, such as rubber, foam, metal and coated fabric, or combinations thereof well known to those skilled in the art.

[0031] The technical contents and technical features of the present disclosure are disclosed above. However, it can be understood that those skilled in the art would have made various variations and improvements to the concepts disclosed above under the creative idea of the present disclosure, and all the variations and improvements fall within the scope of protection of the present disclosure. The descriptions of the above embodiments are illustrative but not restrictive, and the scope of protection of the present disclosure is determined by the claims.

Other embodiments

[0032] With reference to FIGS. 10-37, other embodiments according to the present invention are described. For the sake of completeness in disclosure, some features already discussed above may again be described.

[0033] With reference to FIGS. 10 and 11, the present application provides an inflatable massage pool 1. The inflatable massage pool 1 includes: a pool body 2, a control box accommodating cavity (accommodating chamber) 3, and a control box 4, where the pool body 2 includes a pool wall 2000, and the pool wall 2000 defines an inflatable chamber (air chamber). For example, the pool wall 2000 includes an inner wall 200, an outer wall 201, a top wall 202 and a pool wall 203 (or a part of the pool bottom 203). The inner wall 200, the outer wall 201, the top wall 202 and the pool bottom 203 (or a part of the pool bottom 203) define the inflatable chamber described above. Optionally, the inflatable chamber is formed by welding an upper end 200a of the inner wall 200 to the top wall 202 and welding a lower end 200b of the inner wall 200 to at least a part of the pool bottom 203; and by welding an upper end 201a of the outer wall 201 to the top wall 202 and welding a lower end 201b of the outer wall 201 to the pool bottom 203. For example, the inner wall 200, the outer wall 201, the top wall 202 and the pool bottom 203 are partially or completely made of a weldable material. For example, the weldable material includes thermoplastic urethane (TPU) or polyvinyl chloride (PVC).

[0034] The pool wall 2000 and the pool bottom 203 define a water placement zone (water receptacle) 5.

[0035] The control box accommodating cavity 3 is provided in the pool wall 2000 and isolated from the inflatable chamber in a sealed manner. The control box 4 is located in the control box accommodating cavity 3. The control box 4 is configured to supply air and/or water to the pool body 2. For example, the control box 4 is in fluid communication with the water placement zone 5 of the pool body 2. The control box 4 is configured to control various functions of the inflatable massage pool 1.

[0036] For example, the inflatable chamber is further internally provided with a tensioning member 6. The tensioning member 6 is connected to the inner wall 200 and the outer wall 201 of the pool body 2 separately. After being tensioned, the tensioning member 6 provides a pulling force so as to limit deformation of a wall of the

inflatable chamber, such that the inflatable chamber may keep a certain shape after being inflated.

[0037] The control box 4 is placed in the control box accommodating cavity 3, where the control box accommodating cavity 3 is located in the pool wall 2000. For example, the control box accommodating cavity 3 is located in a space formed by the inner wall 200, the outer wall 201, the top wall 202 and the pool bottom 203 of the pool body 2. In this way, the control box 4 is integrated into the pool body 2, such that no extra space for placing the control box 4 needs to be arranged outside the pool body 2, and an appearance of the entire inflatable massage pool 1 is cleaner.

[0038] A structure of the control box accommodating cavity will be described in detail below in conjunction with the accompanying drawings.

[0039] With reference to FIGS. 10-12, the control box accommodating cavity 3 includes a side wall 305 and an upper wall 302.

[0040] For example, the control box accommodating cavity 3 is in a substantially cuboid shape. The side wall 305 is formed by enclosing a weldable material sheet. The side wall 305 is provided with a front hole or opening 307 and a back hole or opening 308. A front hole periphery 3072 on a front side 300 of the side wall 305 and the outer wall 201 of the pool body 2 are welded to form a sealed connection, and a back hole periphery 3082 on a back side 301 of the side wall 305 and the inner wall 200 of the pool body 2 are welded to form a sealed connection. A periphery 3022 of the upper wall 302 is welded to an upper end of the side wall 305. A lower edge 3062 of the side wall 305 and the pool bottom 203 are welded to form a sealed connection, and the lower edge 3062 of the side wall 305 is provided with a first hole or opening 306, such that the first hole 306 is located at a bottom of the control box accommodating cavity 3. Corresponding to a position of the first hole 306, the pool bottom 203 is provided with a second hole or opening 205 as an access opening, and the first hole 306 is in communication with the second hole 205, so as to allow the control box 4 to enter the control box accommodating cavity 3 from the pool bottom 203. In this way, the control box accommodating cavity 3 isolates outside air from the inflatable chamber and may accommodate the control box 4, so as to facilitate mounting the control box 4 in the pool wall 2000 or removing the control box 4 from the pool wall 2000. Meanwhile, the control box accommodating cavity 3 is welded and fixed to the pool wall 2000, such that the control box accommodating cavity 3 may also limit a position of the control box 4 in the pool wall 2000, and the control box 4 is prevented from moving freely in the inflatable chamber and damaging components including a water supply pipeline.

[0041] It may be understood that in other embodiments, the first hole 306 and the second hole 205 may also be provided on the pool wall 2000, and accordingly, the control box 4 enters the control box accommodating cavity from the first hole 306 and the second hole 205 provided on the pool wall 2000.

[0042] For example, the first hole 306 and the second hole 205 are both in a rounded rectangle shape.

[0043] The second hole 205 may be used as an air inlet, so as to allow an air pump of the control box 4 to suck the outside air from the air inlet, and then supply air to a wave making channel described below and provide a bubble massage function. In other words, when the air pump in the control box 4 works, the outside air may be sucked into the control box 4 via the second hole 205 and the first hole 306, pressurized by the air pump, and conveyed into water in the water placement zone 5 via the pipeline, so as to form bubbles having a massage function.

[0044] With reference to FIGS. 11 and 13, at least one protective wall 7 is arranged between the control box accommodating cavity 3 and the control box 4. The protective wall 7 is located between the control box accommodating cavity 3 and the control box 4, and is configured to prevent the control box 4 from making direct contact with the control box accommodating cavity 3 and being rubbed with the control box accommodating cavity 3 and then causing air leakage of the inflatable chamber.

[0045] With reference to FIGS. 11, 12 and 14, the outer wall 201 of the pool body is provided with a panel hole 206. The panel hole 206 is aligned with the front hole 307, so as to allow a control panel 404 of the control box 4 to extend out of the outer wall 201 of the pool body. For example, the control panel 404 allows a user to set a working state of the control box 4.

[0046] With reference to FIGS. 11, 14 and 15, the control box 4 is internally provided with a fluid pipe 410, a water pump 405, an air pump 403 and a heater 406, where the fluid pipe 410 includes a water outlet pipe 411, a water inlet pipe 412, an air inlet pipe 413, and an inflation pipe 414. A front end surface 408 of the control box 4 is provided with a control box water outlet connector 8. The inner wall 200 of the pool body is provided with a pool water outlet connector 9. One end of the control box water outlet connector 8 is in communication with the water outlet pipe 411, and the other end of the control box water outlet connector is in communication with the pool water outlet connector 9. In this way, the water in the water placement zone of the pool body passes the pool water outlet connector 9 and the control box water outlet connector 8 successively, and thus enters the water outlet pipe 411 in the control box.

[0047] The front end surface 408 of the control box 4 is provided with a control box water inlet connector 10. The inner wall 200 of the pool body is provided with a pool water inlet connector 11. One end of the control box water inlet connector 10 is in communication with the water inlet pipe 412, and the other end of the control box water inlet connector is in communication with the pool water inlet connector 11. In this way, water in the water inlet pipe 412 of the control box 4 passes the control box water inlet connector 10 and the pool water inlet connector 11 successively, and thus enters the water placement zone of

the pool body, where the water outlet pipe 411 is in communication with the water inlet pipe 412. Specifically, water enters the water outlet pipe 411 from the water placement zone 5 of the pool body, passes the water pump 405, flows through the heater 406, then enters the water inlet pipe 412, and finally returns to the water placement zone 5. That is, the water pump 405 is in fluid communication with the water placement zone of the pool body, so as to achieve water circulation. On one hand, the heater 406 may heat the water as required, so as to make a user in the water placement zone 5 more comfortable. On the other hand, a filtering apparatus arranged on a water circulation path may filter impurities in the water. For example, a filtering apparatus 911 is mounted on the inner wall 200 of the pool body 2 as shown in FIG. 10.

[0048] A connection between the control box water outlet connector 8 and the pool water outlet connector 9 will be described in detail below in conjunction with the accompanying drawings.

[0049] With reference to FIGS. 11, 12 and 16, the inflatable massage pool further includes a water outlet sealing assembly 800, the control box 4 includes the control box water outlet connector 8, the inner wall 200 of the pool body is provided with the pool water outlet connector 9, and the back side 301 of the control box accommodating cavity 3 is provided with the back hole 308, so as to allow the pool water outlet connector 9 to penetrate the back hole 308 to be connected to the control box water outlet connector 8 in a sealed manner by means of the water outlet sealing assembly 800, where the water outlet sealing assembly 800 may simultaneously achieve a sealed connection between the control box water outlet connector 8 and the pool water outlet connector 9 in a radial direction (a Z direction in FIG. 16) and an axial direction (an R direction in FIG. 16) of the control box water outlet connector 8. The control box water outlet connector 8 is connected to the pool water outlet connector 9 in a sealed manner, such that water may be prevented from leaking when entering the control box water outlet connector 8 from the pool water outlet connector 9.

[0050] Specifically, the water outlet sealing assembly 800 includes a first radial sealing member 809. For example, the first radial sealing member 809 is an annular sealing ring. With reference to FIGS. 16 and 17, the pool water outlet connector 9 includes a water outlet insertion end 901. For example, the water outlet insertion end 901 is of a hollow tubular structure. A radial size of the water outlet insertion end 901 gradually increases in an axial direction, facing an interior of the control box, of the pool water outlet connector 9.

[0051] It may be understood that the sealing member described herein and hereafter is made of an elastic material. The elastic material may be (but not limited to) rubber or silica gel.

[0052] With reference to FIGS. 16 and 18, the control box water outlet connector 8 includes a water outlet slot 804. For example, one end of the water outlet slot 804 away from the filter 911 is closed (as shown in A in FIG. 16) and the other end of the water outlet slot is open (as shown in B in FIG. 16).

[0053] The water outlet insertion end 901 is inserted into the water outlet slot 804. The first radial sealing member 809 is arranged between the water outlet insertion end 901 and a slot wall of the water outlet slot 804, and abuts against a side wall of the water outlet insertion end 901 and the slot wall of the water outlet slot 804 separately, such that the water outlet insertion end 901 is connected to the water outlet slot 804 in a sealed manner.

[0054] The control box water outlet connector 8 includes an inner control box water outlet connector 801 and an outer control box water outlet connector 802. The outer control box water outlet connector 802 is arranged around the inner control box water outlet connector 801 so as to define the water outlet slot 804. For example, a radial size of the outer control box water outlet connector 802 is greater than that of the inner control box water outlet connector 801. That is, a distance between the outer control box water outlet connector 802 and the inner control box water outlet connector 801 in a radial direction forms the water outlet slot 804, and the water outlet insertion end 901 is inserted into the water outlet slot 804.

[0055] The inner control box water outlet connector 801 is connected to the water outlet insertion end 901 in a sealed manner. Optionally, the inner control box water outlet connector 801 is hollow and is provided with an outer thread 803 on an outer surface, and the water outlet insertion end 901 is provided with an inner thread 902 on an inner wall. The outer thread 803 is connected to the inner thread 902. The first radial sealing member 809 is located between an outer wall of the water outlet insertion end 901 and the slot wall of the water outlet slot 804, such that the water outlet slot 804 is connected to the water outlet insertion end 901 in a sealed manner. It may be understood that the inner control box water outlet connector 801 and the water outlet insertion end 901 may further be connected to each other in known ways such as a flange connection or an interference fit connection.

[0056] With reference to FIGS. 16 and 19, the water outlet sealing assembly 800 further includes a first axial sealing member 808, the pool water outlet connector 9 further includes a first water outlet end surface 900 connected to the water outlet insertion end 901, and the first water outlet end surface 900 extends outward in the radial direction (the Z direction in FIG. 16) of the pool water outlet connector 9.

[0057] The control box water outlet connector 8 further includes a second water outlet end surface 805 connected to the water outlet slot 804, and the second water outlet end surface 805 extends outward in the radial direction of the control box water outlet connector 8. For example, the second water outlet end surface 805 is annular.

[0058] The first water outlet end surface 900 and the second water outlet end surface 805 are arranged oppositely and at an interval in the axial direction (the R

direction in FIG. 16) of the control box water outlet connector 8. The first axial sealing member 808 is located between the first water outlet end surface 900 and the second water outlet end surface 805, and is connected to the first water outlet end surface 900 and the second water outlet end surface 805 separately in the axial direction of the control box water outlet connector 8 in a sealed manner. For example, the first axial sealing member 808 is connected to the first water outlet end surface 900 and the second water outlet end surface 805 separately in a sealed manner, such that water leaking into the water outlet slot 804 may be effectively prevented from leaking between the first water outlet end surface 900 and the second water outlet end surface 805.

[0059] With reference to FIGS. 16 and 20, the inflatable massage pool further includes a water outlet fixing member 913, at least a part of the water outlet fixing member 913 is located in the water outlet slot 804, an inner wall 913a of the water outlet fixing member 913 abuts against the outer wall of the water outlet insertion end 901, and an outer wall 913b of the water outlet fixing member 913 abuts against the slot wall of the water outlet slot 804. The water outlet insertion end 901 and the water outlet fixing member 913 jointly achieve reliable sealing between the control box water outlet connector 8 and the pool water outlet connector 9. An outer diameter of the water outlet insertion end 901 gradually decreases in a direction away from the first water outlet end surface 900, such that the water outlet fixing member 913 is gradually pressed in a process of fastening the water outlet insertion end 901 to the inner control box water outlet connector 801.

[0060] The outer wall 913b of the water outlet fixing member 913 is provided with a water outlet sealing clamping groove 917, and the water outlet sealing clamping groove 917 accommodates the first radial sealing member 809. The first radial sealing member 809 is pressed between the water outlet fixing member 913 and the inner wall of the outer control box water outlet connector 802, so as to form a seal between the control box water outlet connector 8 and the pool water outlet connector 9. There are two (or more) water outlet sealing clamping grooves 917, and each of the water outlet sealing clamping grooves 917 accommodates one first radial sealing member 809, such that a desirable sealing effect can still be ensured when any first radial sealing member 809 fails.

[0061] With reference to FIGS. 16 and 19, the first axial sealing member 808 includes a first protrusion 808a, and an inner wall of the first protrusion 808a is provided with a first clamping groove 808f. The outer wall 913b of the water outlet fixing member 913 is provided with a clamping part 915 in a protruding manner. The clamping part 915 is connected to the first clamping groove 808f in a clamped manner. For example, the first protrusion 808a covers the clamping part 915, such that a certain tightness is ensured while relative fixation of the first axial sealing member 808 and the water outlet fixing member 913 is achieved.

[0062] With reference to FIGS. 16 and 19, the first axial sealing member 808 further includes a connection part 808b and a second protrusion 808c. The first protrusion 808a and the second protrusion 808c are located at two ends of the connection part 808b in the axial direction (the R direction in FIG. 16) of the first axial sealing member 808, respectively. For example, a radial size of the first protrusion 808a is greater than that of the second protrusion 808c. The second protrusion 808c is clamped between the outer wall 913b of the water outlet fixing member and the slot wall of the water outlet slot 804 in the radial direction (the Z direction in FIG. 16) of the first axial sealing member 808. The connection part 808b extends outward in the radial direction of the first axial sealing member 808 so as to be attached to the inner wall 200 of the pool body. A surface of the connection part 808b and the inner wall 200 of the pool body are welded and sealed to prevent water from leaking from a joint between the second water outlet end surface 805 and the connection part 808b.

[0063] With reference to FIGS. 16 and 18, one side of the second water outlet end surface 805 facing the connection part 808b is provided with a second clamping groove 808d extending in the axial direction of the control box water outlet connector 8, the second clamping groove 808d accommodates a first water outlet sealing ring 808e, and the first water outlet sealing ring 808e abuts against the connection part 808b. For example, the first axial sealing member 808 and the first water outlet sealing ring 808e fill a space between the first water outlet end surface 900 and the second water outlet end surface 805 in the axial direction (the R direction in FIG. 16) of the control box water outlet connector 8, and the first water outlet end surface 900 and the second water outlet end surface 805 also press the first axial sealing member 808 and the first water outlet sealing ring 808e, such that a gap between the first water outlet end surface 900 and the second water outlet end surface 805 is as small as possible, so as to achieve a better sealing effect.

[0064] An outer wall of the outer control box water outlet connector 802 is provided with a third clamping groove 802a configured to accommodate a fastening member 810, and the fastening member 810 is configured to fasten the control box water outlet connector 8 and the pool water outlet connector 9. For example, the fastening member 810 presses the water outlet insertion end 901 in the water outlet slot 804 of the control box water outlet connector 8 and the first radial sealing member 809 by means of a fastening force, such that sealing of the control box water outlet connector 8 and the pool water outlet connector 9 is tighter and more reliable.

[0065] With reference to FIGS. 15, 16 and 21, the pool water outlet connector 9 is connected to the filter 911, and the filter 911 is fixed to the inner wall 200 of the pool body. For example, under the action of the water pump 405, the water in the water placement zone of the pool body first flows into the filter 911, and the impurities in the water are filtered by a filter element of the filter 911. The filtered

water enters the control box 4, and optionally is heated by the heater 406, and then is returned to the water placement zone by means of the control box water inlet connector.

[0066] The inflatable massage pool further includes a water bypass assembly 912. The water bypass assembly 912 is fixed to the inner wall 200 of the pool body and is in fluid communication with the filter 911. For example, the water bypass assembly 912 is in communication by means of a pipeline arranged in the pool wall, such that the water pump 405 is not only in communication with the water in the water placement zone by means of the filter 911, but also in communication with the water in the water placement zone by means of the water bypass assembly 912. When the filter 911 is blocked, the water in the water placement zone may still be sucked into the water pump 405 by means of the water bypass assembly 912. Especially, in the case that the filter 911 is blocked by hair of a user, existence of the water bypass assembly 912 enables the user to easily leave the filter 911 without danger. In order to prevent the water pump 405 from working abnormally due to the fact that large impurities are sucked into the water pump 405, the water bypass assembly 912 is optionally provided with a filter screen (not shown in the figure). Alternatively, the water bypass assembly 912 is further provided with a filter element, or the water bypass assembly 912 is another filter the same as or approximately the same as the filter 911, so as to improve filtration efficiency of a filtration system.

[0067] A connection between the control box water inlet connector and the pool water inlet connector will be described in detail below in conjunction with the accompanying drawings.

[0068] With reference to FIGS. 12, 14 and 22, the inflatable massage pool further includes a water inlet sealing assembly 100, the control box 4 includes the control box water inlet connector 10, the inner wall 200 of the pool body is provided with the pool water inlet connector 11, and the back side 301 of the control box accommodating cavity 3 is provided with the back hole 308, so as to allow the pool water inlet connector 11 to penetrate the back hole 308 to be connected to the control box water inlet connector 10 in a sealed manner by means of the water inlet sealing assembly 100, where the water inlet sealing assembly 100 simultaneously achieve a sealed connection between the control box water inlet connector 10 and the pool water inlet connector 11 in a radial direction (a Z direction in FIG. 22) and an axial direction (an R direction in FIG. 22) of the control box water inlet connector 10.

[0069] Specifically, the water inlet sealing assembly 100 includes a second radial sealing member 106. For example, the second radial sealing member 106 is an annular sealing ring. With reference to FIGS. 21 and 22, the pool water inlet connector 11 includes a water inlet insertion end 111. For example, the water inlet insertion end 111 is of a hollow tubular structure, and extends in the axial direction of the control box water inlet connector 10. A radial size of the water inlet insertion end 111 gradually increases in a direction facing an exterior of the control box.

[0070] For example, the pool water inlet connector 11 further includes a water inlet limiting part 113. The water inlet limiting part 113 is arranged at a periphery of a first water inlet end surface 110 and extends in the axial direction of the pool water inlet connector 11 so as to protrude from the first water inlet end surface 110.

[0071] With reference to FIGS. 22-24, the control box water inlet connector 10 includes a water inlet slot 103. For example, one end of the water inlet slot 103 in the axial direction (the R direction in FIG. 22) of the control box water inlet connector 10 is closed (as shown in C in FIG. 22) and the other end of the water inlet slot is open (as shown in D in FIG. 22).

[0072] The water inlet insertion end 111 is inserted into the water inlet slot 103. The second radial sealing member 106 is arranged between the water inlet insertion end 111 and a slot wall of the water inlet slot 103, and abuts against the water inlet insertion end 111 and the slot wall of the water inlet slot 103 separately in the radial direction of the pool water inlet connector 11, such that the water inlet insertion end 111 is connected to the water inlet slot 103 in a sealed manner.

[0073] With reference to FIGS. 22 and 24, the control box water inlet connector 10 includes an inner control box water inlet connector 101 and an outer control box water inlet connector 102. The outer control box water inlet connector 102 is arranged around the inner control box water inlet connector 101 so as to define the water inlet slot 103. For example, a radial size of the outer control box water inlet connector 102 is greater than that of the inner control box water inlet connector 101. That is, a distance between the outer control box water inlet connector 102 and the inner control box water inlet connector 101 in the radial direction of the control box water inlet connector 10 forms the water inlet slot 103. One end of the water inlet slot 103 in the axial direction of the control box water inlet connector 10 is open and the other end of the water inlet slot is closed. An opening of the water inlet slot allows the water inlet insertion end 111 to be inserted into.

[0074] The inner control box water inlet connector 101 is hollow and is provided with an outer thread 101a on an outer surface, and an inner wall of the water inlet insertion end 111 is provided with an inner thread 112 matching the outer thread 101a. For example, under the condition that the inner control box water inlet connector 101 is in threaded connection with the water inlet insertion end 111, the second radial sealing member 106 is located between an outer wall of the water inlet insertion end 111 and the slot wall of the water inlet slot 103, such that the water inlet slot 103 is connected to the water inlet insertion end 111 in a sealed manner. It may be understood that the inner control box water inlet connector 101 and the water inlet insertion end 111 may further be connected to each other in a sealed manner in known ways such as a

flange connection or an interference fit connection.

[0075] The water inlet sealing assembly 100 further includes a second axial sealing member 105. The pool water inlet connector 11 further includes the first water inlet end surface 110 connected to the water inlet insertion end 111, and the first water inlet end surface 110 extends outward in the radial direction of the pool water inlet connector 11.

[0076] The control box water inlet connector 10 further includes a second water inlet end surface 104 connected to the water inlet slot 103, and the second water inlet end surface 104 extends outward in the radial direction of the control box water inlet connector 10. For example, the second water inlet end surface 104 is annular.

[0077] The first water inlet end surface 110 and the second water inlet end surface 104 are arranged oppositely and at an interval in the axial direction (the R direction in FIG. 22) of the control box water inlet connector 10. The second axial sealing member 105 is located between the first water inlet end surface 110 and the second water inlet end surface 104, and is connected to the first water inlet end surface 110 and the second water inlet end surface 104 separately in the axial direction of the control box water inlet connector 10 in a sealed manner.

[0078] With reference to FIGS. 22 and 25, the inflatable massage pool further includes a water inlet fixing member 107, at least a part of the water inlet fixing member 107 is located in the water inlet slot 103, and an inner wall 107a of the water inlet fixing member 107 abuts against the outer wall of the water inlet insertion end 111 in the radial direction (the Z direction in FIG. 22) of the control box water inlet connector 10. An outer wall 107b of the water inlet fixing member 107 abuts against the slot wall of the water inlet slot 103 in the radial direction of the control box water inlet connector 10. That is, the water inlet insertion end 111 and the water inlet fixing member 107 jointly achieve reliable sealing between the control box water inlet connector 10 and the pool water inlet connector 11. An outer diameter of the water inlet insertion end 111 gradually decreases in a direction away from the first water inlet end surface 110, such that the water inlet fixing member 107 is gradually pressed in a process of fastening the water inlet insertion end 111 to the inner control box water inlet connector 101.

[0079] The outer wall 107b of the water inlet fixing member 107 is provided with a water inlet sealing clamping groove 107c, and the water inlet sealing clamping groove 107c accommodates the second radial sealing member 106. The second radial sealing member 106 is pressed between the water inlet fixing member 107 and the inner wall of the outer control box water inlet connector 102, so as to form a sealed connection between the control box water inlet connector 10 and the pool water inlet connector 11. There are two (or more) water inlet sealing clamping grooves 107c, and each of the water inlet sealing clamping grooves 107c accommodates one second radial sealing member 106, such that a desirable sealing effect can still be ensured when any second radial sealing member 106 fails.

[0080] With reference to FIGS. 22 and 26, the second axial sealing member 105 includes a third protrusion 105a, and an inner wall of the third protrusion 105a is provided with a fourth clamping groove 105d. The outer wall 107b of the water inlet fixing member 107 is provided with a second clamping part 107d in a protruding manner. The second clamping part 107d is connected to the fourth clamping groove 105d in a clamped manner. The third protrusion 105a covers the second clamping part 107d, such that relative positions of the second axial sealing member 105 and the water inlet fixing member 107 are fixed, and sealing is provided.

[0081] The second axial sealing member 105 includes a third connection part 105b and a fourth protrusion 105c. The third protrusion 105a and the fourth protrusion 105c are located at two ends of the third connection part 105b in the axial direction (the R direction in FIG. 22) of the second axial sealing member 105, respectively. For example, a radial size of the third protrusion 105a is greater than that of the fourth protrusion 105c. The water inlet limiting part 113 presses the third protrusion 105a. The fourth protrusion 105c is clamped between the outer wall 107b of the water inlet fixing member 107 and the slot wall of the water inlet slot 103 in the radial direction (the Z direction in FIG. 22) of the second axial sealing member 105. The third connection part 105b extends outward in the radial direction of the second axial sealing member 105 so as to be attached to the inner wall 200 of the pool body. For example, a surface of the third connection part 105b and the inner wall 200 of the pool body are welded and sealed to prevent water from leaking from a joint between the second water inlet end surface 104 and the third connection part 105b.

[0082] With reference to FIGS. 22 and 24, one side of the second water inlet end surface 104 facing the third connection part 105b is provided with a second water inlet clamping groove 104a, the second water inlet clamping groove 104a accommodates a first water inlet sealing ring 104b, and the first water inlet sealing ring 104b abuts against the third connection part 105b.

[0083] With reference to FIGS. 11, 21 and 22, a protective cover 12 is connected to the pool water inlet connector 11 in a clamped manner, so as to prevent objects in the water placement zone from entering the control box 4. The protective cover 12 is provided with a plurality of water inlet holes 122 and is connected to the pool water inlet connector 11 by means of its columnar part 120 in a clamped manner.

[0084] With reference to FIGS. 11, 13 and 15, the control box 4 is internally provided with a control box air inlet connector, and the inner wall 200 of the pool body is provided with a pool air inlet connector 15. One end of the pool air inlet connector 15 penetrates an air inlet hole 409 of the front end surface 408 of the control box 4, so as to be in communication with the control box air inlet connector, and the other end of the pool air inlet con-

nector 15 is in fluid communication with a connection channel 152 of the pool body. The air pump 403 sucks air from the outside, pressurizes the air, and then conveys the air to a wave making channel 151 via the connection channel 152. The pressurized air supplies bubbles to a water storage zone via air injection holes 153 distributed on the wave making channel 151 so as to produce a massage effect.

[0085] A connection between the control box air inlet connector and the pool air inlet connector will be described in detail below in conjunction with the accompanying drawings.

[0086] With reference to FIGS. 27-29 and in conjunction with FIGS. 12 and 14, the inflatable massage pool further includes an air inlet sealing assembly 13, the control box 4 includes a control box air inlet connector 14, the inner wall 200 of the pool body is provided with a pool air inlet connector 15, the back side 301 of the control box accommodating cavity 3 is provided with the back hole 308, the front end surface 408 of the control box 4 is provided with the air inlet hole 409, the back hole 308 is in communication with the air inlet hole 409, so as to allow the pool air inlet connector 15 to penetrate the back hole 308 and extend into the control box 4, and the control box air inlet connector 14 is connected to the pool air inlet connector 15 in a sealed manner by means of the air inlet sealing assembly 13, where the air inlet sealing assembly 13 provides sealing between the control box air inlet connector 14 and the pool air inlet connector 15.

[0087] With reference to FIGS. 27 and 30, the air inlet sealing assembly 13 includes a radial sealing connector 131. The radial sealing connector includes a first air inlet end 133 and a second air inlet end 134. In an axial direction (an R direction in FIG. 27) of the radial sealing connector 131, the control box air inlet connector 14 is sleeved with the first air inlet end 133, and the pool air inlet connector 15 is sleeved with the second air inlet end 134. An inner wall of the first air inlet end 133 is connected to an outer wall of the control box air inlet connector 14 in a radial direction (a Z direction in FIG. 27) of the radial sealing connector 131 in a sealed manner, and an end of the first air inlet end 133 is connected to the outer wall of the control box inflation connector 14 in the axial direction of the radial sealing connector 131 in a sealed manner. An inner wall of the second air inlet end 134 is connected to an outer wall of the pool air inlet connector 15 in the radial direction of the radial sealing connector 131 in a sealed manner. That is, the control box air inlet connector 14 and the pool air inlet connector 15 are sleeved with the radial sealing connector 131 at the same time, such that the control box air inlet connector 14 is connected to the pool air inlet connector 15.

[0088] For example, the radial sealing connector 131 further includes a contraction part 134a. One end of the contraction part 134a is connected to the first air inlet end 133 and the other end of the contraction part is connected to the second air inlet end 134.

[0089] For example, both the first air inlet end 133 and the second air inlet end 134 are of a hollow tubular structure having an equal diameter. Specifically, if a radial size of the first air inlet end 133 is greater than that of the second air inlet end 134, a radial size of the contraction part 134a gradually decreases in the axial direction, facing the pool body, of the radial sealing connector 131. That is, the radial size of the contraction part 134a gradually decreases from a maximum radial size at a joint with the first air inlet end 133 to a minimum radial size at a joint with the second air inlet end 134.

[0090] With reference to FIGS. 27 and 28, the air inlet sealing assembly 13 further includes a first air inlet sealing ring 142. The inner wall of the first air inlet end 133 or the outer wall of the control box air inlet connector 14 is provided with a first air inlet clamping groove 140, and the first air inlet clamping groove 140 accommodates the first air inlet sealing ring 142. Optionally, the first air inlet clamping groove 140 is provided on the outer wall of the control box air inlet connector 14, and the inner wall of the first air inlet end 133 and the first air inlet clamping groove 140 press the first air inlet sealing ring 142, such that the first air inlet end 133 of the radial sealing connector 131 is connected to the control box air inlet connector 14 in a sealed manner. Further, gas is prevented from leaking from a joint between the control box air inlet connector 14 and the radial sealing connector 131.

[0091] The air inlet sealing assembly 13 further includes a second air inlet sealing ring 143. The outer wall of the control box air inlet connector 14 is provided with a second air inlet clamping groove 141, and the second air inlet clamping groove 141 accommodates the second air inlet sealing ring 143. For example, the first air inlet clamping groove 140 and the second air inlet clamping groove 141 are provided at an interval in an axial direction (the R direction in FIG. 27) of the control box air inlet connector 14. Specifically, the first air inlet clamping groove 140 is closer to the pool air inlet connector 15 than the second air inlet clamping groove 141.

[0092] The outer wall of the control box air inlet connector 14 is provided with an air inlet limiting part 144 in a protruding manner. In the axial direction (the R direction in FIG. 27) of the control box air inlet connector 14, the air inlet limiting part 144 and an end of the first air inlet end 133 of the radial sealing connector 131 jointly clamp the second air inlet sealing ring 143. For example, the air inlet limiting part 144 is arranged around the outer wall of the control box air inlet connector 14, and a radial size of the air inlet limiting part 144 is greater than an outer contour size of the control box air inlet connector 14.

[0093] For example, one groove wall of the second air inlet clamping groove 141 in the axial direction of the control box air inlet connector 14 is a first wall 144a of the air inlet limiting part 144, and the other groove wall of the second air inlet clamping groove is flush with the end of the first air inlet end 133 in the radial direction of the control box air inlet connector 14. In this way, the second air inlet sealing ring 143 in the second air inlet clamping groove 141 is pressed by the first wall 144a of the air inlet

limiting part 144 and the end of the first air inlet end 133 separately in the axial direction of the control box air inlet connector 14, and then the control box air inlet connector 14 is connected to the radial sealing connector 131 in the axial direction of the control box air inlet connector 14 in a sealed manner.

[0094] With reference to FIGS. 27 and 31, the inflatable massage pool further includes a threaded fastener 130. The first air inlet end 133 of the radial sealing connector 131 is sleeved with the threaded fastener 130, and the threaded fastener is in threaded connection with the first air inlet end 133. The first air inlet end 133 is provided with an outer thread 133a, and the threaded fastener 130 is provided with an inner thread 130a matching the outer thread 133a.

[0095] With reference to FIG. 27, the threaded fastener 130 includes a first stop part 139, and the first stop part 139 extends in the radial direction (the Z direction in FIG. 27) of the threaded fastener 130. The air inlet limiting part 144 includes a first side 144a and a second side 144b facing away from each other in its axial direction (the R direction in FIG. 27). The first side 144a faces the second air inlet sealing ring 143 in the axial direction of the threaded fastener 130, and the second side 144b abuts against the first stop part 139.

[0096] With reference to FIGS. 27 and 29, the air inlet sealing assembly 13 further includes a third air inlet sealing ring 157. The outer wall of the pool air inlet connector 15 or the inner wall of the second air inlet end 134 of the radial sealing connector 131 is provided with an air inlet sealing clamping groove 155, and the air inlet sealing clamping groove 155 accommodates the third air inlet sealing ring 157. Optionally, the air inlet sealing clamping groove 155 is provided on the outer wall of the pool air inlet connector 15, and the inner wall of the second air inlet end 134 of the radial sealing connector 131 presses the third air inlet sealing ring 157, such that the second air inlet end 134 of the radial sealing connector 131 is connected to the pool air inlet connector 15 in a sealed manner.

[0097] For example, two or more air inlet sealing clamping grooves 155 are provided to accommodate a corresponding number of third air inlet sealing rings 157, so as to achieve a better sealing effect.

[0098] The inner wall of the second air inlet end 134 of the radial sealing connector 131 is connected to the outer wall of the pool air inlet connector 15 in a clamped manner. Specifically, the inner wall of the second air inlet end 134 of the radial sealing connector 131 includes an air inlet clamping part 134d, and the outer wall of the pool air inlet connector 15 includes a first air inlet connection clamping groove 154. The air inlet clamping part 134d is connected to the first air inlet connection clamping groove 154 in a clamped manner. The air inlet clamping part 134d is obliquely arranged facing the first air inlet connection clamping groove 154 and abuts against a groove wall of the first air inlet connection clamping groove 154. That is, the air inlet clamping part 134d is connected to the first air inlet connection clamping groove 154 in a clamped manner, such that the radial sealing connector 131 and the pool air inlet connector 15 are fixed relative to each other, and thus the radial sealing connector 131 is prevented from falling off from the pool air inlet connector 15.

[0099] For example, the first air inlet connection clamping groove 154 and the air inlet sealing clamping groove 155 are provided at an interval in the axial direction of the pool air inlet connector 15.

[0100] With reference to FIGS. 27 and 32, the inflatable massage pool further includes an axial sealing connector 132. The axial sealing connector 132 includes an inner air inlet connection part 132a. The outer wall of the second air inlet end 134 of the radial sealing connector 131 is sleeved with the inner air inlet connection part 132a, and the inner air inlet connection part is connected to the outer wall of the second air inlet end 134 in a clamped manner. Optionally, the contraction part 134a and the second air inlet end 134 are sleeved with the inner air inlet connection part 132a at the same time.

[0101] For example, an inner periphery of the inner air inlet connection part 132a is provided with a plurality of recesses 132c, outer peripheries of the contraction part 134a and the second air inlet end 134 are provided with a plurality of protrusions 134c, and the plurality of recesses 132c are connected to the plurality of protrusions 134c in a clamped manner, such that the axial sealing connector 132 and the radial sealing connector 131 are fixed relative to each other. However, the present application does not limit a connection way of the axial sealing connector 132 and the radial sealing connector 131. For example, the inner periphery of the inner air inlet connection part 132a may be provided with a plurality of protrusions, the outer peripheries of the contraction part 134a and the second air inlet end 134 are provided with a plurality of recesses, and the axial sealing connector 132 is connected to the radial sealing connector 131 through a concave-convex fit.

[0102] The axial sealing connector 132 further includes an outer air inlet sealing end surface 132b. The outer air inlet sealing end surface 132b is connected to the inner air inlet connection part 132a. The outer air inlet sealing end surface 132b is attached to the inner wall 200 of the pool body in the axial direction (the R direction in FIG. 27) of the axial sealing connector 132. For example, the outer air inlet sealing end surface 132b is welded to the inner wall 200 of the pool body, such that gas is prevented from leaking between the outer air inlet sealing end surface 132b and the inner wall 200 of the pool body.

[0103] For example, the outer wall of the pool air inlet connector 15 is provided with an air inlet protrusion 156 in a protruding manner, and the second air inlet end 134 and one end of the inner connection part 132a facing the pool body are flush with each other in the radial direction of the pool air inlet connector 15 and abut against the air inlet protrusion 156.

[0104] With reference to FIGS. 27 and 29, the inflatable

massage pool further includes an air inlet connector 150. The pool air inlet connector 15 is sleeved with the air inlet connector 150. The outer wall of the pool air inlet connector 15 is provided with the air inlet protrusion 156 in a protruding manner. The inner air inlet connection part 132a of the axial sealing connector 132 includes an annular end part 132d. The annular end part 132d is arranged at one side of the inner air inlet connection part 132a in the axial direction (the R direction in FIG. 27) of the pool air inlet connector 15 and facing the pool body. The annular end part 132d and the end of the air inlet connector 150 in the axial direction of the pool air inlet connector 15 and facing an interior of the control box jointly clamp the air inlet protrusion 156. The annular end part 132d and the outer air inlet sealing end surface 132b are arranged at an interval in the axial direction of the pool air inlet connector 15.

[0105] For example, with reference to FIGS. 11 and 27, an outer end surface of the air inlet connector 150 and the outer sealing end surface 132b of the axial sealing connector 132 are oppositely arranged in the axial direction of the pool air inlet connector 15. The air inlet connector 150 is configured to be connected to the connection channel 152 connected to the wave making channel 151, such that gas from the air pump in the control box enters the wave making channel 151, and a wave-making massage function is provided for a user.

[0106] Before the inflatable massage pool is used, the inflatable chamber needs to be inflated by using the air pump in the control box, such that the inflatable massage pool expands to a set shape, so as to form the water placement zone for accommodating water. Specifically, the control box of the inflatable massage pool may be in fluid communication with the inflatable chamber. That is, the air pump in the control box may pump gas into the inflatable chamber via a control box inflation connector and an accommodating cavity inflation connector of the control box accommodating cavity, so as to inflate the inflatable chamber.

[0107] A connection between the control box inflation connector and the accommodating cavity inflation connector of the control box accommodating cavity will be described in detail below in conjunction with the accompanying drawings.

[0108] With reference to FIGS. 33-35 and in conjunction with FIGS. 12 and 14, the inflatable massage pool further includes an inflation sealing assembly 16, the control box 4 includes the control box inflation connector 17, a side wall 305 of the control box accommodating cavity 3 is provided with the accommodating cavity inflation connector 18, and the control box 4 is provided with an inner inflation hole 407, such that the accommodating cavity inflation connector 18 extends into the inner inflation hole 407 to be connected to the control box inflation connector 17 by means of the inflation sealing assembly 16 in a sealed manner.

[0109] With reference to FIGS. 33-35, the accommodating cavity inflation connector 18 includes a first connection part 181, the control box inflation connector 17 includes an inflation insertion end 17b, the inflation insertion end 17b is sleeved with the first connection part 181, and an inner wall of the first connection part 181 is connected to an outer wall of the inflation insertion end 17b in a sealed manner in a radial direction (an M direction in FIG. 33) of the accommodating cavity inflation connector 18.

[0110] With reference to FIG. 33 and in conjunction with FIG. 15, for example, the control box inflation connector 17 further includes a pipeline connection end 17a, and the pipeline connection end 17a is connected to the inflation insertion end 17b. The pipeline connection end 17a is inserted into an inflation pipe 414, and an outer wall of the pipeline connection end 17a is provided with an inflation connection clamping groove 173, so as to accommodate a sealing ring, such that the control box inflation connector 17 is connected to the inflation pipe 414 in a sealed manner.

[0111] With reference to FIGS. 33 and 34, the inflation sealing assembly 16 includes a first inflation sealing ring 172a. The inner wall of the first connection part 181 or the outer wall of the inflation insertion end 17b is provided with a first inflation clamping groove 172. The first inflation clamping groove 172 accommodates the first inflation sealing ring 172a. Optionally, the first inflation clamping groove 172 is provided on the outer wall of the inflation insertion end 17b, and the inner wall of the first connection part 181 presses the first inflation sealing ring 172a in the first inflation clamping groove 172 in the radial direction of the control box inflation connector 17, such that the inner wall of the first connection part 181 is closely attached to the outer wall of the inflation insertion end 17b, and thus the control box inflation connector 17 is connected to the accommodating cavity inflation connector 18 in a sealed manner.

[0112] The inflation sealing assembly 16 further includes a second inflation sealing ring 171a. The inner wall of the first connection part 181 or the outer wall of the inflation insertion end 17b is provided with a second inflation clamping groove 171. The second inflation clamping groove 171 accommodates the second inflation sealing ring 171a. For example, the first inflation clamping groove 172 and the second inflation clamping groove 171 are provided at an interval in an axial direction (an N direction in FIG. 24) of the control box inflation connector 17.

[0113] Optionally, the second inflation clamping groove 171 is provided on the outer wall of the inflation insertion end 17b, and the inner wall of the first connection part 181 presses the second inflation sealing ring 171a in the second inflation clamping groove 171 in the radial direction of the accommodating cavity inflation connector 18, such that the inner wall of the first connection part 181 is closely attached to the outer wall of the inflation insertion end 17b, and thus the control box inflation connector 17 is connected to the accommodating cavity inflation connector 18 in a sealed manner.

[0114] The outer wall of the inflation insertion end 17b is provided with an inflation limiting part 170 in a protruding manner. In the axial direction (the N direction in FIG. 33) of the accommodating cavity inflation connector 18, the inflation limiting part 170 and the inner wall of the first connection part 181 jointly clamp the second inflation sealing ring 171a. For example, the inflation limiting part 170 is arranged around the outer wall of the inflation insertion end 17b, and an outer contour size of the inflation limiting part 170 is greater than that of the inflation insertion end 17b.

[0115] The inflation limiting part 170 includes a first limiting wall 170a and a second limiting wall 170b facing away from each other in the axial direction of the accommodating cavity inflation connector 18, and the first limiting wall 170a is also a groove wall of the second inflation clamping groove 171. The first limiting wall 170a abuts against an end of the first connection part 181 of the accommodating cavity inflation connector 18 in the axial direction of the accommodating cavity inflation connector 18, such that the second inflation sealing ring 171a is pressed together by the inner wall of the first connection part 181 and the first limiting wall 170a, and thus the control box inflation connector 17 is connected to the accommodating cavity inflation connector 18 in a sealed manner.

[0116] With reference to FIG. 33, the inflatable massage pool further includes an inflation fastener 160. The first connection part 181 of the accommodating cavity inflation connector 18 is sleeved with the inflation fastener 160, and the inflation fastener is in threaded connection with the first connection part 181. For example, the outer wall of the first connection part 181 of the accommodating cavity inflation connector 18 is provided with an outer thread 180, and the inner wall of the inflation fastener 160 is provided with an inner thread 160a. The outer thread 180 is connected to the inner thread 160a.

[0117] That is, the first connection part 181 of the accommodating cavity inflation connector 18 is clamped by the inflation fastener 160 and the inflation insertion end 17b of the control box inflation connector 17, such that relative movement of the control box inflation connector 17 and the accommodating cavity inflation connector 18 is limited, and then connection reliability of the control box inflation connector 17 and the accommodating cavity inflation connector 18 is ensured.

[0118] The inflation fastener 160 includes a first inflation stop part 160b. The first inflation stop part 160b extends in the radial direction (the M direction in FIG. 33) of the control box inflation connector 17. In the axial direction (the N direction in FIG. 33) of the control box inflation connector 17, two ends of the inflation limiting part 170 abut against the first inflation stop part 160b and the end of the first connection part 181 of the accommodating cavity inflation connector 18, respectively. Specifically, the first limiting wall 170a of the inflation limiting part 170 abuts against the end of the first connection part 181 of the accommodating cavity inflation connector 18, and the second limiting wall 170b abuts against the first inflation stop part 160b, such that relative fixation of the control box inflation connector 17, the accommodating cavity inflation connector 18 and the inflation fastener 160 is achieved, and then a sealed connection between the control box inflation connector 17 and the accommodating cavity inflation connector 18 is ensured.

[0119] With reference to FIGS. 33 and 35, the first connection part 181 of the accommodating cavity inflation connector 18 includes a second inflation stop part 184. The second inflation stop part 184 extends in the radial direction of the accommodating cavity inflation connector 18. The second inflation stop part 184 abuts against one end of the inflation fastener 160 in the axial direction (the N direction in FIG. 33) of the accommodating cavity inflation connector 18 and away from the first inflation stop part 160b. That is, on the basis of a threaded connection between the first connection part 181 of the accommodating cavity inflation connector 18 and the inflation fastener 160, the second inflation stop part 184 abuts against the end of the inflation fastener, and thus further the inflation fastener 160 and the first connection part 181 are fixed relative to each other, so as to prevent the inflation fastener 160 from being disengaged from the first connection part 181.

[0120] With reference to FIGS. 33, 36a and 36b, the inflation fastener 160 includes a first fastener 162 and a second fastener 163. The first fastener 162 is provided with an inflation clamping groove 164, and the second fastener 163 is provided with an inflation protrusion 165. The inflation protrusion 165 is connected to the inflation clamping groove 164 in a clamped manner. For example, both the first fastener 162 and the second fastener 163 are semicircular, and the first fastener 162 and the second fastener 163 are spliced to form a complete inflation fastener 160. The inflation fastener 160 fastens the connection between the control box inflation connector 17 and the accommodating cavity inflation connector 18 so as to prevent the control box inflation connector 17 and the accommodating cavity inflation connector 18 from being disengaged.

[0121] With reference to FIGS. 33 and 37, the inflatable massage pool further includes an axial inflation sealing member 161, the axial inflation sealing member 161 includes an inner inflation connection part 161a, and the accommodating cavity inflation connector 18 further includes a second connection part 182 connected to the first connection part 181. The second connection part 182 is sleeved with the inner inflation connection part 161a, and the inner inflation connection part is connected to the second connection part 182 in a clamped manner.

[0122] For example, an inner wall of the inner inflation connection part 161a is provided with an inflation sealing clamping groove 161c, an outer wall of the second connection part 182 is provided with an inflation clamping part 185 in a protruding manner, and the inflation clamping part 185 is connected to the inflation sealing clamping groove 161c of the inner inflation connection part 161a in

a clamped manner, such that the axial inflation sealing member 161 and the accommodating cavity inflation connector 18 are fixed and sealed relative to each other.

[0123] With reference to FIGS. 33 and 36 in conjunction with FIG. 12, the axial inflation sealing member 161 further includes an outer inflation sealing end surface 161b. The outer inflation sealing end surface 161b is connected to the inner inflation connection part 161a. The outer inflation sealing end surface 161b extends outward in the radial direction (the M direction in FIG. 24) of the accommodating cavity inflation connector 18 so as to be attached and connected to the side wall 305 of the control box accommodating cavity in the axial direction (the N direction in FIG. 33) of the accommodating cavity inflation connector 18. For example, the outer inflation sealing end surface 161b is fixed to the side wall 305 of the control box accommodating cavity through welding, such that gas is prevented from leaking from the joint between the accommodating cavity inflation connector 18 and the side wall 305 of the control box accommodating cavity.

[0124] Although the present utility model has been illustrated and described with reference to some preferred implementations of the present utility model, those of ordinary skill in the art should understand that the above contents are further detailed descriptions for the present utility model in conjunction with specific implementations, and it cannot be assumed that the specific implementations of the present utility model are limited to these descriptions. Those skilled in the art can make various changes in form and details, including several simple deduction or substitutions, without departing from the spirit and scope of the present utility model.

FIRST ASPECTS

[0125]

1. An inflatable massage pool, characterized by comprising:

a pool body, which comprises a water holding chamber defined by a pool wall and a pool bottom, the pool wall being provided with an air chamber; and

a control box configured to at least control a massage function of the inflatable massage pool,

wherein the pool wall is further provided with an accommodating chamber to accommodate the control box, the accommodating chamber being separated from the air chamber by means of a chamber wall that is provided with a first opening for through which the control box can be put into the accommodating chamber.

2. The inflatable massage pool according to aspect 1, wherein the pool wall is formed by a top wall, an outer wall and an inner wall which are disposed in an enclosing manner, the pool wall and the pool bottom form the air chamber in a sealing manner, the chamber wall comprises a chamber surrounding wall connected to both the outer wall and the inner wall and forming the first opening beneath, and the pool bottom is provided with a second opening corresponding to the first opening.

3. The inflatable massage pool according to aspect 1 or 2, wherein that the chamber wall further comprises a chamber upper wall connected to the chamber surrounding wall.

4. The inflatable massage pool according to any one of aspects 1 to 3, wherein that the chamber surrounding wall is formed by a single sheet disposed in an enclosing manner.

5. The inflatable massage pool according to any one of aspects 1 to 4, wherein the accommodating chamber is further internally provided with a protective wall that matches the contour of the chamber wall, the protective wall being formed by a single sheet and connected to both the outer wall and the inner wall.

6. The inflatable massage pool according to any one of aspects 1 to 5, wherein the pool bottom is provided with an air passage that is in communication with the control box in the accommodating chamber via an air intake bag.

7. The inflatable massage pool according to any one of aspects 1 to 6, wherein the control box is provided with a foldable control panel, and the chamber wall and the pool wall of the pool body are each provided with an opening through which the control panel extends out of the pool wall.

8. The inflatable massage pool according to any one of aspects 1 to 7, wherein the control box is provided with a water inlet end in communication with a water inlet of the pool body, a water inlet end in communication with a water outlet of the pool body, a first air supply end in communication with the air chamber, and a second air supply end in communication with the air passage.

9. The inflatable massage pool according to aspect 8, wherein the water inlet end and the water outlet end of the control box are connected to the water inlet and the water outlet, respectively, in a sealing manner by means of intermediate members.

10. The inflatable massage pool according to aspect 9, wherein the intermediate members are fixedly connected to the pool body.

SECOND ASPECTS

[0126]

1. An inflatable massage pool, characterized in that the inflatable massage pool comprises:

a pool body comprising a pool wall and a pool bottom, wherein the pool bottom and the pool wall define an inflatable chamber;
a control box accommodating cavity provided in the pool wall and isolated from the inflatable chamber in a sealed manner; and
a control box located in the control box accommodating cavity, wherein the control box is configured to supply air and/or water to the pool body.

2. The inflatable massage pool according to aspect 1, wherein the control box accommodating cavity is provided with a first hole, and the first hole allows the control box to enter the control box accommodating cavity.

3. The inflatable massage pool according to aspect 1 or 2, wherein the control box comprises a control panel, the control box accommodating cavity is provided with a front hole, the pool wall of the pool body is provided with a panel hole, and the front hole is in communication with the panel hole, so as to allow the control panel to extend out of the pool wall.

4. The inflatable massage pool according to any one of aspects 1 to 3, wherein the inflatable massage pool further comprises a water outlet sealing assembly, the control box comprises a control box water outlet connector, an inner wall of the pool body is provided with a pool water outlet connector, the control box accommodating cavity is provided with a back hole, the pool water outlet connector penetrates the back hole, and the pool water outlet connector is connected to the control box water outlet connector in a sealed manner by means of the water outlet sealing assembly.

5. The inflatable massage pool according to any one of aspects 1 to 4, wherein the inflatable massage pool further comprises a water inlet sealing assembly, the control box comprises a control box water inlet connector, an inner wall of the pool body is provided with a pool water inlet connector, the control box accommodating cavity is provided with a back hole, the pool water inlet connector penetrates the back hole, and the pool water inlet connector is connected to the control box water inlet connector in a sealed manner by means of the water inlet sealing assembly.

6. The inflatable massage pool according to any one of aspects 1 to 5, wherein the inflatable massage pool further comprises an air inlet sealing assembly, the control box comprises a control box air inlet connector, an inner wall of the pool body is provided with a pool air inlet connector, the control box accommodating cavity is provided with a back hole, the pool air inlet connector penetrates the back hole, and the control box air inlet connector is connected to the pool air inlet connector in a sealed manner by means of the air inlet sealing assembly.

7. The inflatable massage pool according to any one of aspects 1 to 7, wherein the inflatable massage pool further comprises an inflation sealing assembly, the control box comprises a control box inflation connector, the control box accommodating cavity comprises an accommodating cavity inflation connector, and the accommodating cavity inflation connector is connected to the control box inflation connector in a sealed manner by means of the inflation sealing assembly.

8. The inflatable massage pool according to aspect 7, wherein the accommodating cavity inflation connector comprises a first connection part, the control box inflation connector comprises an inflation insertion end, the inflation insertion end is sleeved with the first connection part, and an inner wall of the first connection part and an outer wall of the inflation insertion end are sealed.

9. The inflatable massage pool according to aspect 8, wherein the inflation sealing assembly comprises:

a first inflation clamping groove provided on the inner wall of the first connection part or the outer wall of the inflation insertion end; and
a first inflation sealing ring accommodated in the first inflation clamping groove.

10. The inflatable massage pool according to aspect 9, wherein the inflation sealing assembly further comprises:
a second inflation clamping groove provided on the inner wall of the first connection part or the outer wall of the inflation insertion end; and
a second inflation sealing ring accommodated in the second inflation clamping groove.

THIRD ASPECTS

[0127]

1. An inflatable massage pool (1), comprising:

a pool body (2) comprising a pool wall (2000) and a pool bottom (203), wherein the pool bot-

tom (203) and the pool wall (2000) define an inflatable chamber; and
a control box (4),
characterised in that
the inflatable massage pool (1) further comprises
an accommodating cavity (3) provided in the pool wall (2000) and isolated from the inflatable chamber in a sealed manner,
wherein the control box (4) is located in the accommodating cavity (3).

2. The inflatable massage pool (1) according to aspect 1, further comprising an accommodating wall (340) that separates the accomdating cavity (3) from the inflatable chamber,

preferably, wherein the pool wall (2000) includes a top wall (202), an outer wall (201) and an inner wall (200) so disposed as to form the inflatable chamber in cooperation with the bottom wall (203), and
preferably, wherein the accommodating wall (340) extends between the outer wall (201) and the inner wall (200) and is connected to both the outer wall (201) and the inner wall (200).

3. The inflatable massage pool (1) according to aspect 2, wherein the accommodating wall (34) includes an upper wall (302) facing the top wall (202) of the pool wall (2000).

4. The inflatable massage pool (1) according to aspect 2 or 3, wherein the accommodating wall (340) includes a side wall (305) so shaped as to surround the control box (4),
preferably, wherein the side wall (305) is formed by a single sheet.

5. The inflatable massage pool (1) according to any one of aspects 2 to 4, further comprising a protective wall (7) between the accommodating wall (340) and the control box (4),

preferably, wherein the protective wall (7) is formed by a single sheet,
preferably, wherein the protective wall (7) is connected both the outer wall (201) and the inner wall (200) of the pool wall (2000).

6. The inflatable massage pool (1) according to any one of aspects 1 to 5, wherein the pool body (2) comprising an access opening (205) through which the control box (4) is introduced into the accommodating cavity (3),
preferably, wherein the access opening (205) is located in the pool bottom (203).

7. The inflatable massage pool (1) according to any one of aspects 1 to 6, wherein the control box (4) includes a control panel (404), and
wherein the pool wall (2000) includes an opening (206) through which the control panel (4040) extends out of the pool wall (2000).

8. The inflatable massage pool (1) according to any of aspects 1 to 7, wherein the control box (4) is configured to circulate water in a water receptacle (5) defined by the pool wall (2000) and the pool bottom (203),

preferably, wherein the pool wall (2000) comprises a water inlet (11) and a water outlet (9) on a water receptacle (5) side,
preferably, wherein the control box (4) comprises a water inlet (10) and a water outlet (8) each in communication with the water receptacle (5) via the water inlet (11) and the water outlet (9) of the pool wall (2000).

9. The inflatable massage pool (1) according to aspect 8, further comprising a water outlet sealing assembly (800) for connecting the water outlet (9) of the pool wall (2000) and the water outlet (8) of the control box (4) in a sealed manner,
preferably, wherein the control box (4) comprises a control box water outlet connector (8), an inner wall (200) of the pool body comprises a pool water outlet connector (9), the accommodating wall (340) comprises a back hole (308) throughwhich the pool water outlet connector (9) penetrates, and the pool water outlet connector (9) is connected to the control box water outlet connector (8) in a sealed manner by means of the water outlet sealing assembly (800).

10. The inflatable massage pool (1) according to aspect 8 or 9, further comprising a water inlet sealing assembly (100) for connecting the water inlet (11) of the pool wall (2000) and the water inlet (10) of the control box (4) in a sealed manner,
preferably, wherein the control box (4) comprises a control box water inlet connector (10), an inner wall (200) of the pool body (2) comprises a pool water inlet connector (11), the accommodating wall (340) comprises a back hole (308) throughwhich the pool water inlet connector (11) penetrates, and the pool water inlet connector (11) is connected to the control box water inlet connector (10) in a sealed manner by means of the water inlet sealing assembly (100).

11. The inflatable massage pool (1) according to any of aspects 1 to 10, wherein the control box (4) is configured to supply air into a water receptacle (5) defined by the pool wall (2000) and the pool bottom (203),

preferably, wherein the pool wall (2000) comprises an air inlet (15) on the water receptacle side,
preferably, wherein the control box (4) comprises an air inlet (409) in communication with the water receptacle (5) via the air inlet (5) of the pool wall.

12. The inflatable massage pool (1) according to aspect 11, further comprising an air inlet sealing assembly (13), the control box (4) comprises a control box air inlet connector (14), an inner wall (200) of the pool body comprises a pool air inlet connector (15), the accommodating wall (340) comprises a back hole (308) throughwhich the pool air inlet connector (15) penetrates, and the control box air inlet connector (14) is connected to the pool air inlet connector (15) in a sealed manner by means of the air inlet sealing assembly (13).

13. The inflatable massage pool according to any of aspects 1 to 12, further comprising an inflation sealing assembly (16), the control box (4) comprises a control box inflation connector (17), the accommodating wall (340) comprises an accommodating cavity inflation connector (18), and the accommodating cavity inflation connector (18) is connected to the control box inflation connector (17) in a sealed manner by means of the inflation sealing assembly (16).

14. The inflatable massage pool according to aspect 13, wherein the accommodating cavity inflation connector (18) comprises a first connection part (181), the control box inflation connector (17) comprises an inflation insertion end (17b), the inflation insertion end (17b) is sleeved with the first connection part (181), and an inner wall of the first connection part (181) and an outer wall of the inflation insertion end (17b) are sealed.

15. The inflatable massage pool (1) according to aspect 13 or 14, wherein the inflation sealing assembly (16) comprises:

a first inflation clamping groove (172) provided on the inner wall of the first connection part (181) or the outer wall of the inflation insertion end (17b); and
a first inflation sealing ring (172a) accommodated in the first inflation clamping groove (172),
preferably, the inflation sealing assembly (16) further comprises:

a second inflation clamping groove (171) provided on the inner wall of the first connection part (181) or the outer wall of the inflation insertion end (17b); and
a second inflation sealing ring (171a) accommodated in the second inflation clamping groove (171).

Claims

1. An inflatable massage pool, comprising:

an outer wall (201) including a top portion and a bottom portion;
an inner wall (200) including a top portion and a bottom portion;
a top wall (202) connected to the top portion of the outer wall (201) and the top portion of the inner wall (200);
a pool bottom (203) connected to the bottom portion of the outer wall (201) and the bottom portion of the inner wall (200);
a water receptacle (5) defined by the inner wall (200) and the pool bottom (203);
an inflatable chamber defined by the outer wall (201), the inner wall (200), the top wall (202), and the pool bottom (203);
characterized by
an accommodating wall (340) connected to the inner wall (200), the outer wall (201), and the pool bottom (203) to separate an accommodating cavity (3) from the inflatable chamber in a sealed manner;
a control box (4) disposed in the accommodating cavity (3); and
a protective wall (7) disposed between the accommodating wall (340) and the control box (4) and matching the contour of the accommodating wall (340).

2. The inflatable massage pool according to claim 1, wherein the protective wall (7) is formed by a single sheet or strip and connected to both the outer wall (201) and the inner wall (200).

3. The inflatable massage pool according to claims 1 or 2, wherein the protective wall (7) is made of a weldable material.

4. The inflatable massage pool according to any one of claims 1 to 3, wherein the protective wall (7) is connected to the inner wall (200) and the outer wall (201) along the side edges of the protective wall (7) and with an inner welding line (331) and an outer welding line (332).

5. The inflatable massage pool according to any one of claims 1 to 4, wherein the accommodating wall (340) includes a side wall (305) surrounding the control box (4).

6. The inflatable massage pool according to claim 5,

wherein the side wall (305) includes a top opening (326).

7. The inflatable massage pool according to claim 6, wherein the top opening (326) of side wall (305) is connected to the top wall (202).

8. The inflatable massage pool according to claim 6, wherein the accommodating wall (340) includes an upper wall (302) facing the top wall (202) and connected to the side wall (305) to close the top opening (326).

9. The inflatable massage pool according to any one of claims 5 to 8, wherein the side wall (305) is formed by a single sheet.

10. The inflatable massage pool according to any one of claims 1 to 9, wherein,

the accommodating wall (340) includes a first opening (306):
the pool bottom (203) or the outer wall (201) includes a second opening (205) in communication with the first opening (306).

11. The inflatable massage pool according to claim 10, wherein,

the first opening (306) is located at the bottom of the accommodating cavity (3);
the second opening (205) is located at the position of the first opening (306) on the pool bottom (203).

12. The inflatable massage pool according to claim 11, wherein,

the accommodating wall (340) includes a third opening (307);
the outer wall (305) includes a fifth opening (206);
the control box (4) includes a control panel (404) passing through the third opening (307) and the fifth opening (206).

13. The inflatable massage pool according to claim 10, wherein the first opening (306) and the second opening (205) are both in a rounded rectangle shape.

14. The inflatable massage pool according to any one of claims 1 to 13, wherein the accommodating wall (340) includes a fourth opening (308), and the inflatable massage pool comprises:

a pool water outlet connector (9) penetrating the fourth opening (308) to be connected to the control box (4);
a pool water inlet connector (11) penetrating the fourth opening (308) to be connected to the control box (4).

15. The inflatable massage pool according to claim 14, wherein the inflatable massage pool further comprises:
a pool air inlet connector (15) penetrating the fourth opening (308) to be connected to the control box (4).

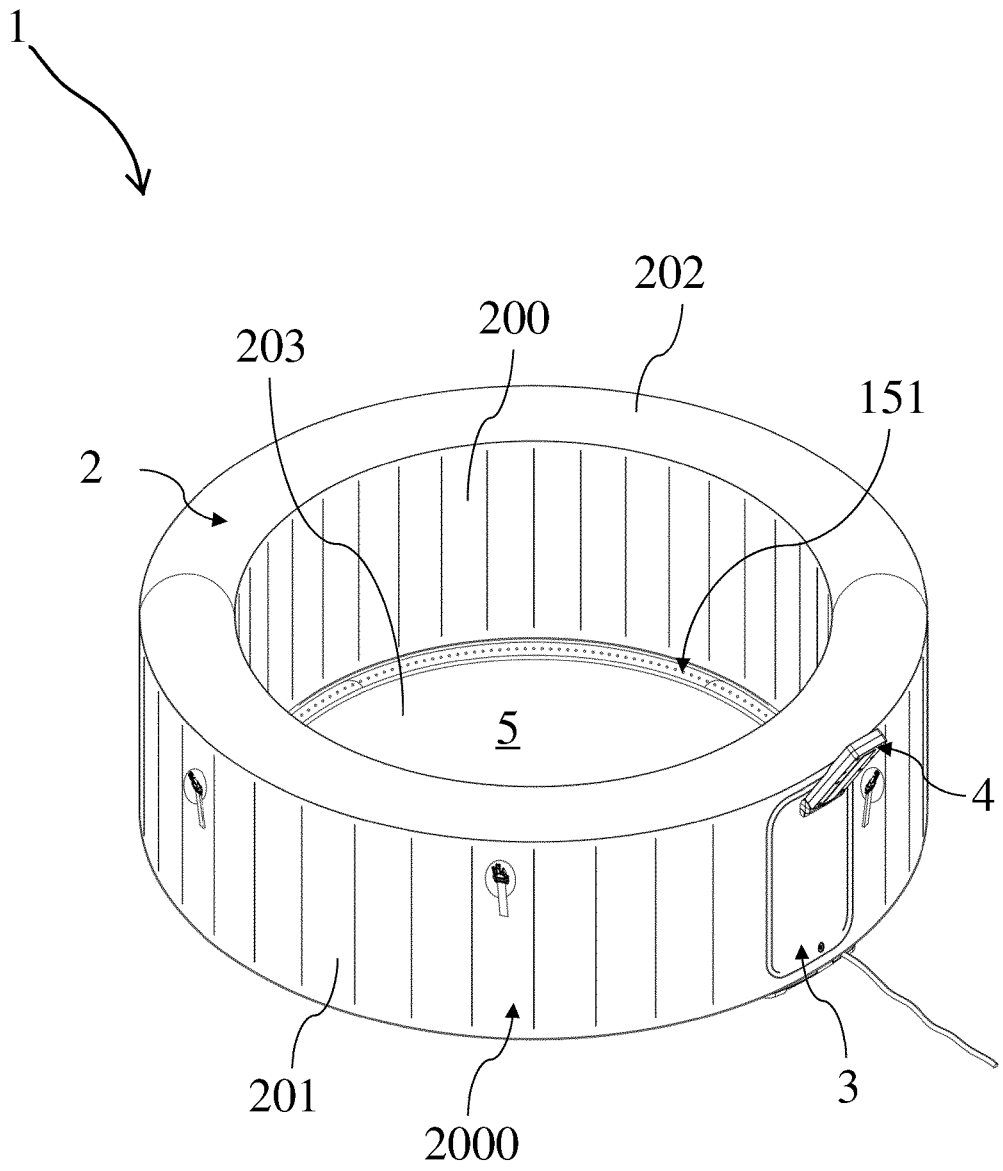


FIG. 1

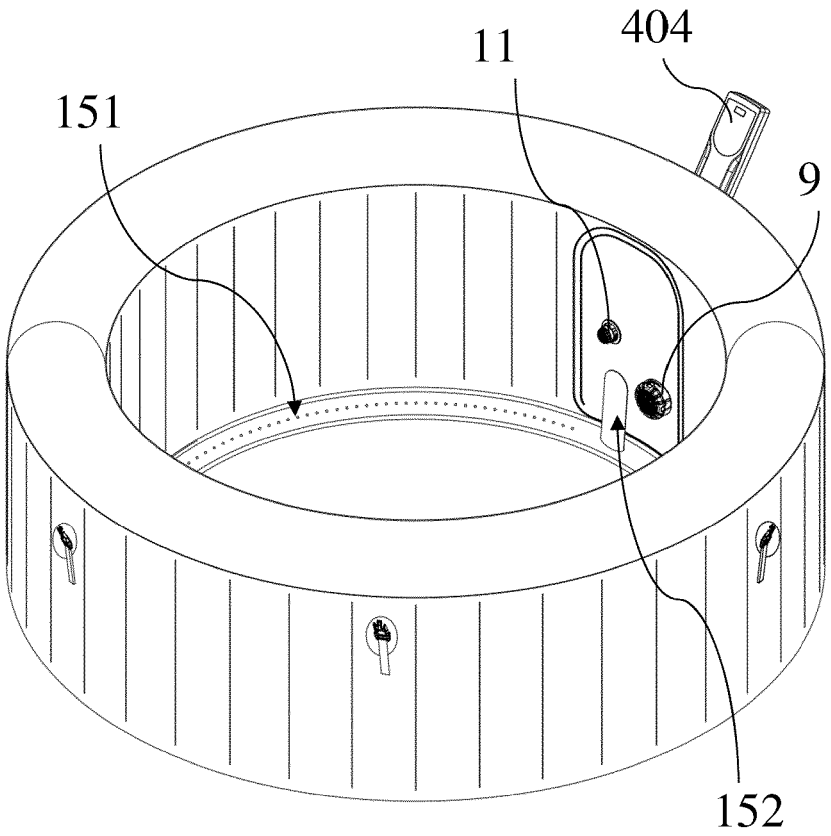


FIG. 2

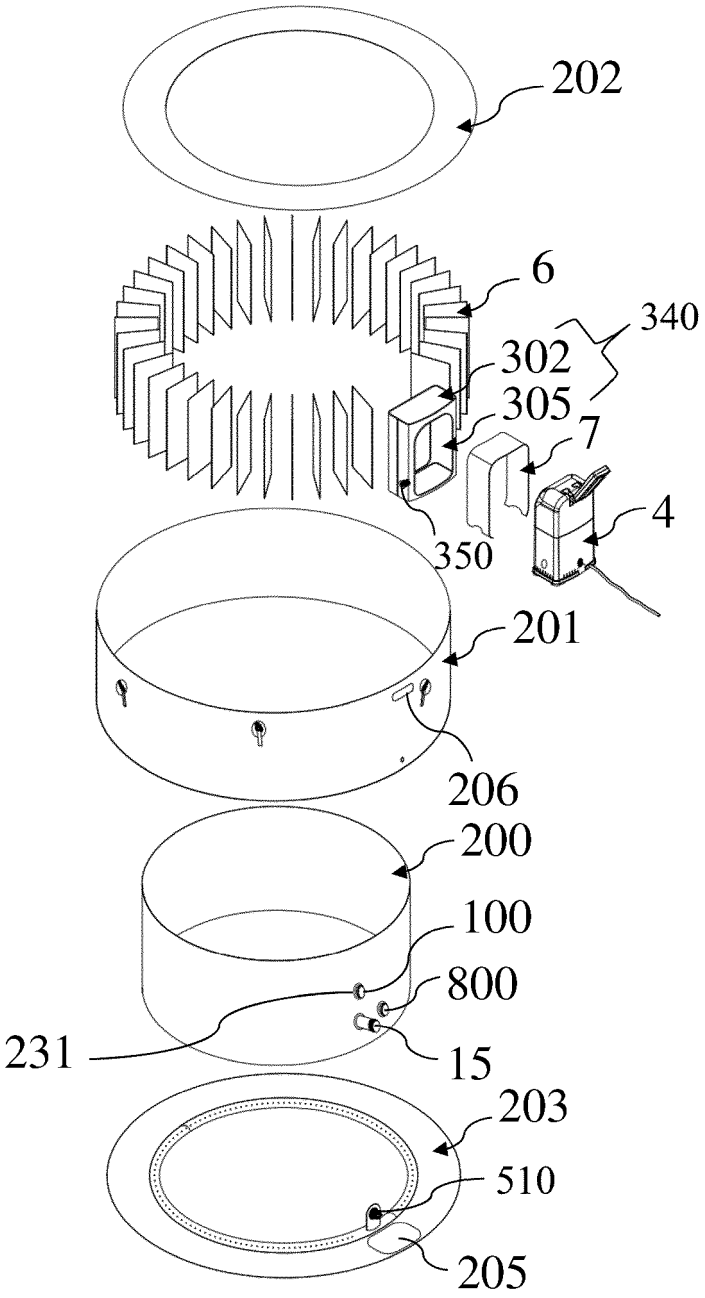


FIG. 3

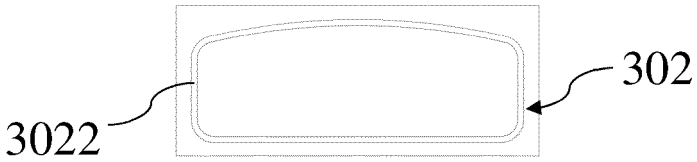


FIG. 4A

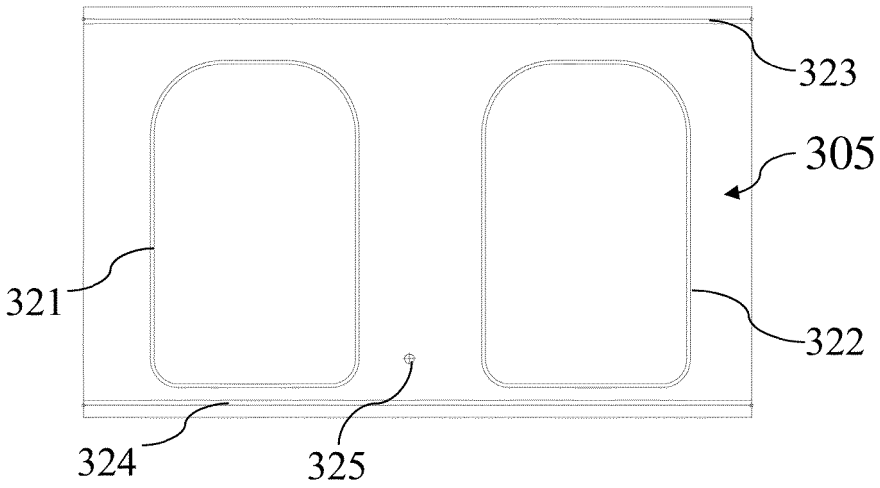


FIG. 4B

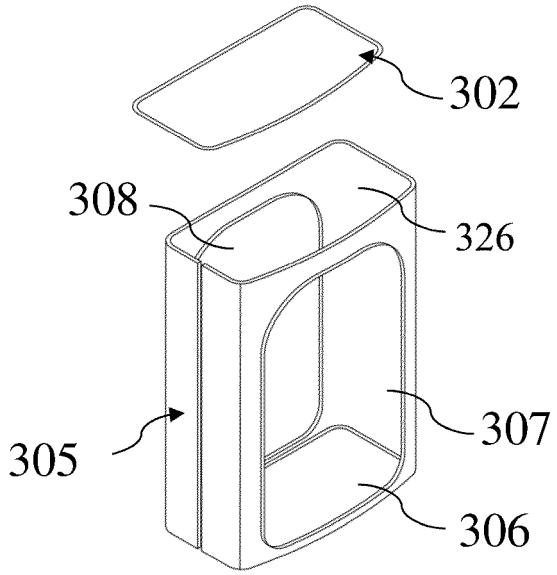


FIG. 4C

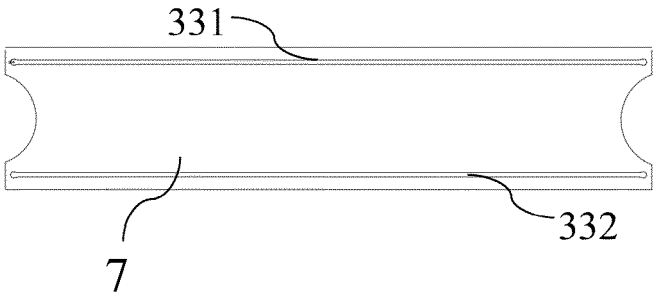


FIG. 5A

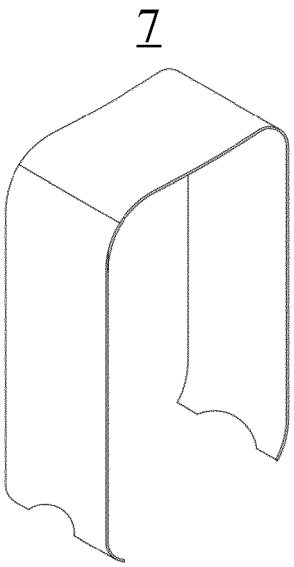


FIG. 5B

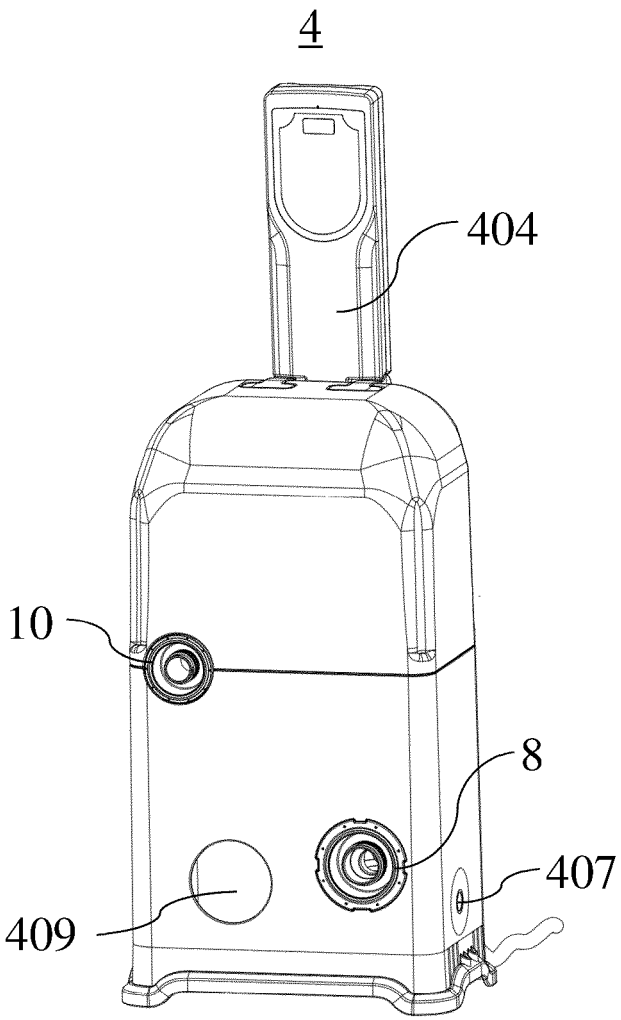


FIG. 6

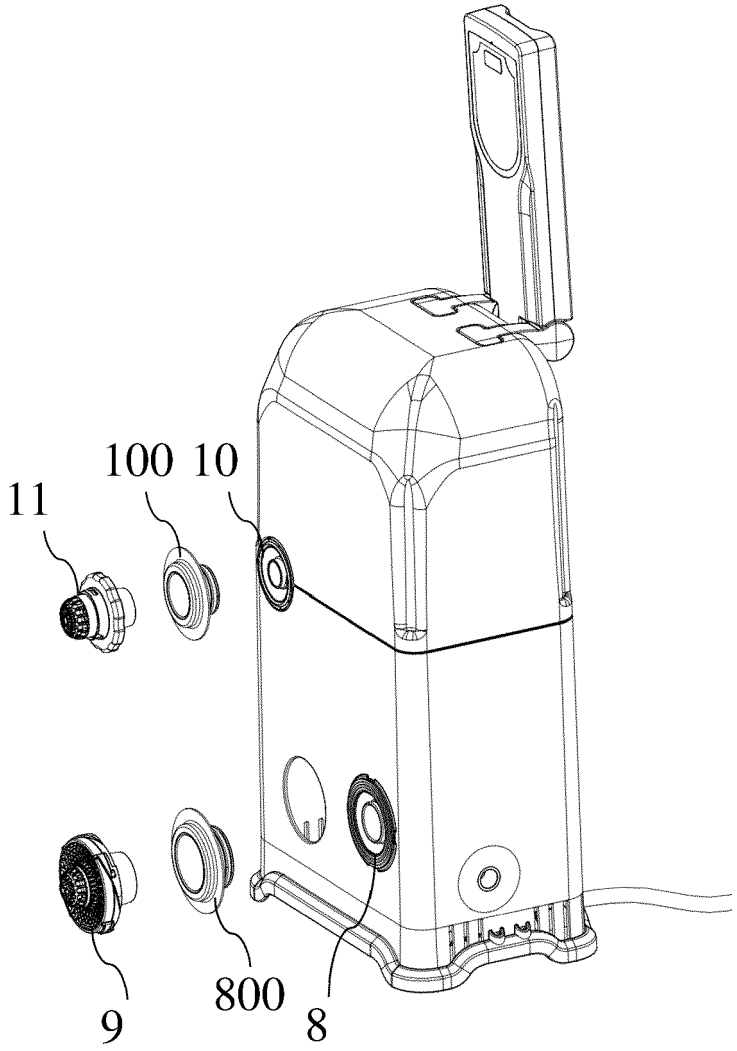


FIG. 7

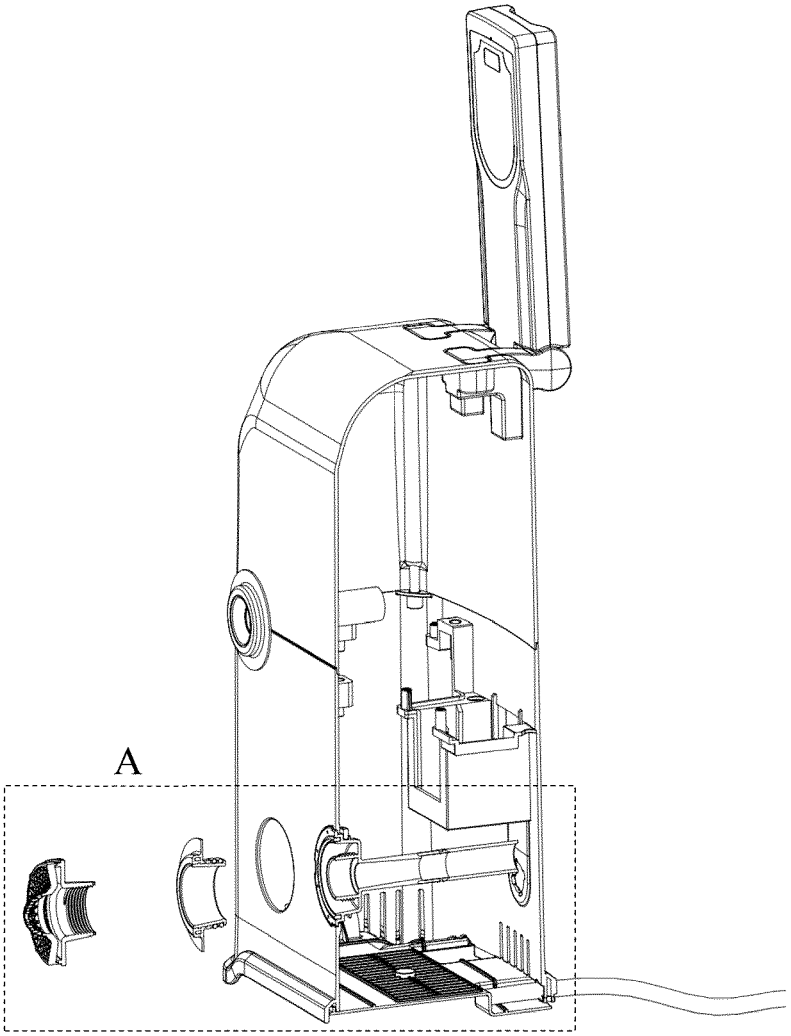


FIG. 8

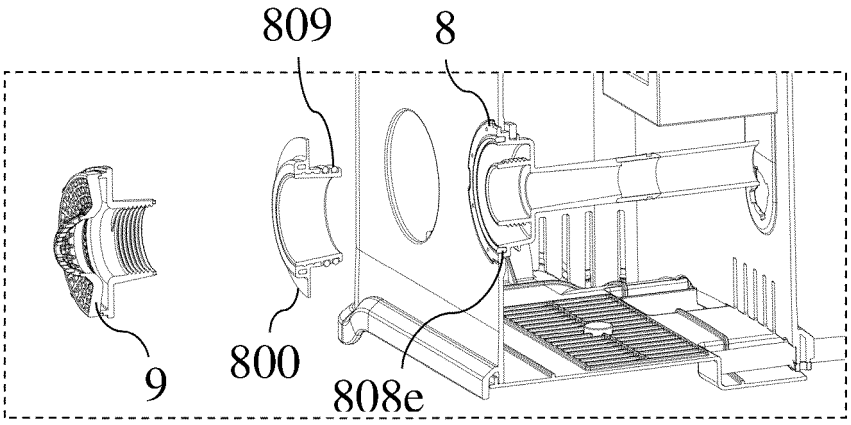


FIG. 9

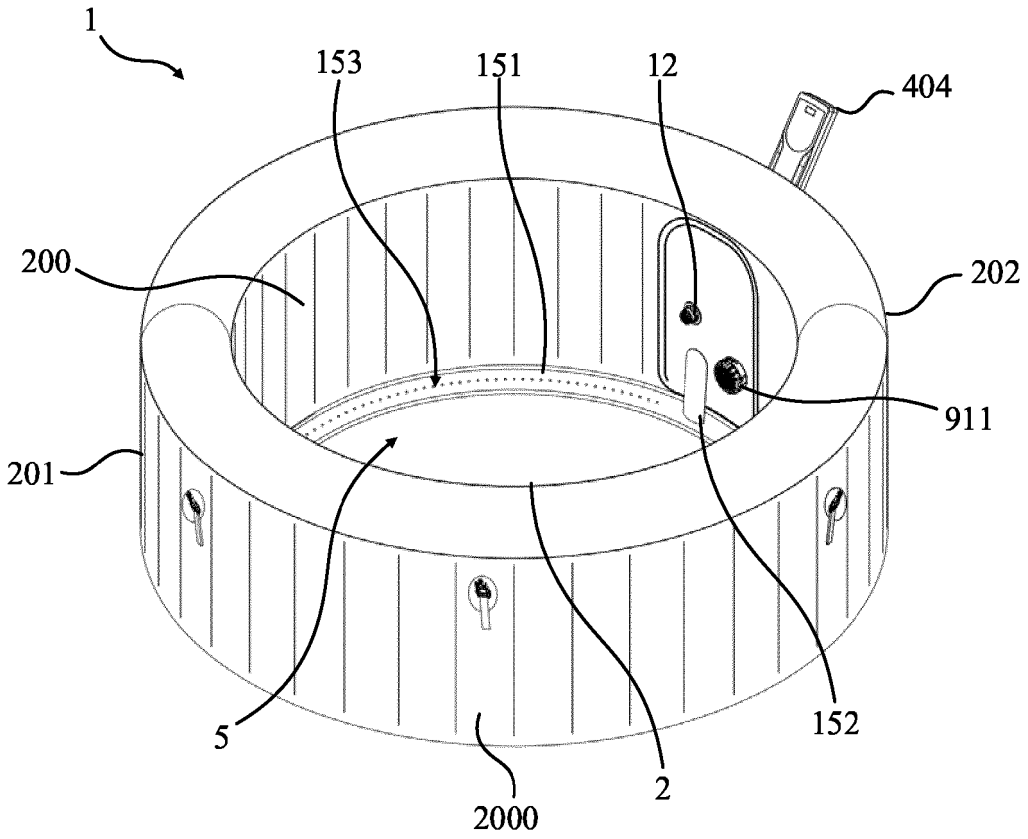


FIG. 10

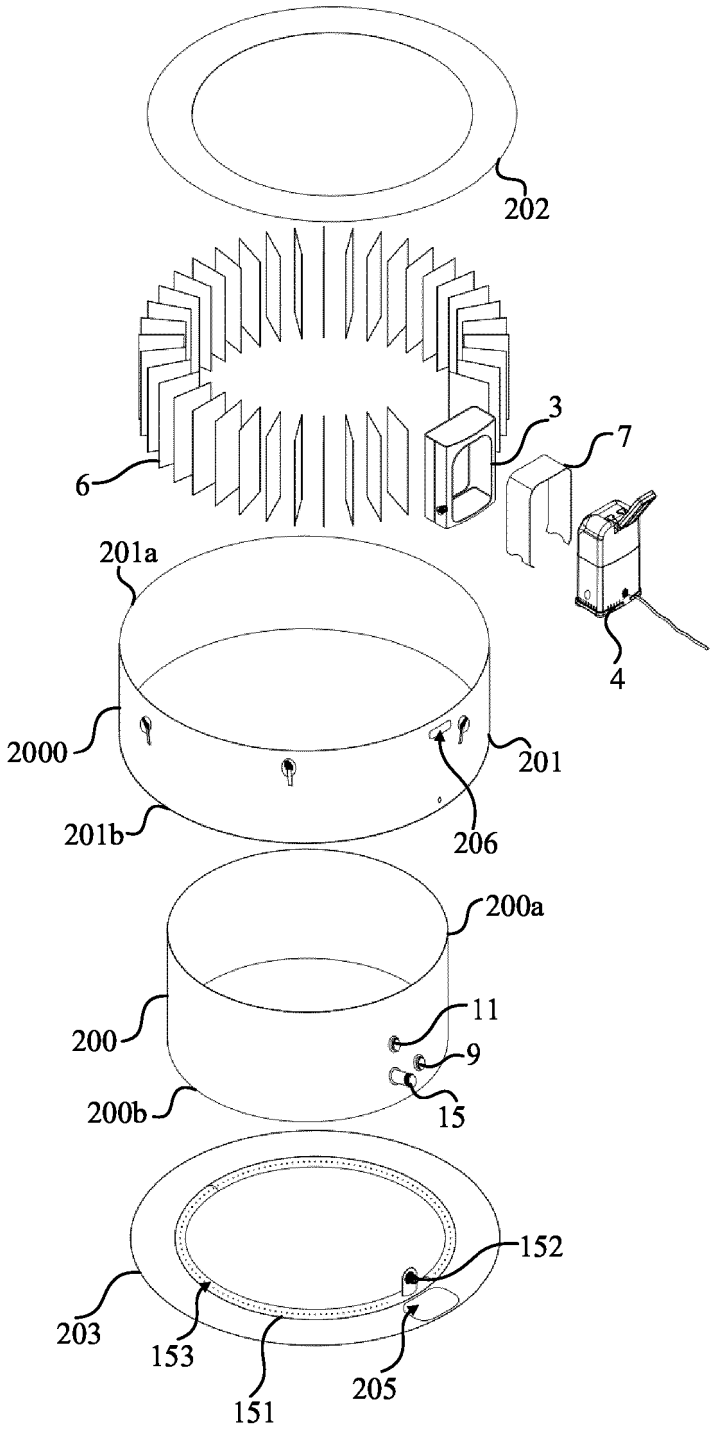

202
3
7
6
201a
4
2000
201
201b
206
200a
200
11
9
15
200b
152
203
153
151
205

FIG. 11

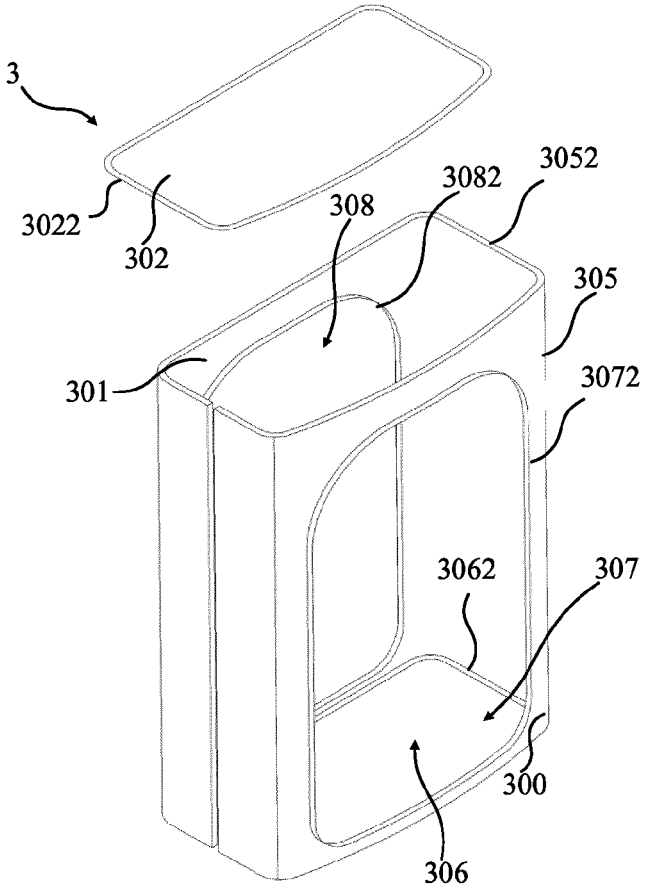


FIG. 12

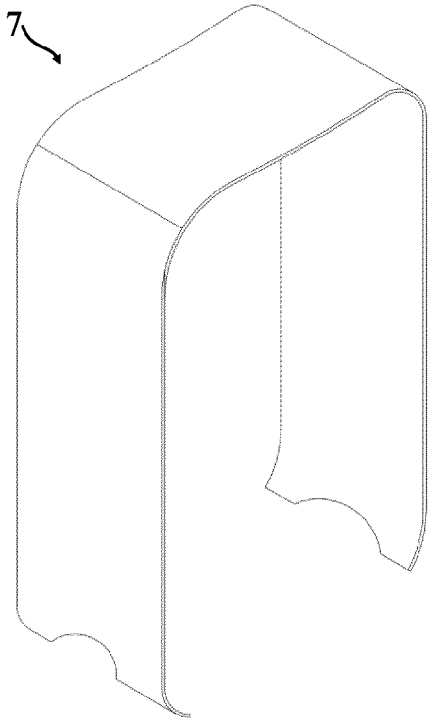


FIG. 13

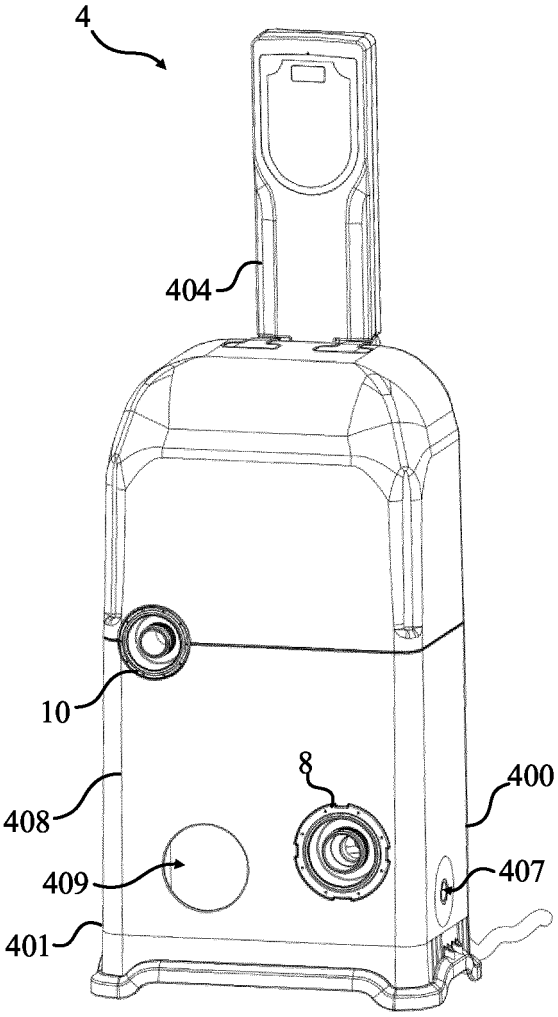


FIG. 14

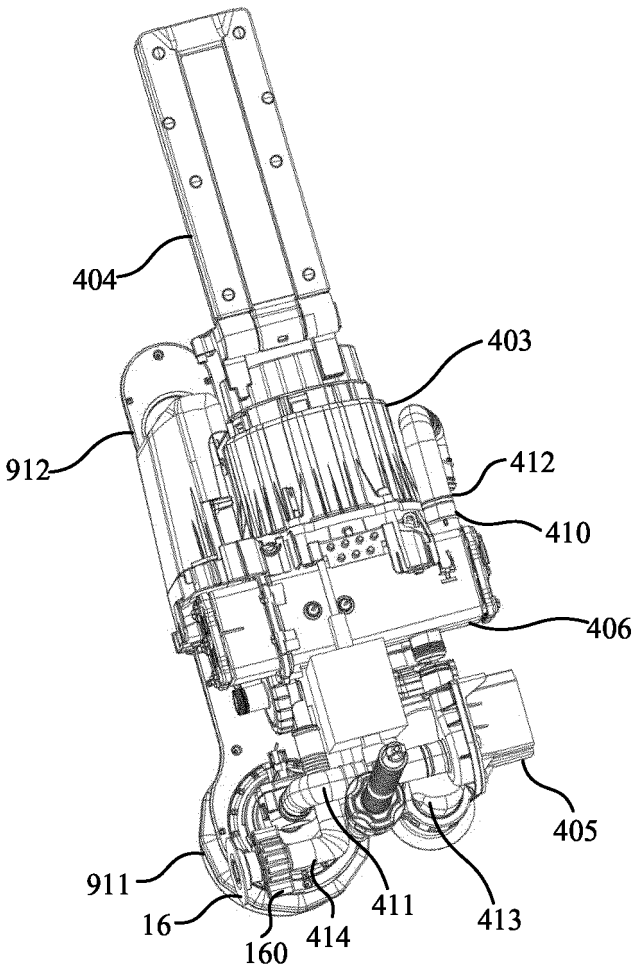
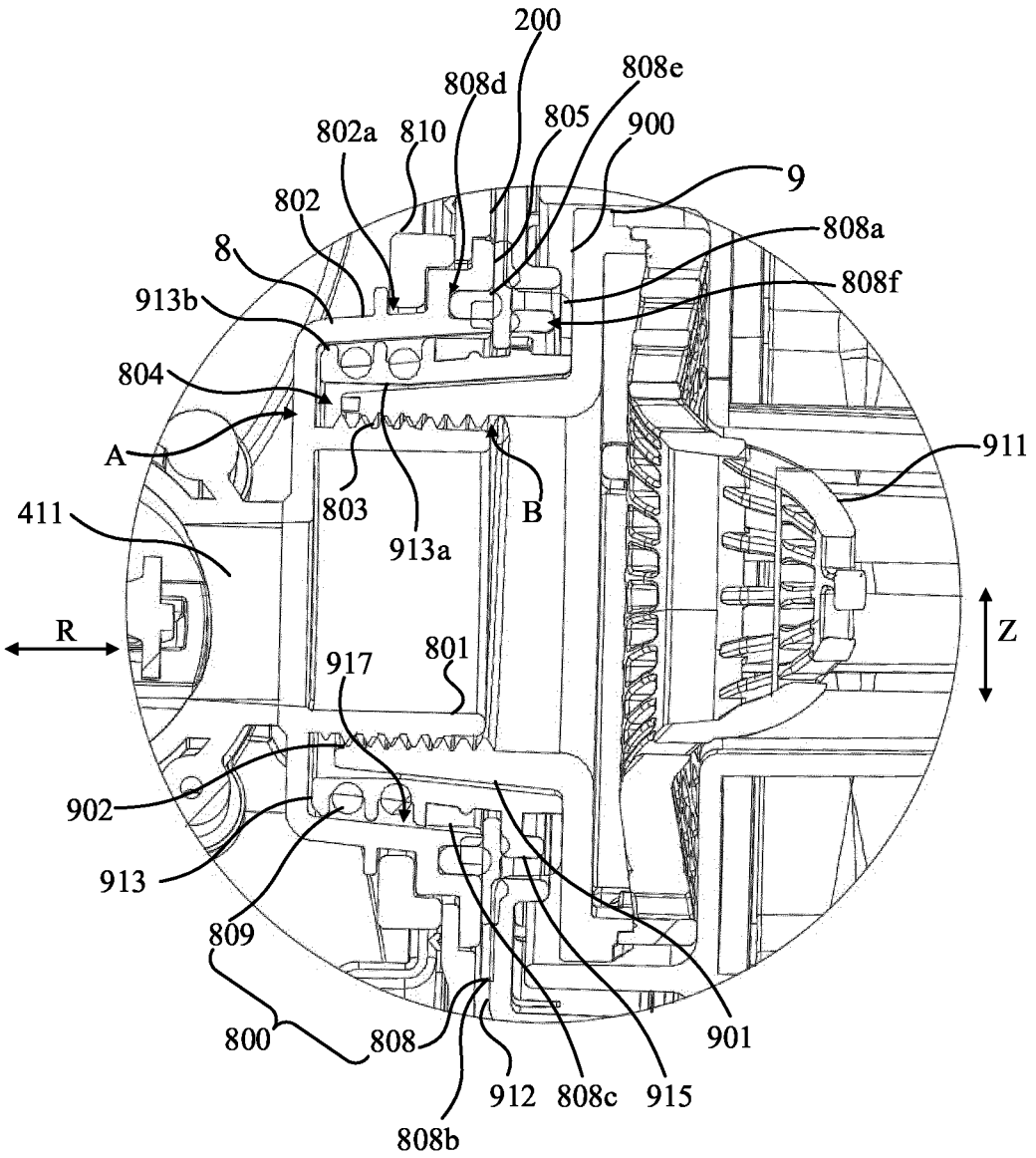


FIG. 15


200
808d
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805
900
802a
810
9
802
808a
8
808f
913b
804
A
911
411
803
913a
B
R
Z
917
801
902
913
809
800
808
901
912
808c
915
808b

FIG. 16

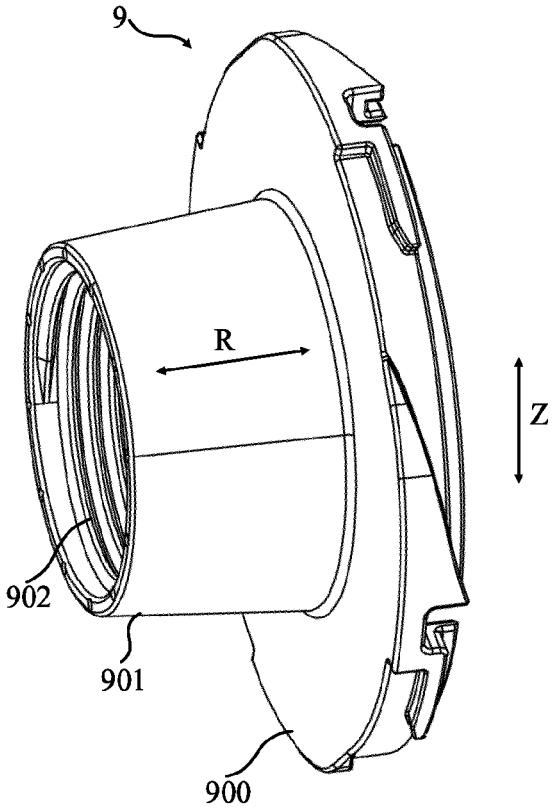

FIG. 17

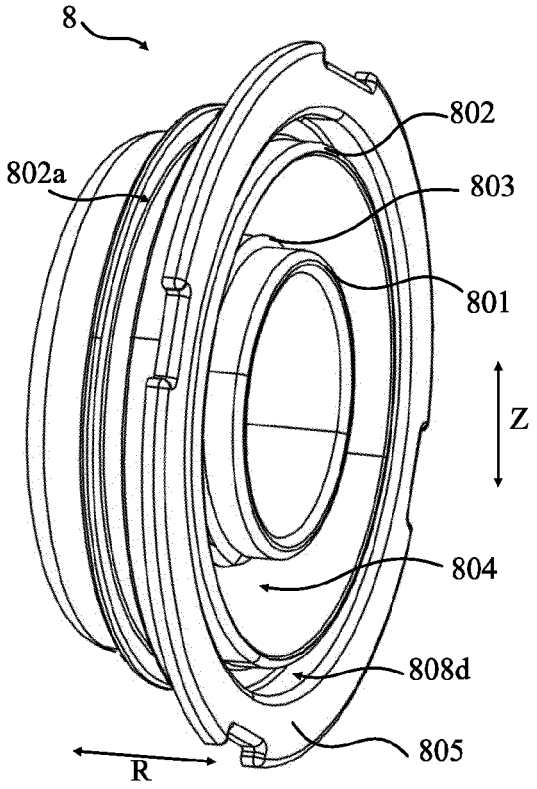

FIG. 18

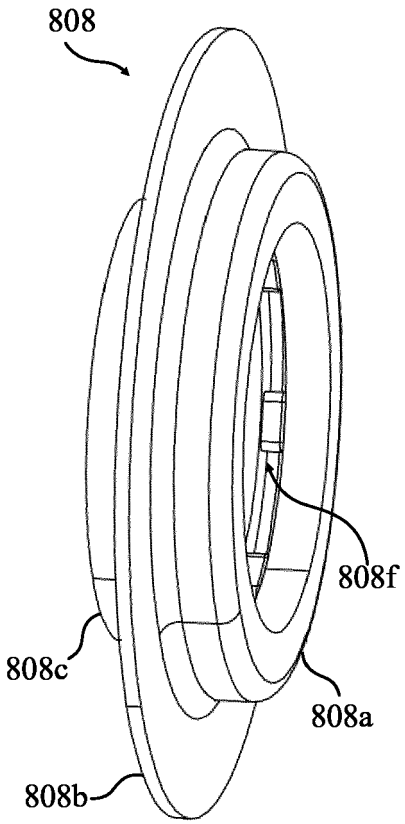

FIG. 19

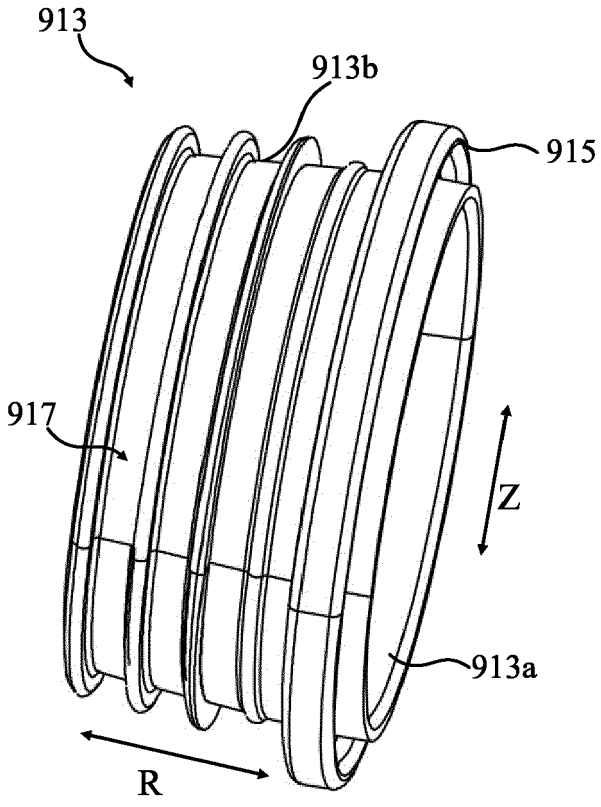

FIG. 20

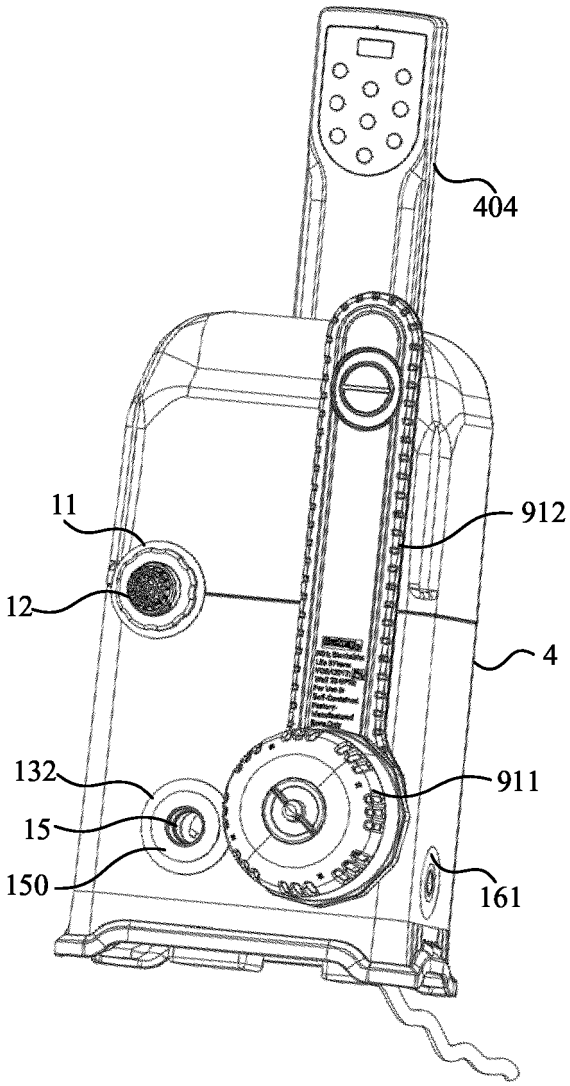

FIG. 21

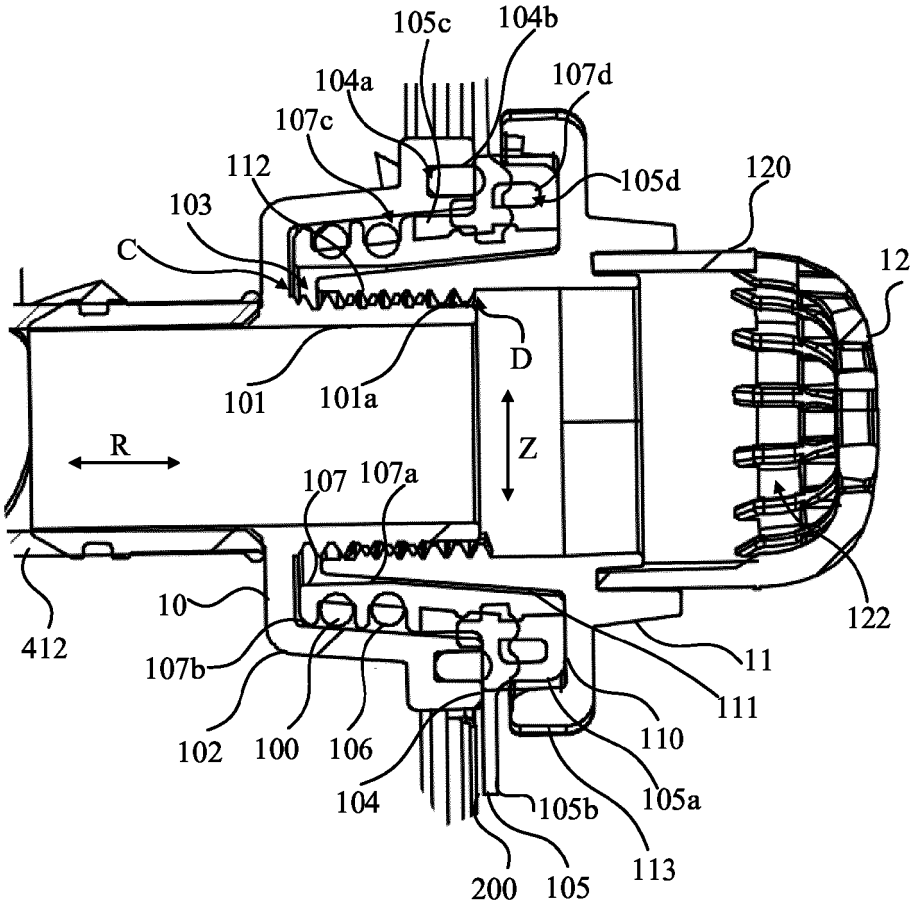
105c
104b
104a
107d
107c
112
105d
120
103
C
12
D
101
101a
Z
R
107
107a
122
412
10
11
107b
111
102
100
106
110
104
105b
105a
113
200
105

FIG. 22

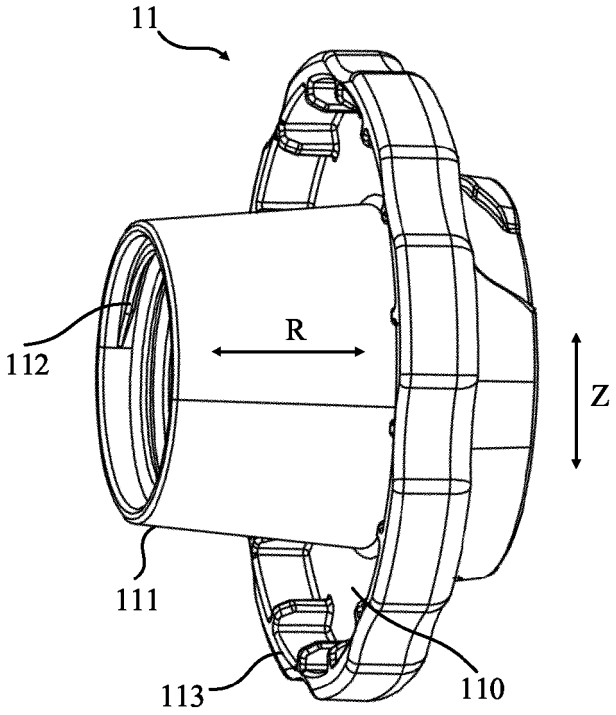
11
R
112
Z
111
113
110

FIG. 23

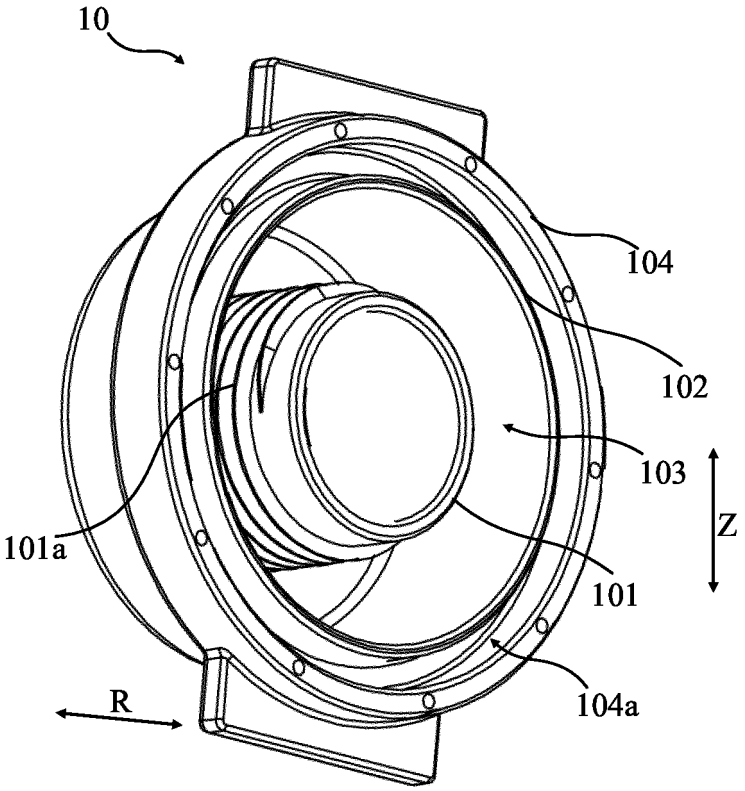

FIG. 24

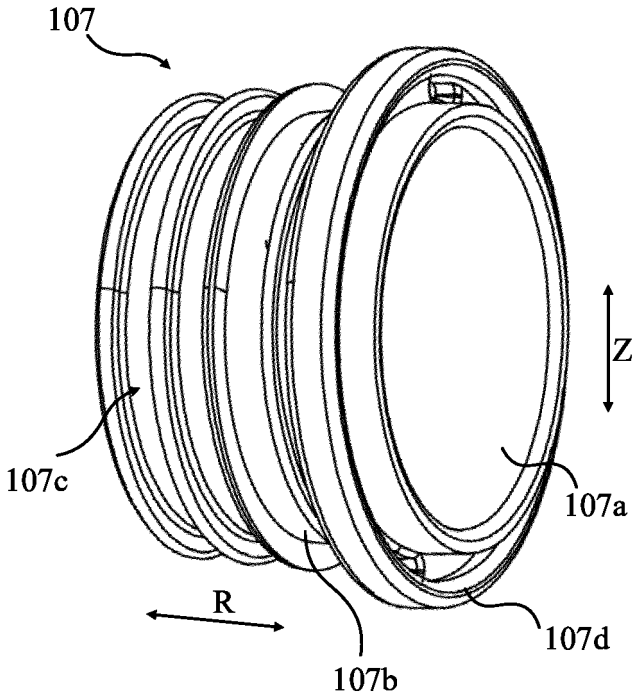

FIG. 25

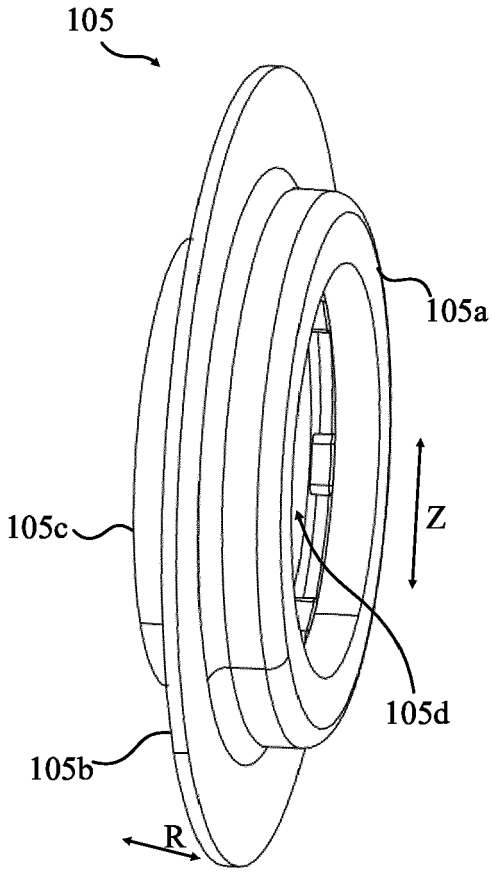

FIG. 26

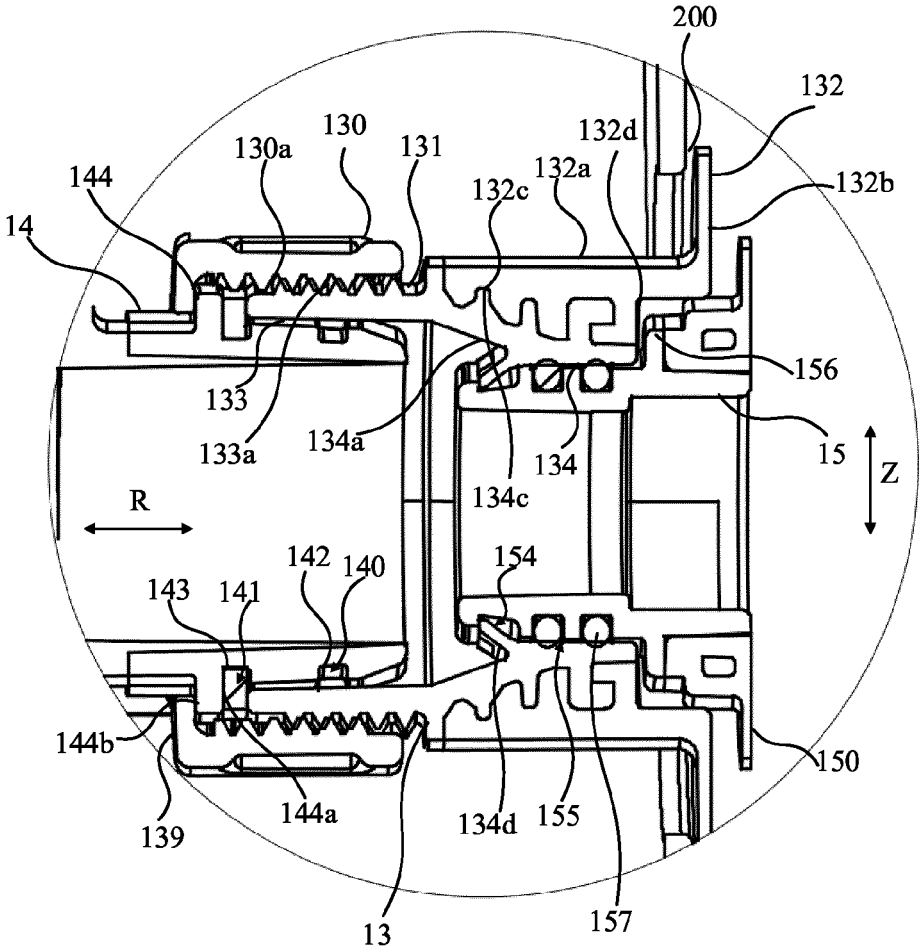
200
132
132d
130
130a
131
132a
144
132c
132b
14
156
133
133a
134a
134
15
Z
134c
R
142
140
154
143
141
144b
150
139
144a
134d
155
13
157

FIG. 27

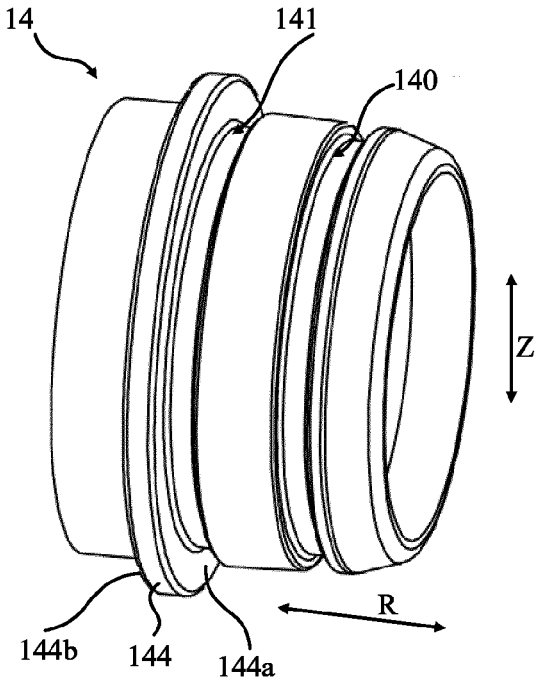
14
141
140
Z
R
144b
144
144a

FIG. 28

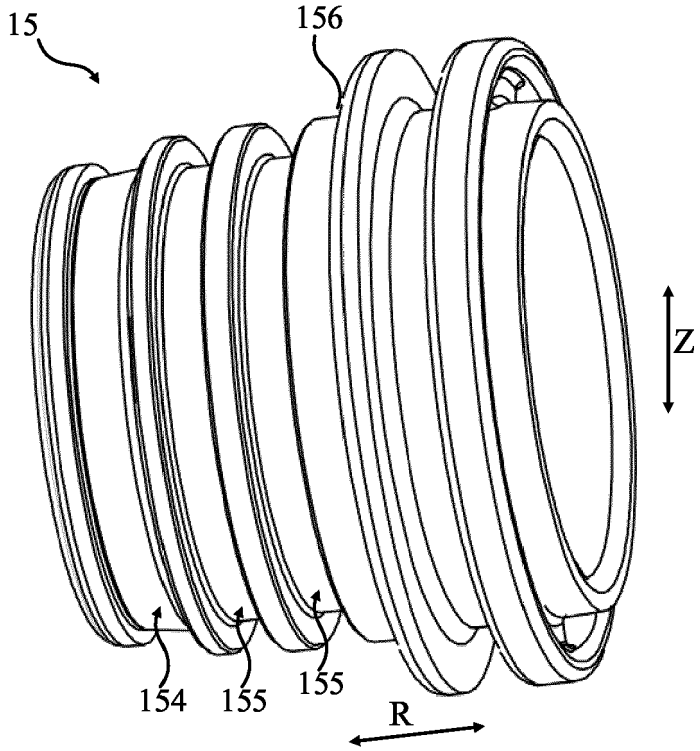

FIG. 29

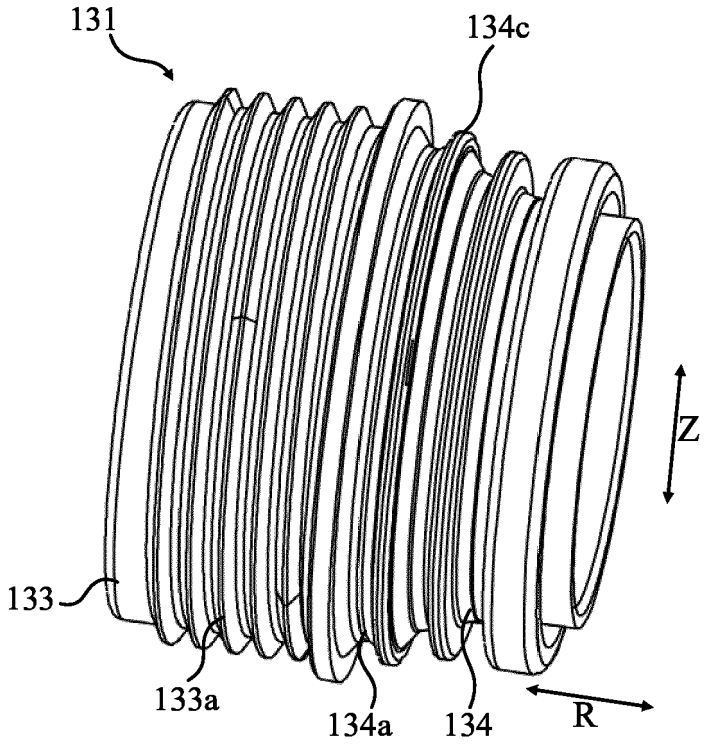

FIG. 30

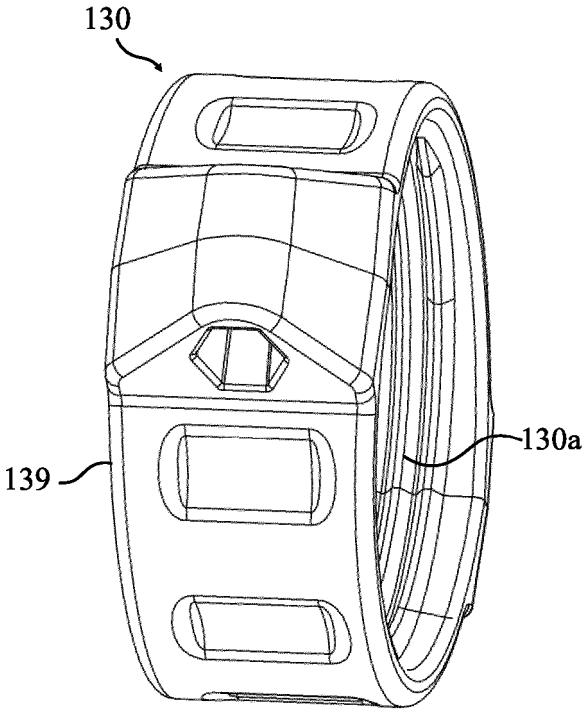

FIG. 31

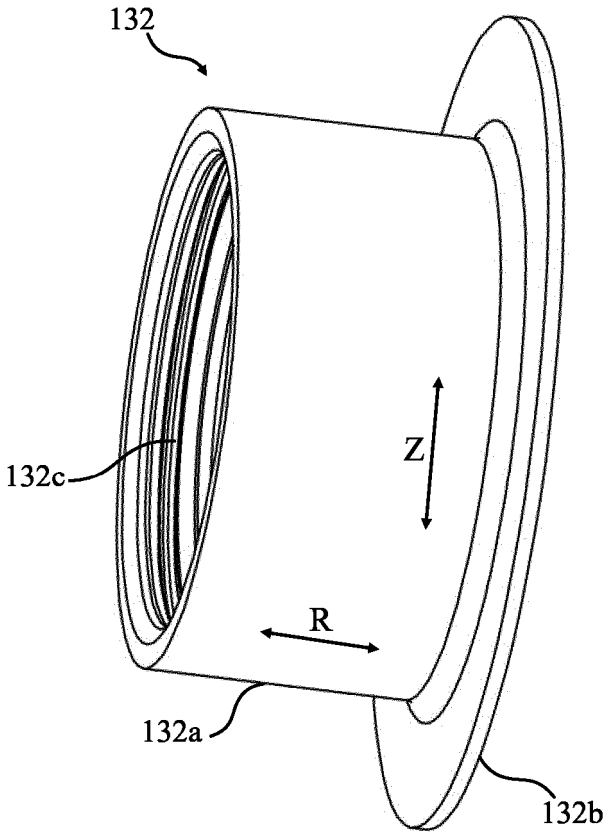

FIG. 32

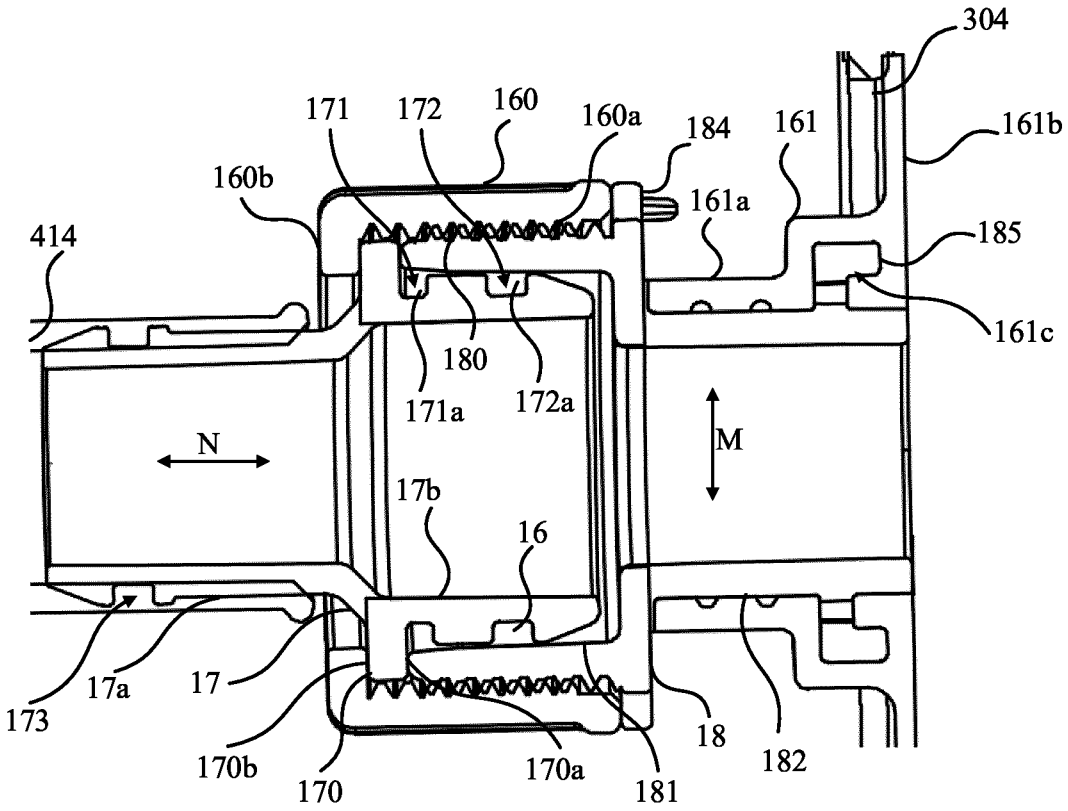
304
171
172
160
160a
184
161
161b
160b
161a
414
185
161c
180
171a
172a
N
M
17b
16
17a
17
173
170b
170
170a
181
18
182

FIG. 33

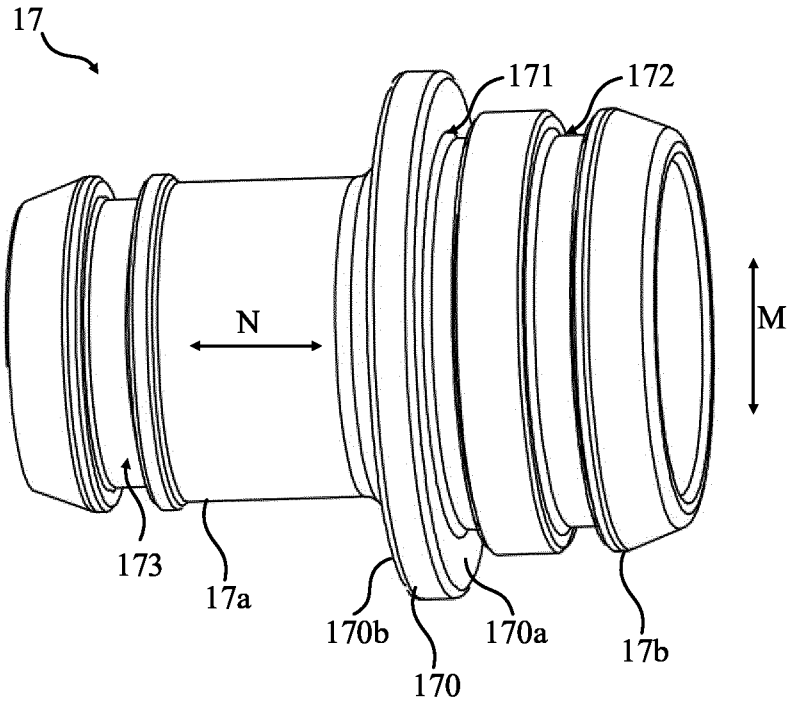
17
171
172
N
M
173
17a
170b
170
170a
17b

FIG. 34

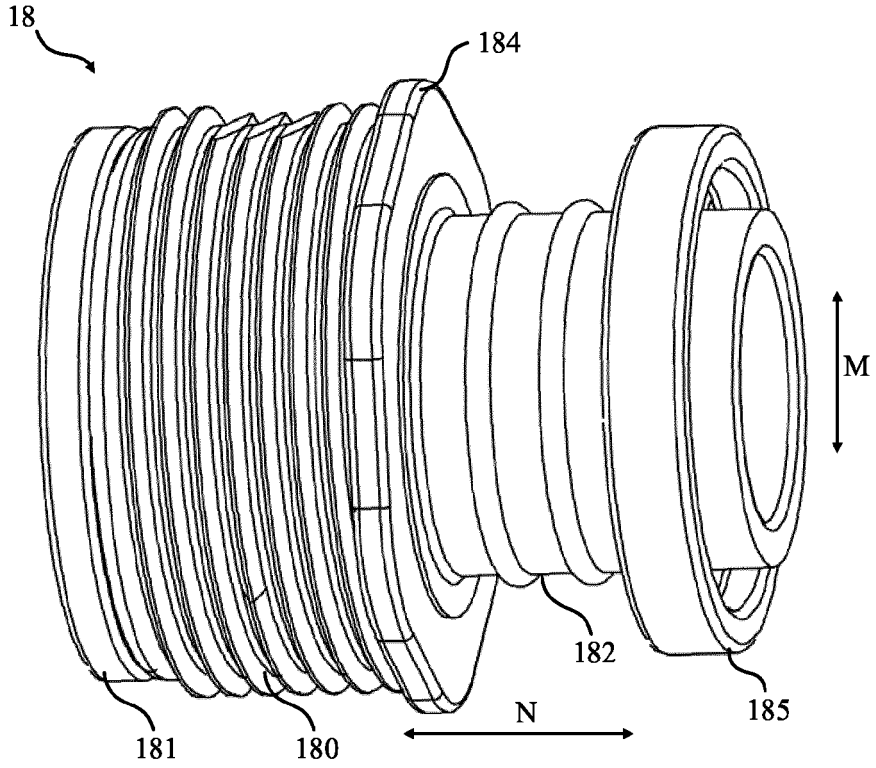

FIG. 35

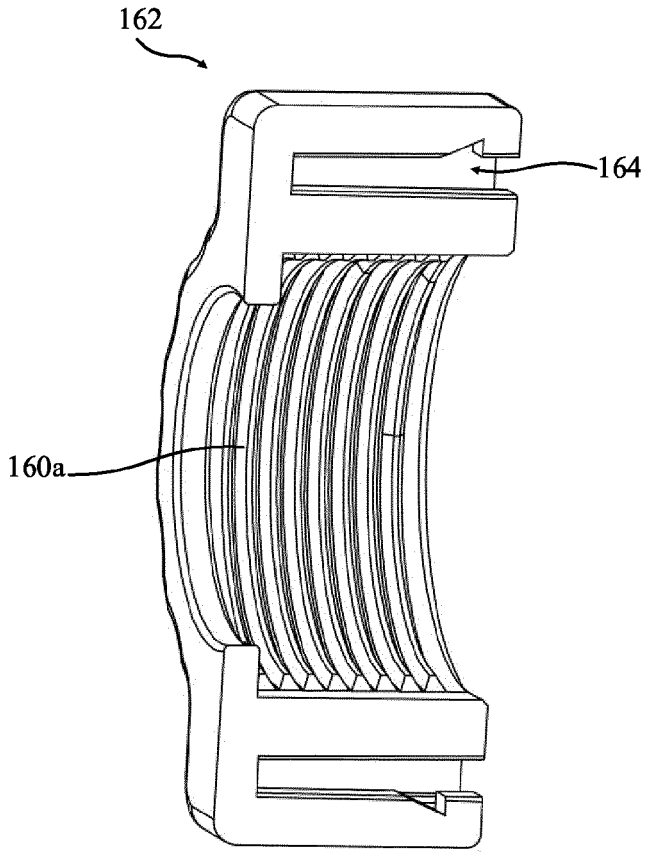

FIG. 36a

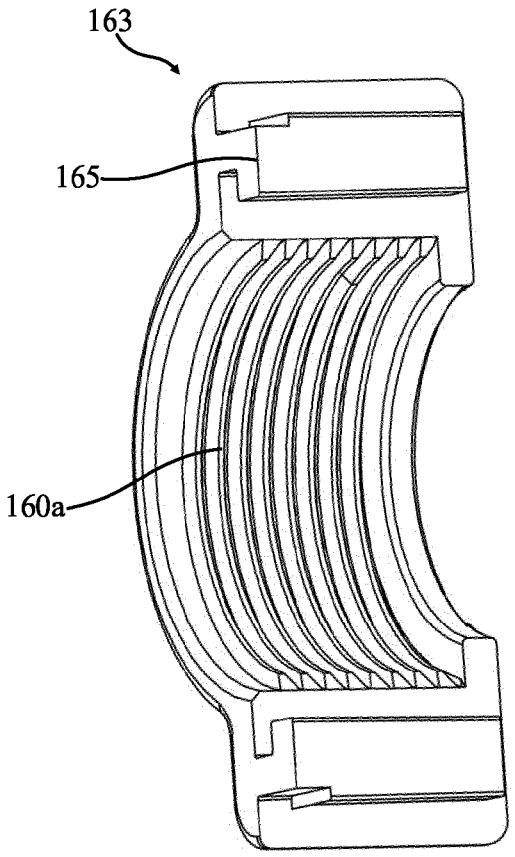

FIG. 36b

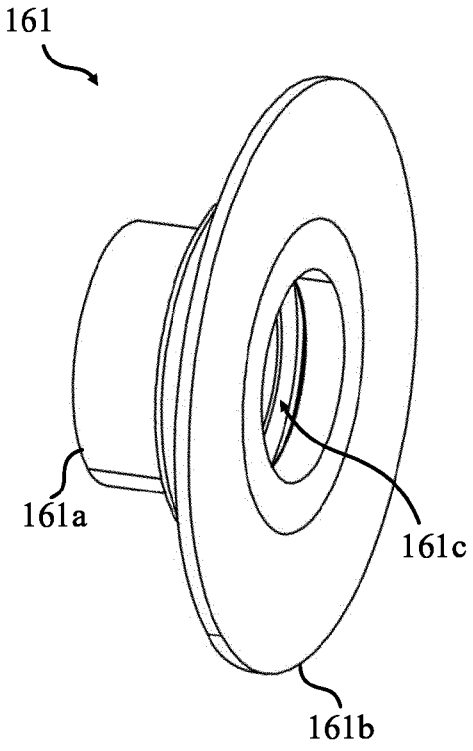

FIG. 37