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**Hand-held or fixed massage shower**

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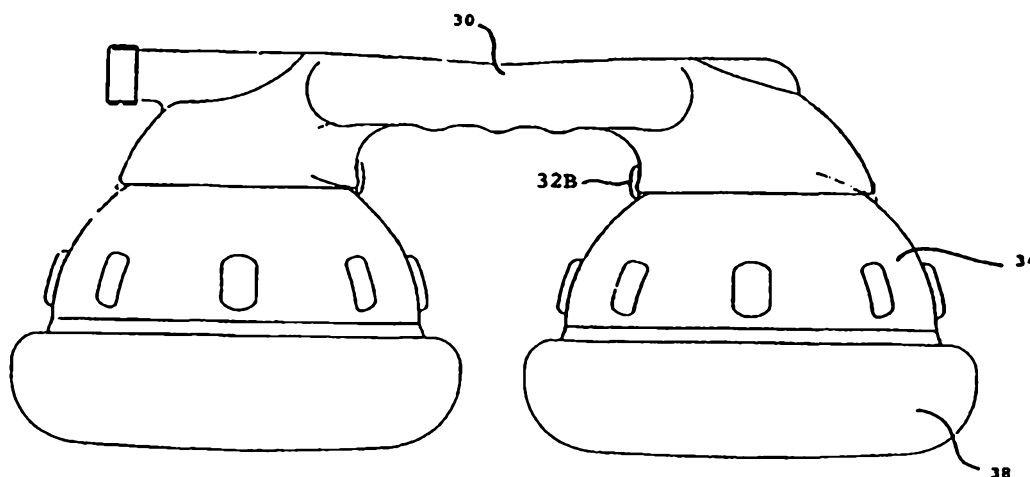
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**US 5385532**  
**US 4432355**

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## INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

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<b>(21) International Application Number:</b> PCT/IT99/00005 <b>(22) International Filing Date:</b> 15 January 1999 (15.01.99) <b>(30) Priority Data:</b> RM98A000021 16 January 1998 (16.01.98) IT <b>(71)(72) Applicant and Inventor:</b> DE SIMONE, Fiorentino [IT/IT]; Largo Olgiate, 15, Isola 2/E, I-00123 Roma (IT). <b>(74) Agent:</b> SARPI, Maurizio; Studio Ferrario, Via Collina, 36, I-00187 Roma (IT). <div data-bbox="327 761 734 1019" style="border: 1px solid black; padding: 5px; margin-top: 20px;">         IP AUSTRALIA          0 2 AUG 1999          REC       </div>		<b>(81) Designated States:</b> AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG). <b>Published</b> <i>With international search report.          Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.          In English translation (filed in Italian).</i>

**(54) Title:** HAND-HELD OR FIXED MASSAGE SHOWER**(57) Abstract**

A water-driven whirl shower fixture including one or more spouts and one or more sponges, rolls or similar interchangeable massaging means which can be handled by the user and/or hung on the wall or the bathtub. Said water-driven fixture for having a water massage and/or a shower is provided with rotatable accessories capable of a massaging action and at the same time acting as a shower head, said accessories being disposed on a handle having the shape of a telephone which can either be seized by the user or hung on the wall of the shower and/or the bathtub, said shower handle being used in replacement of the conventional shower heads.

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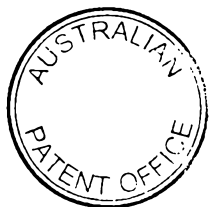
## HAND-HELD OR FIXED MASSAGE SHOWER

The present invention relates to bathroom fixtures and the massotherapy as well as beauty parlour treatments. The same Applicant of the present invention made known fixtures which are an evolution of the traditional fixed shower facilities as  
10 they permit a water massage, ie. relaxing massage and body washing, also of those parts that cannot be easily reached such as back.

The foregoing and any following description of, or reference to, the prior art is provided so that the present invention may be more fully understood and appreciated in its technical context and its significance more fully appreciated.

15 Unless clearly indicated to the contrary, however, this discussion is not, and should not be interpreted as, an express or implied admission that any of the prior art referred to is widely known or forms part of common general knowledge in the field.

It is known from CH-A-0328897, US-A-3563469, US-A-4432355, DE-A-  
20 3827286, US-A-5385532, US-A-5065463 and DE-U-9402435, water-driven fixtures provided with massaging rotatable accessories with a handle in the shape of a telephone, having a water supply duct for supplying the rotatable accessories themselves. Said documents disclose also means for the quick-coupling and for the quick-release of said accessories.



5 A disadvantage of these prior art devices is that none of them disclose a device provided with two rotatable accessories that can be used simultaneously in order to give the user a better massaging and/or washing action on his body.

A further drawback of the prior art, consists in that it is not possible to replace one of the rotatable devices without stopping the other one or without closing the  
10 water supply of both the rotatable devices.

It is an object of the present invention to overcome or ameliorate at least one of the disadvantages of the prior art, or to provide a useful alternative.

Accordingly, the invention provides an improved water-driven fixture for having a water massage and/or a shower provided with rotatable accessories, capable of a  
15 massaging action and at the same time acting as a shower head, that are disposed on a handle having the shape of a telephone including a water supply duct for supplying the rotatable accessories, wherein said rotatable accessories are two and said shower handle is used in replacement of the conventional shower heads and it can either be seized by the user or hung on the wall of the shower and/or the  
20 bathtub; said two rotatable accessories being connected by means of quick-release couplings for their fast replacement, that are provided with individual supply water inlets, a ball valve capable of automatically closing the water duct when the corresponding rotatable accessory is released by the user being also provided at each quick-release means coupling.



- 5 Unless the context clearly requires otherwise, throughout the description and the claims, the words 'comprise', 'comprising', 'consist', 'consisting', and the like are to be construed in an inclusive sense as opposed to an exclusive or exhaustive sense; that is to say, in the sense of "including, but not limited to".

Advantageously, the invention provides a water massage fixture of the above-  
10 mentioned type which can be installed in place of a conventional rose or perforated shower head.

More advantageously, at least in a preferred form, the invention provides a rose or perforated shower head provided with a water massage fixture that makes only use of hydraulic and not electric means for the massage.

- 15 Advantageously, at least in a preferred form, the invention overcomes the disadvantages of said prior art providing a shower handle in the form of a "telephone" including one or more spouts and one or more sponges, rolls or any interchangeable water-driven massaging means which can be seized by the user and/or hung on the wall or the bathtub.

- 20 A preferred embodiment of the invention will now be described, by way of example only, with reference to the accompanying drawings in which:

Fig. 1 is an elevation side view of a first embodiment of a shower handle in the form of a "telephone" with two rotatable brushes according to the invention;



5 Fig. 2 is a plan view of the shower handle of Fig. 1;

Fig. 3 is an elevation side view of one of the two interchangeable brushes of the shower handle shown in Fig. 1;

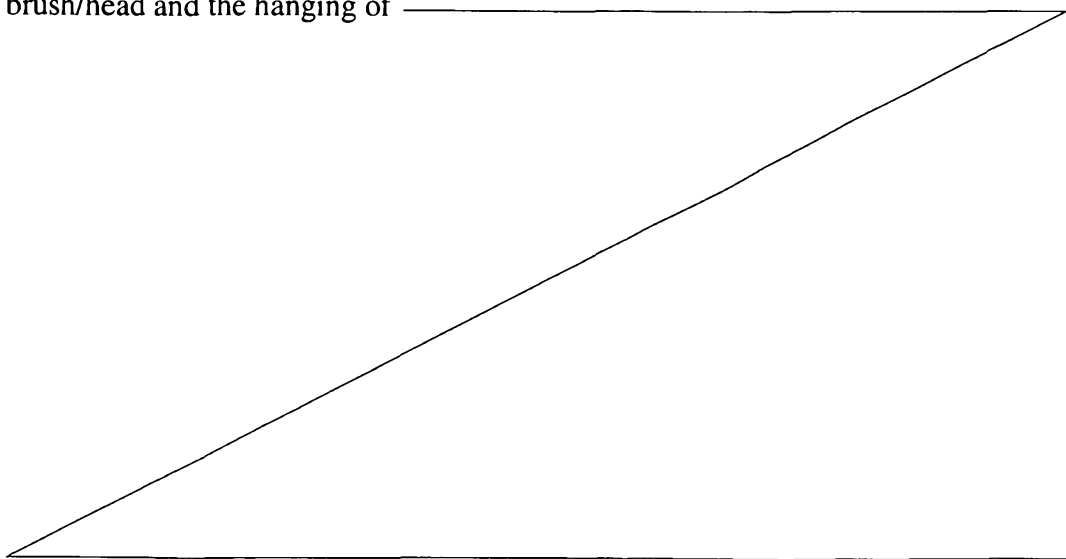
Fig. 4 shows the detail of Fig. 3 in which the sponge is removed from the rotatable multispout shower head;

10 Fig. 5 is a bottom plan view of the rotatable perforated shower head of the shower handle shown in Fig. 1;

Fig. 6 is similar to Fig. 1 and shows a possible use of the shower handle provided with only one shower head;

15 Figs. 7 and 8 show the use of the fixture of Fig. 1 which is applied to a rod holding the shower head and seized by the user, respectively;

Fig. 9 shows the use of the shower handle provided with only one rotatable brush/head and the hanging of \_\_\_\_\_



the rotatable brush/head directly to the handle-stand rod;

Fig. 10 shows the interchangeability of the rotatable  
5 brush/head with the massaging roll;

Fig. 11 shows a rotatable multispout swivel-head that can also be used as water jet massager;

10 Fig. 12 shows a further embodiment of the invention consisting of a roll-holder fork support provided with a rotatable interchangeable roll;

Fig. 13 shows a particular embodiment of the support  
15 for a rotatable sponge that can be hung on the wall;

Figs. 14-17 show several mountings of the invention on rods or fitted columns;

20 Figs. 18-19 show a rotatable ball-holder disc to be mounted in place of the sponge to have a body massage;

Figs. 20-21 show two applications of the rotatable  
25 brushes and/or roll to a bathtub to have a massage also when having a relaxing bath;

Fig. 22 shows a shower handle provided with two rotatable brushes or sponges similar to Fig. 1 and with outlet water pressure regulating means;

Fig. 23 is a longitudinal section of the shower handle of Fig. 22.

With reference to the figures, a peculiar feature of the invention is its application in place of a conventional shower head and/or a shower handle in the form of a telephone.

This is accomplished by providing an advantageously simple water outlet/support structure 30 that allows several rotatable accessories 34 such as sponges, brushes, rolls, discs provided with balls or soft bristles, etc. to be used without needing the installation of particular fixtures and/or special water systems.

In particular each rotatable accessory 34 can be either used individually or in pairs in a practical and easy manner according to user's needs and wishes because of the provision of quick-release means 32-32A actuated by a push button 32B. To this purpose, a ball valve 52, which automatically closes the water duct when the corresponding rotatable accessory 34 is released by the user, is provided at each quick-release means.

It should be noted that the rotation of the brushes and/or the shower heads or rolls is advantageously caused by the pressure of the water supplying the shower. In the particular embodiment disclosed, the rotation of each brush is caused by an impeller 47 which is driven by the water flow from the hydraulic system. In the section of Fig. 23 there is shown the



water flow through inlet 46, the supporting structure 30, the two impellers 47, and the downward outlet of nozzles 49. The rotation movement is transmitted by impeller 47 to the brushes or sponges 38 by means of a gearing consisting of a train of reduction gears 48 idle rotating about their axis.

In the embodiment shown in Figs. 22 and 23 the water-driven rotatable accessories 34 are further provided with taps 45 that regulate the water flow discharged through an additional outlet 51 in order to adjust the pressure and the amount of water flowing through nozzles 49. In this way the amount of the water flowing through the soaped sponges can be advantageously regulated at will.

In fact, the support of brushes or roll 39 needs just to be positioned and directed as desired and after having plugged in the desired rotatable accessory, the water supply tap is opened at the desired temperature and the outlet pressure is adjusted according to the desired rotation rate.

As shown in Figs. 7-11 the shower handle having the typical shape of a telephone allows either only one or two rotatable bodies to be used. In the latter case one rotatable body can be hung on a rod 36 (Fig. 9), the other is seized by the user. To this end, both rotatable bodies are provided with a water supply inlet. It should be noted that in the present embodiment water is supplied through the above-mentioned quick-release means 32-32A.

Advantageously, if the sponges are removed the

rotatable fixture is transformed into a multispout shower head capable of soft rain or stimulating jet.

In particular, there are provided a main central water spout 40 and a plurality of peripheral satellite water spouts 41 capable of being oriented and rotating about their axes and the main water spout. The rotation movements are preferably provided in this case by a water-driven impeller that moves the front portion of the head integral with a plurality of satellite heads rotating about the axis of the impeller. Such satellite heads 41 are also rotated about their own axes by gears engaging to corresponding central stationary gears.

According to another feature of the invention, the fixture is provided with a receptacle containing the foam soap and/or a liquid soap which flows out directly on the sponge by pressing a suitable push button.

Instead of a roll located in place of a sponge 38, a suitable fork support 42 able to hold a roll massaging a wide portion of the body can also be used (Fig. 12).

The present invention can advantageously meet most requirements. In fact, as shown in Figs. 13 to 17, several embodiments characterized by being easy to use are provided. Such embodiments are capable of performing a variety of functions such as a stimulant, tonic water massage, and guarantee the interchangeability of sponges and rolls as well as the capability for the latter of being detached from the support and handled with the maximum comfort.

With reference to Figs. 18 and 19 the rotating sponges can be replaced by rotatable ball-holder discs 43 allowing a particularly effective relaxing massage to be accomplished. More particularly, such rotatable balls 44 are idle mounted and are rotated with respect to their mountings when contacting the user's body.

Still another advantage of the invention consists in that it is not necessary to have a shower for using the above-mentioned fixture but the massaging effect can also be enjoyed when having a comfortable bath in a bathtub.

To this end, Figs. 20 and 21 show an embodiment in which both the sponges and/or rotatable discs and the roll are placed in a bathtub. Advantageously, the bottom and the walls of such bathtub are shaped so as to allow the user to take the desired posture for enjoying as best he can either the relaxing or the stimulant massaging action.

According to a further feature of the invention, each rotatable accessory 34 is connected to support 30 by quick-release couplings, bayonet couplings or similar coupling means. Likewise, the interchangeable sponges, brushes or rolls are connected preferably by means of snap couplings 53.

The present invention has been described and illustrated according to preferred embodiments thereof, however, it should be understood that those skilled in the art can make equivalent modifications and/or replacements without departing from the scope of the present industrial invention.

5 THE CLAIMS DEFINING THE INVENTION ARE AS FOLLOWS:-

1. An improved water-driven fixture for having a water massage and/or a shower provided with rotatable accessories, capable of a massaging action and at the same time acting as a shower head, that are disposed on a handle having the shape of a telephone including a water supply duct for supplying the rotatable  
10 accessories, wherein said rotatable accessories are two and said shower handle is used in replacement of the conventional shower heads and it can either be seized by the user or hung on the wall of the shower and/or the bathtub; said two rotatable accessories being connected by means of quick-release couplings for their fast replacement, that are provided with individual supply water inlets, a ball  
15 valve capable of automatically closing the water duct when the corresponding rotatable accessory is released by the user being also provided at each quick-release means coupling.
2. The water-driven fixture for having a water massage and/or a shower according to any one of the preceding claims, wherein said rotatable accessories  
20 consist of a shower head on which interchangeable sponges, brushes or rolls for water massage are disposed.
3. The water-driven fixture for having a water massage and/or a shower according to any one of the preceding claims, wherein said heads are rotatable and include a plurality of spouts.



5     4.     The water-driven fixture for having a water massage and/or a shower  
according to any one of the preceding claims wherein said spouts consist of a main  
central spout and two or more peripheral spouts rotating about their own axes and  
about the axis of main spout.

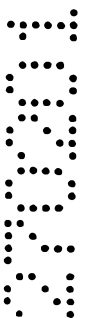
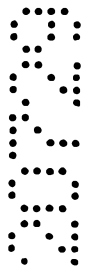
5.     The water-driven fixture for having a water massage and/or a shower  
10 according to any one of the preceding claims, wherein rotatable ball-holder discs  
are provided in place of said interchangeable rolls or brushes, said balls being  
freely rotated with respect to their own housings when contacting the user's body.

6.     The water-driven fixture for having a water massage and/or a shower  
according to any one of the preceding claims, wherein each rotatable accessory has  
15 its own supply water inlet.

7.     The water-driven fixture for having a water massage and/or a shower  
according to any one of the preceding claims, wherein said quick-release  
couplings allowing also only one rotatable accessory fitted in the shower handle to  
be used while the other accessory can be hung on the wall.

20 8.     The water-driven fixture for having a water massage and/or a shower  
according to any one of the preceding claims, wherein it is used in a bathtub  
having a wall provided with a suitable housing able to receive said rotatable  
accessories of any type (roll, brush or sponge).

9.     The water-driven fixture for having a water massage and/or a shower  
25 according to any one of the preceding claims, wherein the water-driven rotatable



5 accessories are provided with ball taps that regulate the water flow discharged through an additional outlet in order to adjust the pressure and the amount of water flowing through nozzles.

10. The water-driven fixture for having a water massage and/or a shower according to any one of the preceding claims, whereby water flows into the  
10 rotatable accessories through an inlet, reaches each impeller through support and flows out of nozzles, the rotation movement being transmitted from the impeller to the brushes or sponges by means of a gear train including an idle reduction gear train on its own axis.

11. The water-driven fixture for having a water massage and/or a shower  
15 according to any one of the preceding claims, wherein instead of quick-release couplings, each rotatable accessory is connected to support by bayonet couplings or similar coupling means.

12. The water-driven fixture for having a water massage and/or a shower according to any one of the preceding claims, wherein said interchangeable  
20 sponges, brushes or rolls are connected by means of snap couplings.



- 5    13.    A water-drive fixture for having a water massage substantially as herein  
described with reference to any one of the embodiments of the invention  
illustrated in the accompanying drawings.

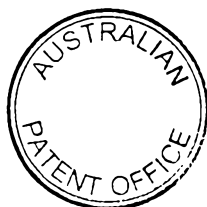
DATED THIS 27TH DAY OF FEBRUARY, 2001

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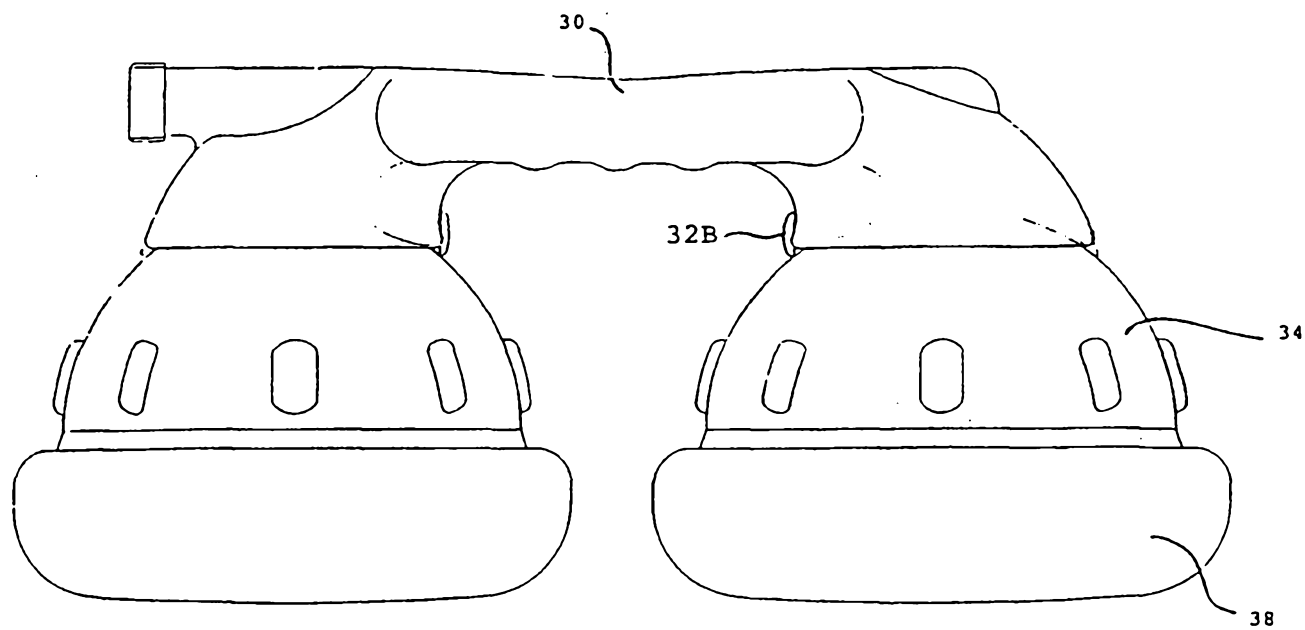


FIG. 1

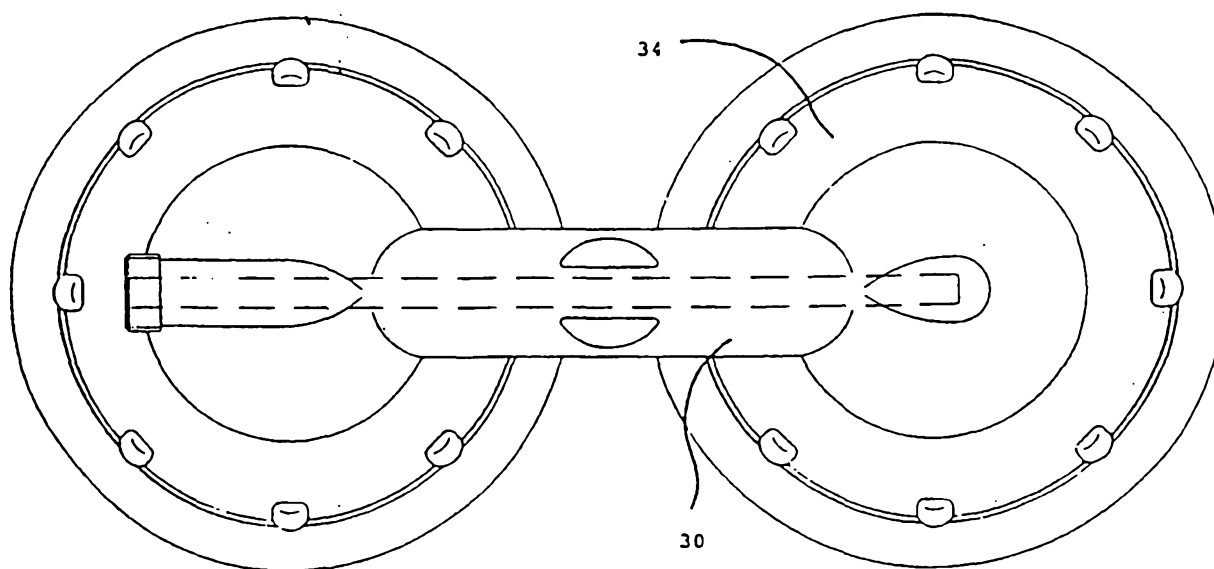


FIG. 2



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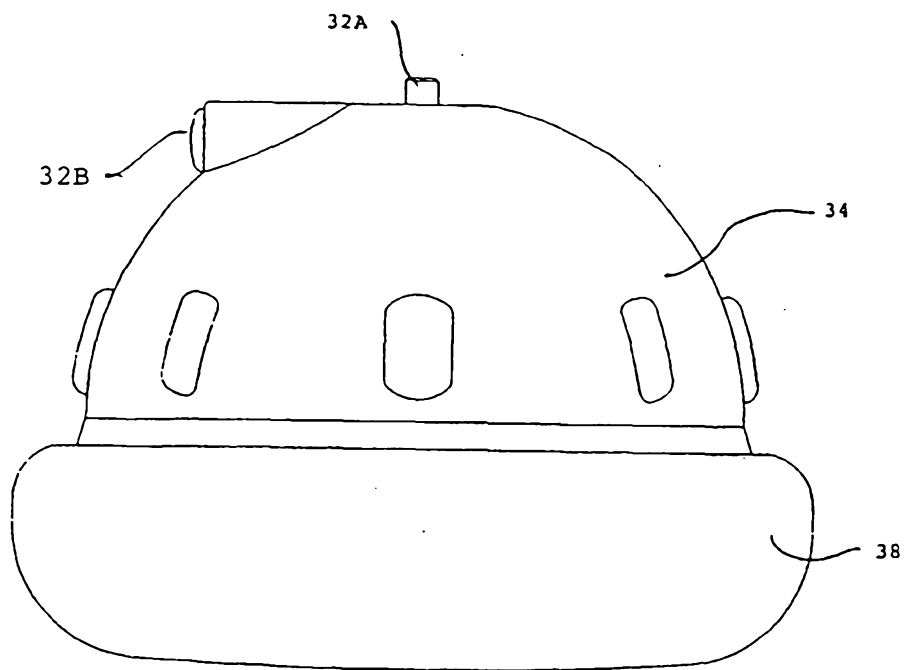


FIG. 3

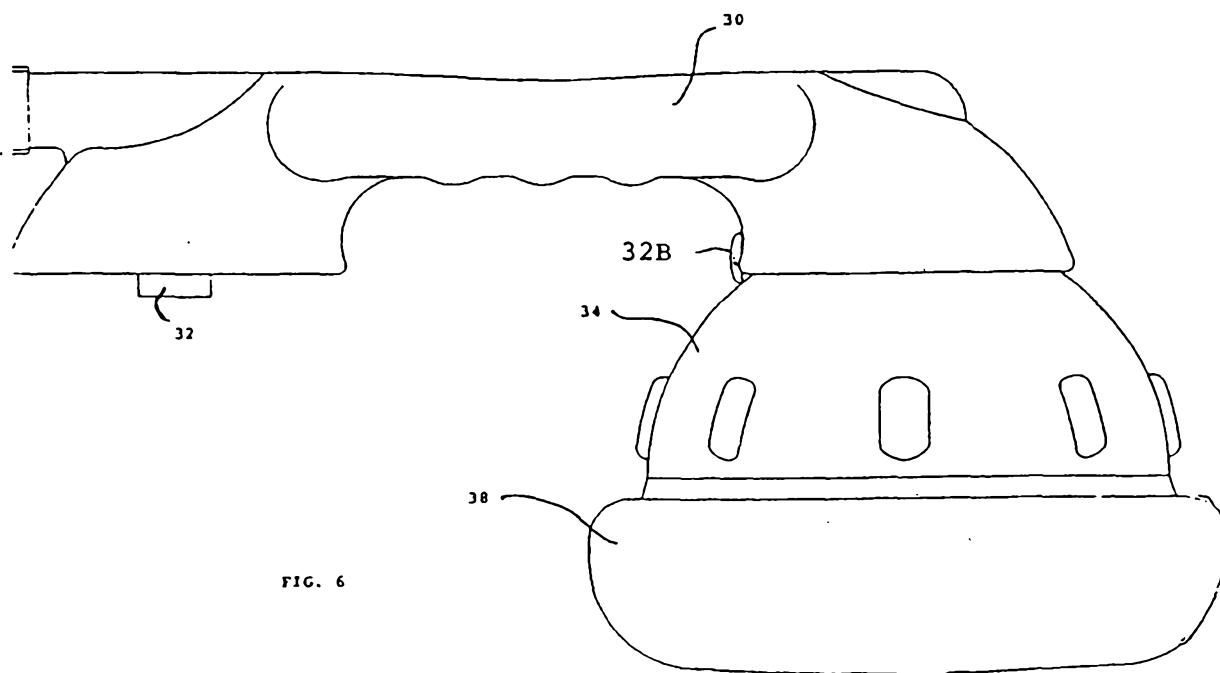


FIG. 6

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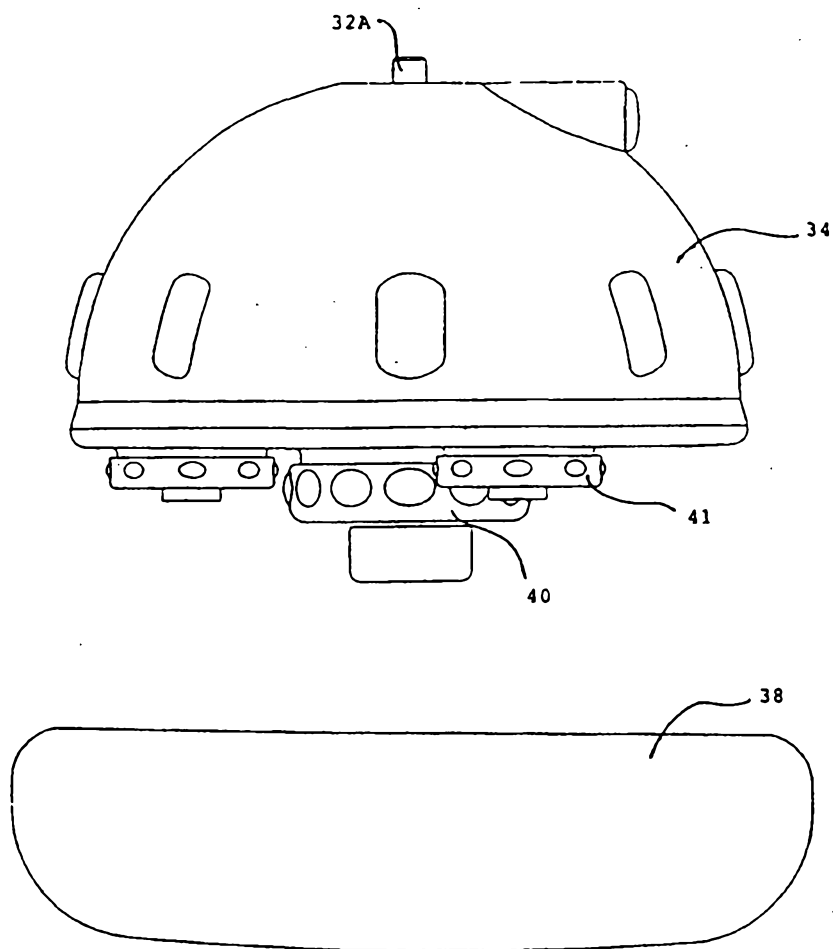


FIG. 4

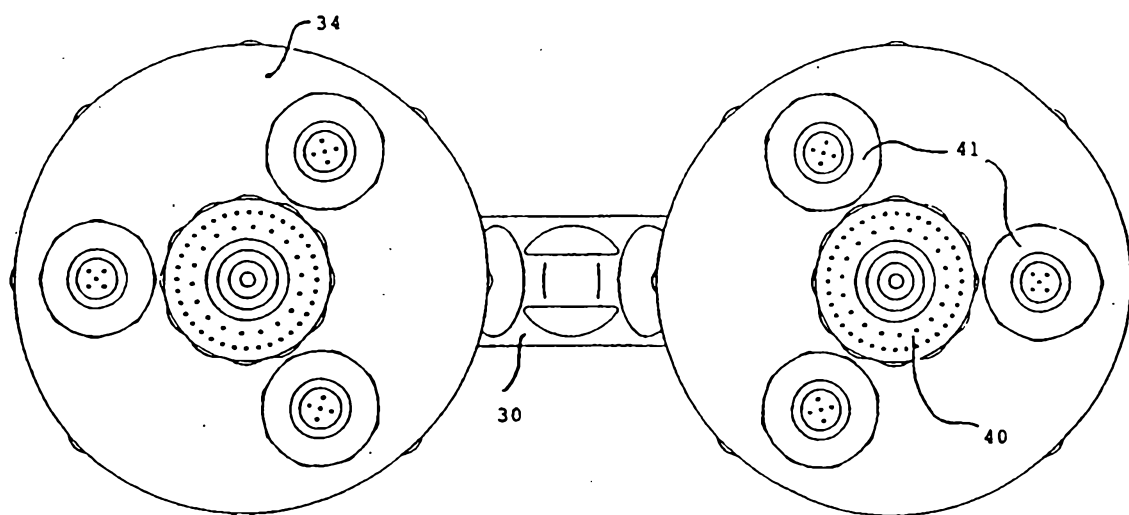


FIG. 5

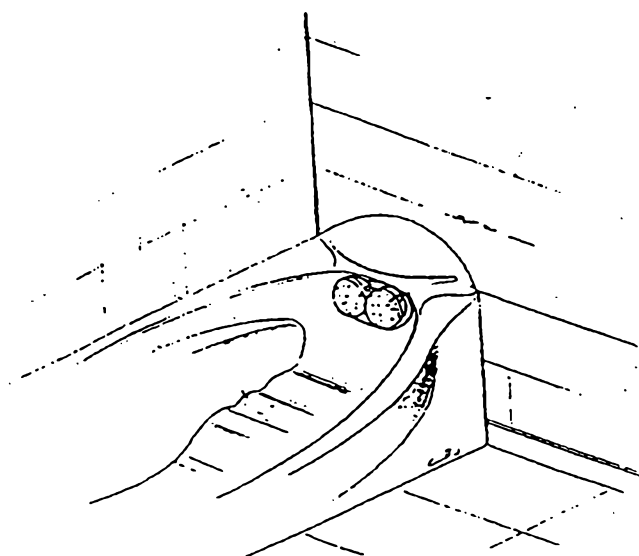


FIG. 20

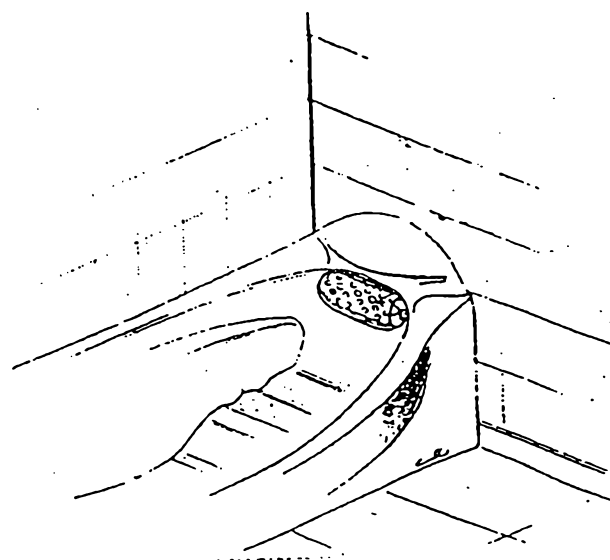


FIG. 21

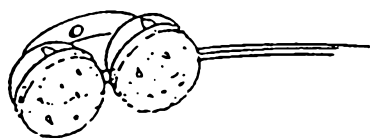


FIG. 7

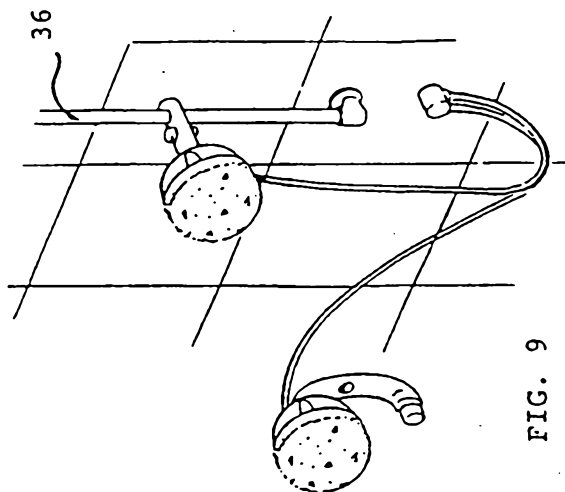


FIG. 8

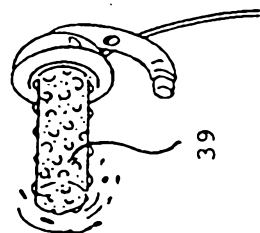


FIG. 9

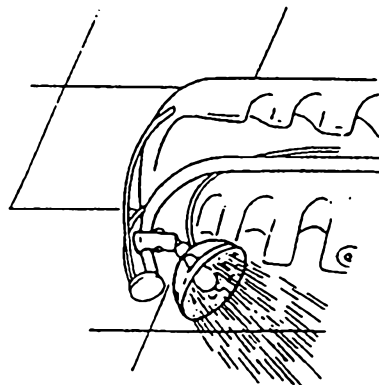


FIG. 10

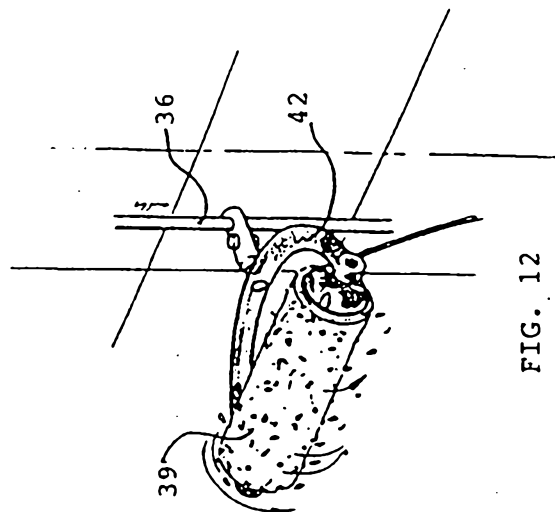


FIG. 11

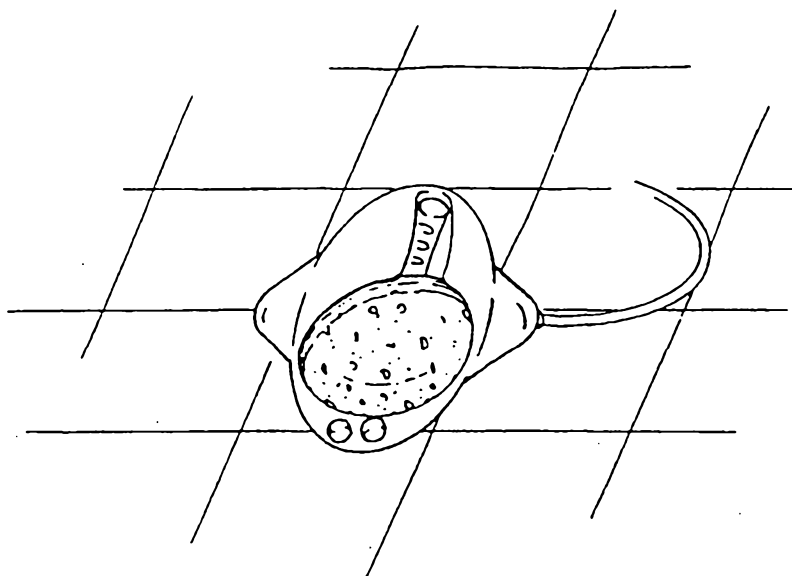


FIG. 13

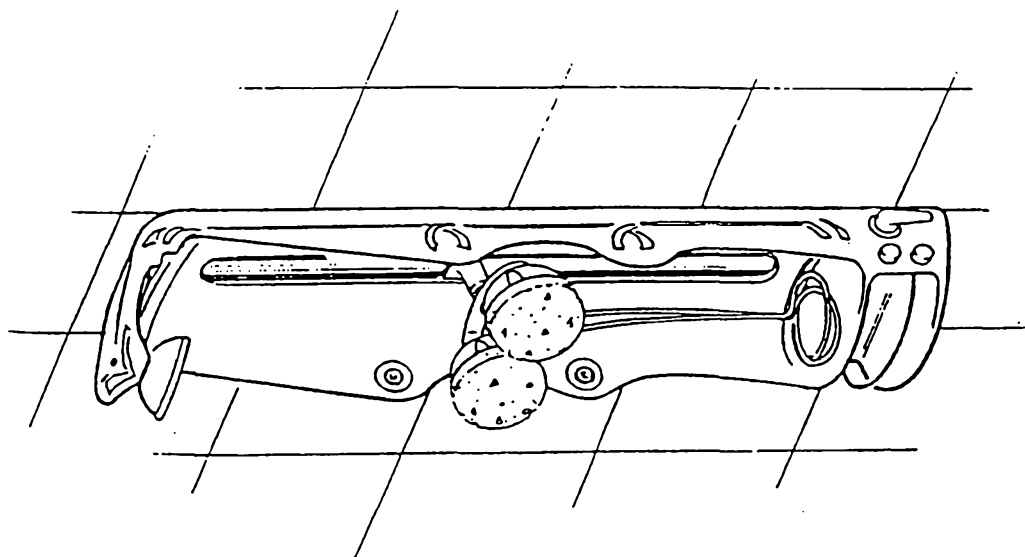


FIG. 15

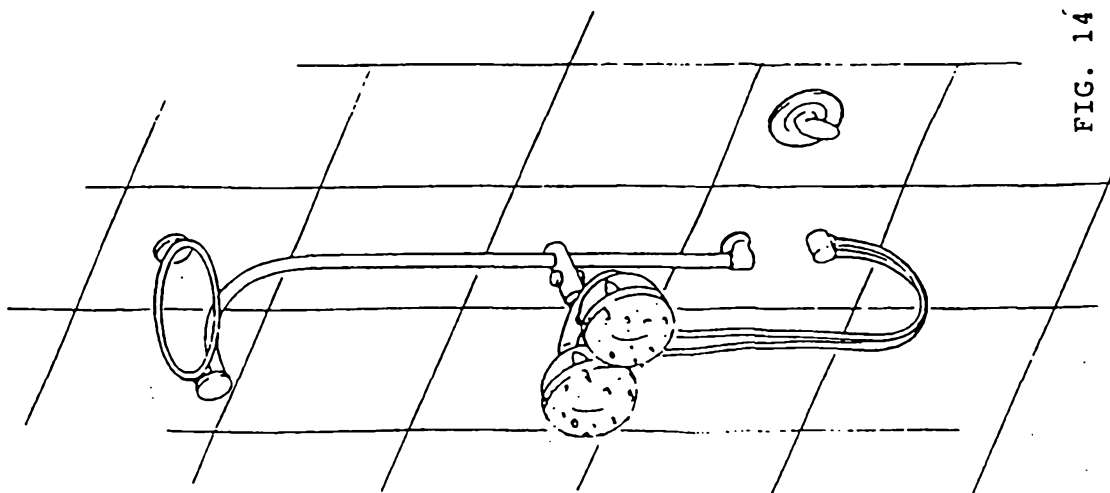


FIG. 14

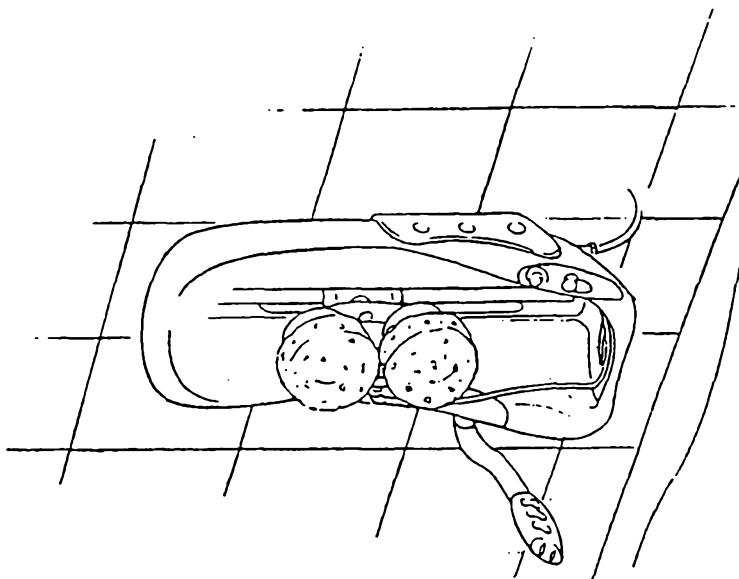


FIG. 17

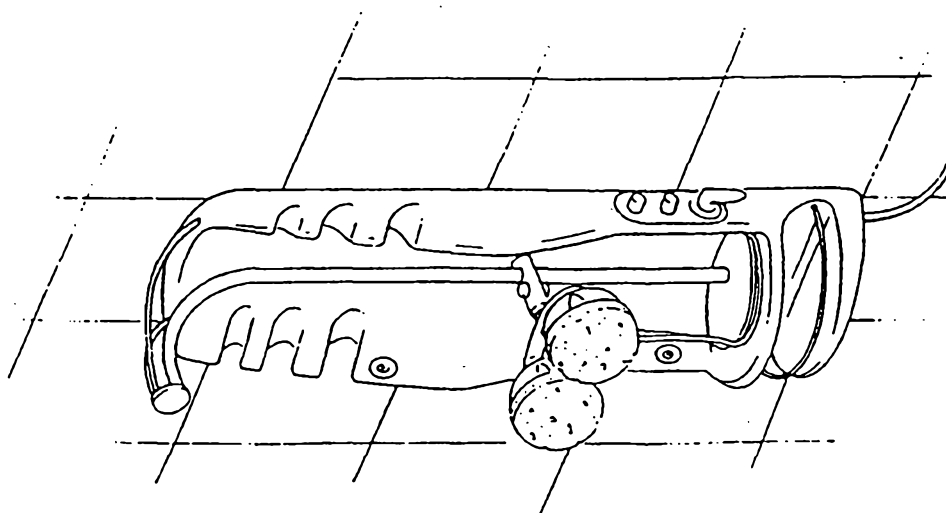


FIG. 16

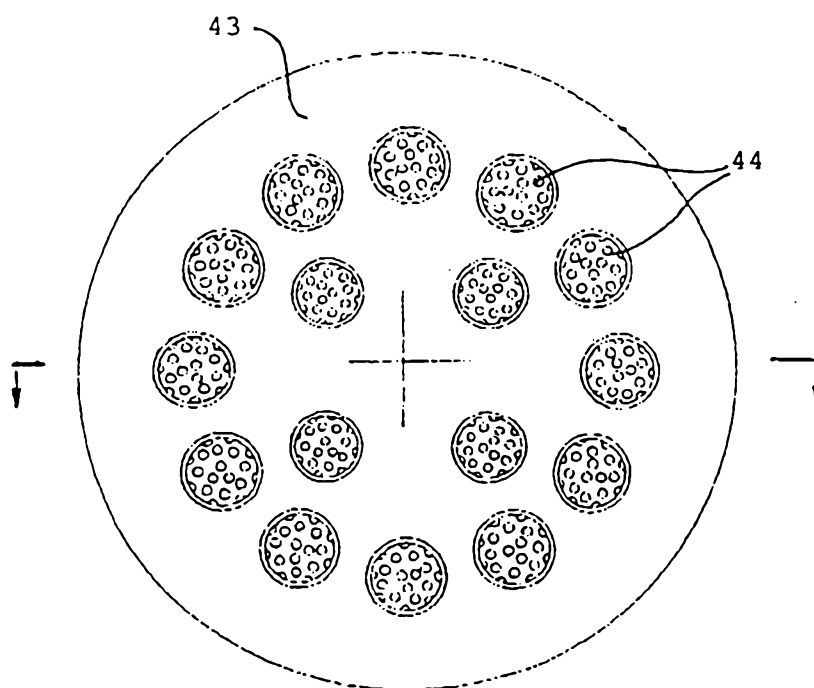


FIG. 18

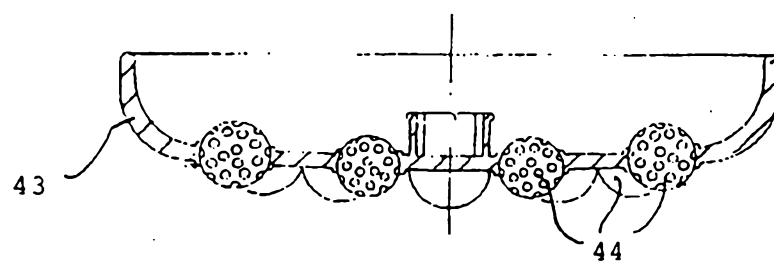


FIG. 19

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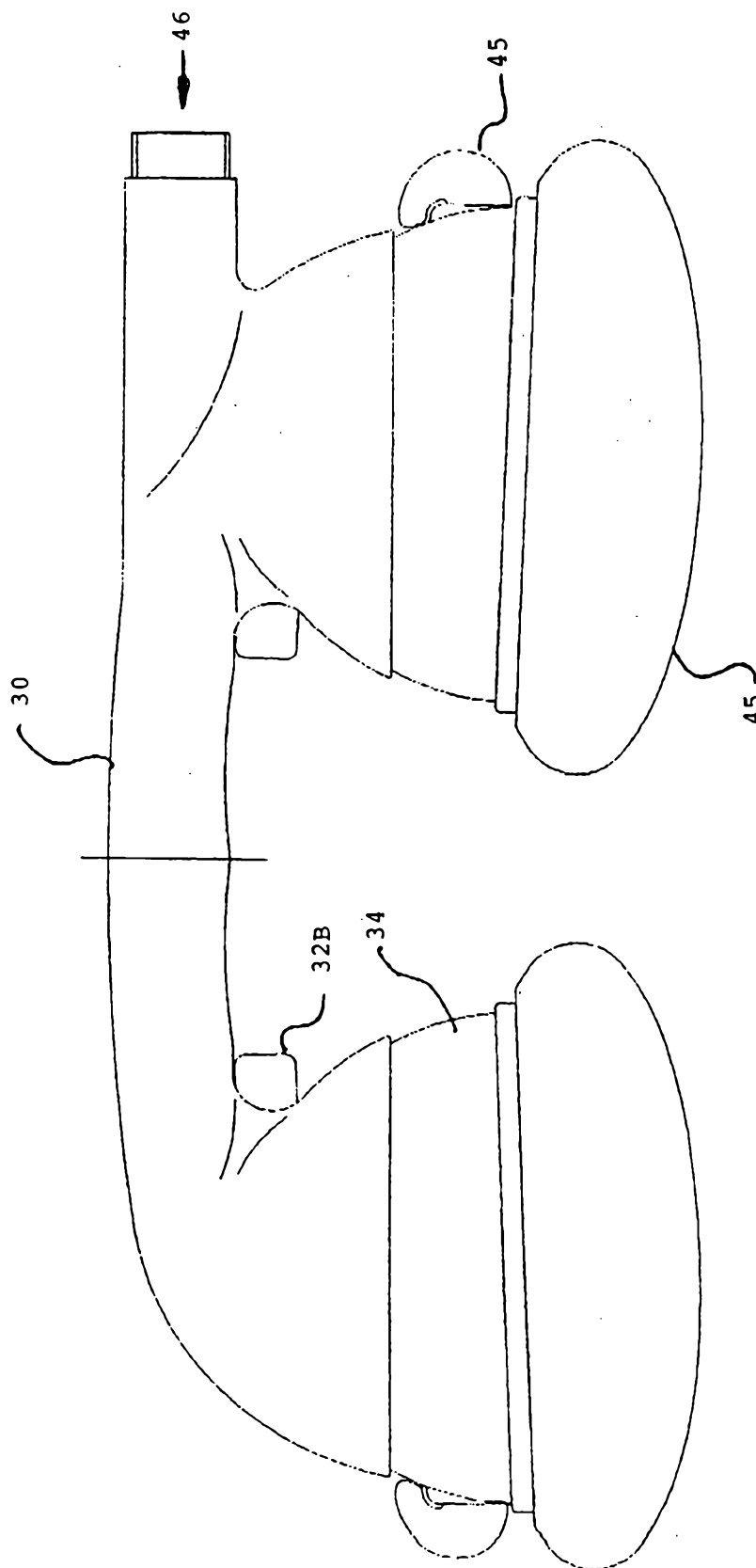


FIG. 22



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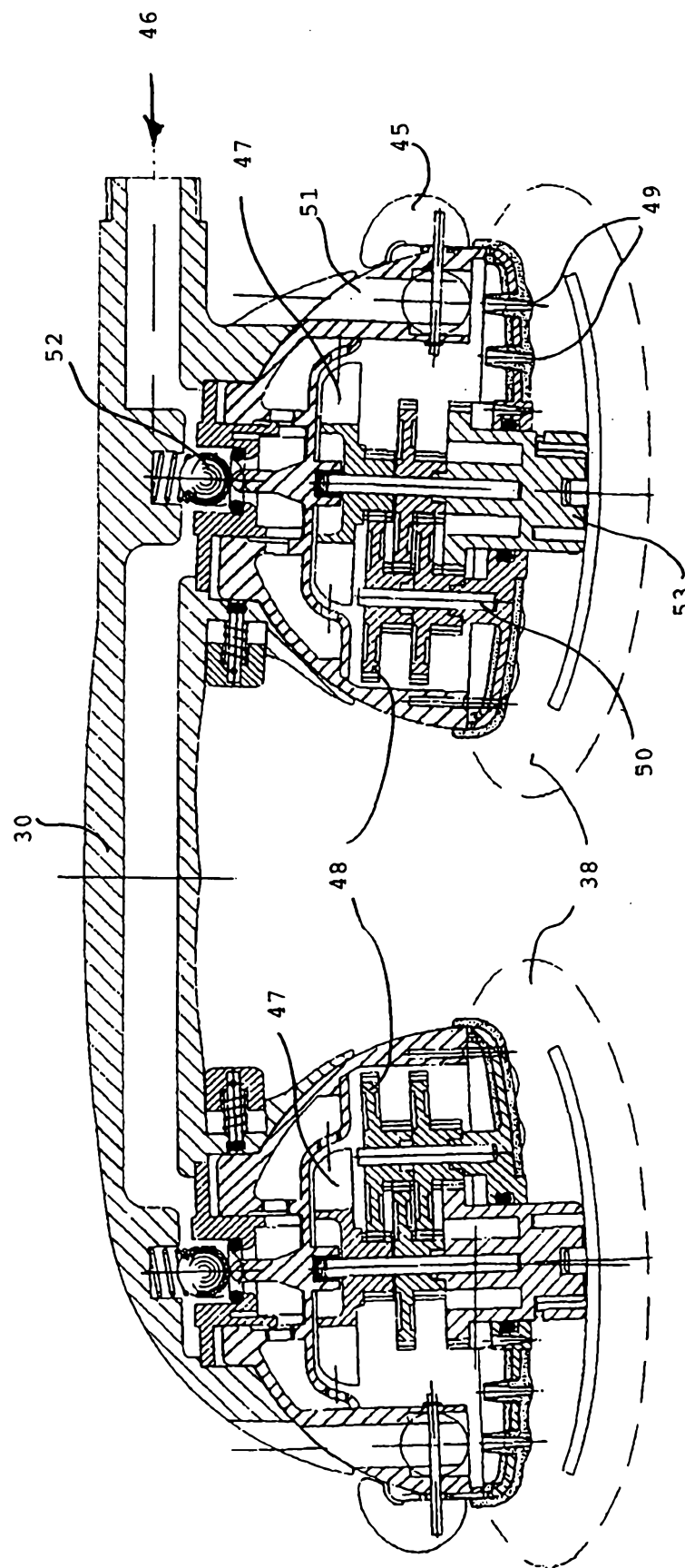


FIG. 23