Office de la Propriété Intellectuelle du Canada
Un organisme d'Industrie Canada

Canadian Intellectual Property Office
An agency of Industry Canada

CA 2576892 C 2011/06/28

(11)(21) 2 576 892

(12) BREVET CANADIEN
CANADIAN PATENT

(13) C

(86) Date de dépôt PCT/PCT Filing Date: 2005/05/04
(87) Date publication PCT/PCT Publication Date: 2006/03/09
(45) Date de délivrance/Issue Date: 2011/06/28
(85) Entrée phase nationale/National Entry: 2007/02/07
(86) N° demande PCT/PCT Application No.: US 2005/015429
(87) N° publication PCT/PCT Publication No.: 2006/025875
(30) Priorité/Priority: 2004/08/30 (US10/929,963)

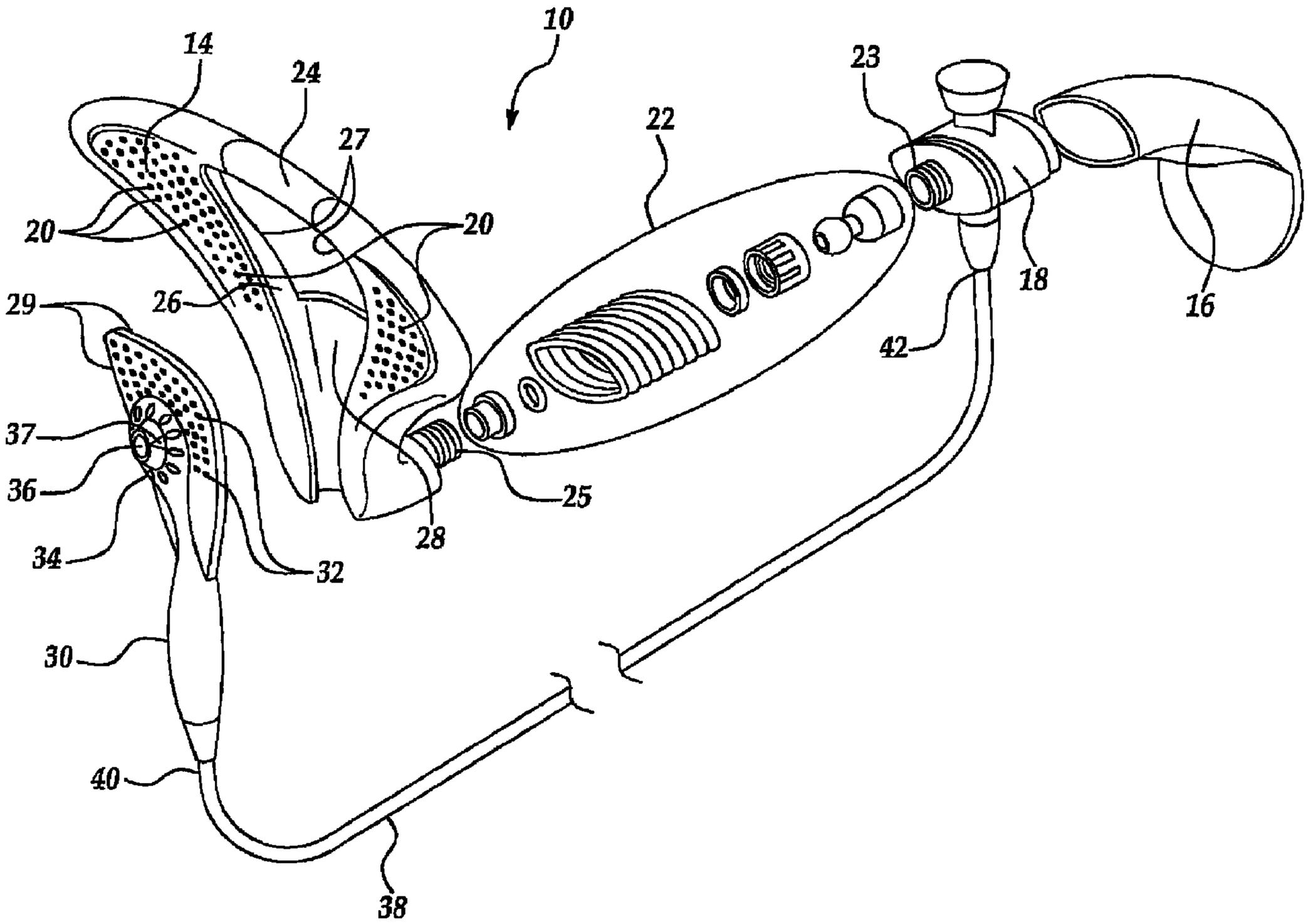
(51) Cl.Int./Int.Cl. *B67D 1/07* (2006.01)

(72) Inventeur/Inventor:
LEV, MORDECHAI, US

(73) Propriétaire/Owner:
SIDUS TECHNOLOGIES, INC., US

(74) Agent: SMART & BIGGAR

(54) Titre : SYSTEME DE POMME DE DOUCHE A POIGNEE INTEGREE
(54) Title: SHOWERHEAD SYSTEM WITH INTEGRATED HANDLE



(57) Abrégé/Abstract:
A showerhead system for communicating a fluid supply, the system including a fixed fluid dispensing unit supported at a location, the fixed dispensing unit including a plurality of nozzles in fluid communication with the fluid supply. A removable fluid dispensing

CA 2576892 C 2011/06/28

(11)(21) 2 576 892

(13) C

(57) Abrégé(suite)/Abstract(continued):
unit is releasably secured to a receptacle established within the fixed dispensing, the removable unit further including at least one additional nozzle. The fluid supply is adapted to be in selective communication with either or both the fixed and removable fluid dispensing units, such as through the provision of a fluid diverter element located at an inlet of the fixed unit and from which extends a conduit in separate communication with the removable unit.

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

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
9 March 2006 (09.03.2006)

PCT

(10) International Publication Number
WO 2006/025875 A2

(51) International Patent Classification:
B67D 1/07 (2006.01)

(21) International Application Number:
PCT/US2005/015429

(22) International Filing Date: 4 May 2005 (04.05.2005)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
10/929,963 30 August 2004 (30.08.2004) US

(71) Applicant *(for all designated States except US)*: **ALSONS CORPORATION** [US/US]; 3010 West Mechanic Street, Hillsdale, MI 49242 (US).

(72) Inventor; and

(75) Inventor/Applicant *(for US only)*: **LEV, Mordechai** [US/US]; 5505 Walnut Circle, West Bloomfield, MI 48322 (US).

(74) Agent: **ZARINS, Edgar, A.**; Masco Corporation, 21001 Van Born Rd., Taylor, MI 48180 (US).

(81) Designated States *(unless otherwise indicated, for every kind of national protection available)*: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

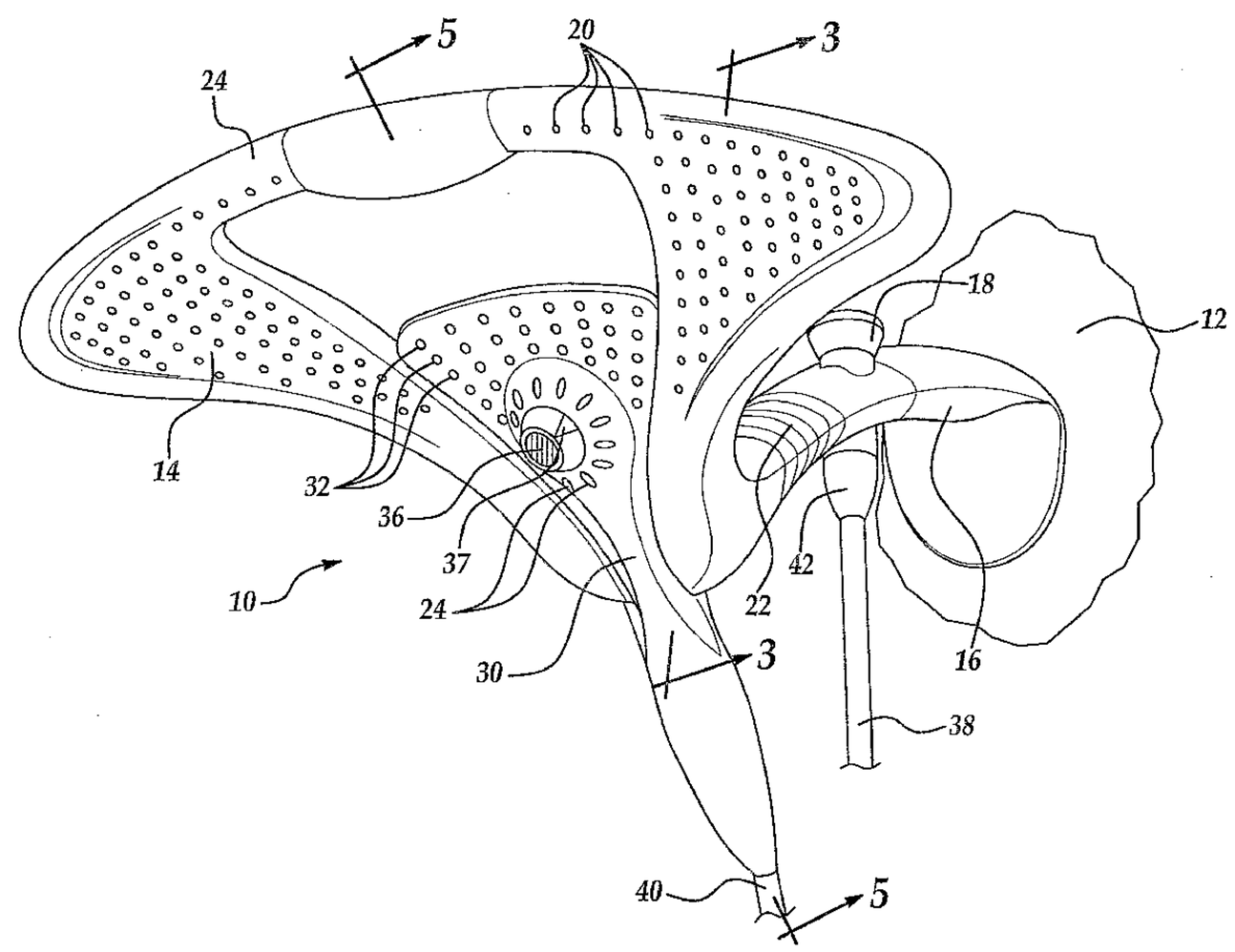
(84) Designated States *(unless otherwise indicated, for every kind of regional protection available)*: ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Declaration under Rule 4.17:

— *as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii)) for the following designations AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM,*

[Continued on next page]

(54) Title: SHOWERHEAD SYSTEM WITH INTEGRATED HANDLE



(57) Abstract: A showerhead system for communicating a fluid supply, the system including a fixed fluid dispensing unit supported at a location, the fixed dispensing unit including a plurality of nozzles in fluid communication with the fluid supply. A removable fluid dispensing unit is releasably secured to a receptacle established within the fixed dispensing, the removable unit further including at least one additional nozzle. The fluid supply is adapted to be in selective communication with either or both the fixed and removable fluid dispensing units, such as through the provision of a fluid diverter element located at an inlet of the fixed unit and from which extends a conduit in separate communication with the removable unit.

WO 2006/025875 A2

WO 2006/025875 A2

ZW, ARIPO patent (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG)

Published:

— *without international search report and to be republished upon receipt of that report*

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

68572-447

SHOWERHEAD SYSTEM WITH INTEGRATED HANDLE

BACKGROUND OF THE INVENTION

FIELD OF THE INVENTION

The present invention generally relates to showerheads. More specifically, the present invention discloses a showerhead incorporating a detachable handle and spray head.

DESCRIPTION OF THE PRIOR ART

The prior art is well documented with various examples of showerhead attachments and assemblies. In each instance, such showerhead devices provide either or both of a steady stream flow or pulse flow of water to a user, and such as within a shower or tub enclosure. In certain instances, the assembly may be subdivided into more than one water dispensing head, such often including a fixed showerhead and a movable showerhead fluidly related in some fashion to the fixed showerhead.

A first example drawn from the prior art is set forth in U.S. Patent No. 4,752,975, issued to Yates, and which teaches a showerhead assembly including a

diverter valve for diverting a water supply to one of two showerheads. One of the showerheads is generally laterally and adjustably displaced from the other of the showerheads by means of a swivelable extension arm and the entire assembly is easily installable on the existing overhead water supply line of a shower stall or bath enclosure.

U.S. Patent No. 5,749,552, issued to Fan, teaches a mounting assembly for mounting a bracket for attaching a handheld showerhead in relation to a wall of a bathroom. The mounting assembly includes a fitting having an end for connecting with a fixed spray head, another end for connecting a water supply pipe and an extending portion for threadably engaging a top end of a post on which the bracket can be slidably locked therealong. A bottom end of the post is attached with a vacuum mounting assembly for mounting the bottom end of the post on the wall by a vacuum pressure.

Finally, U.S. Patent No. 3,471,872, issued to Symmons, teaches a plumbing fixture for baths which facilitates provision of a handheld spray unit in a bathtub or shower installation. A casing incorporates a diverter valve assembly and an ornamental housing which conceals the casing and is adapted to function as a tub spout or as a showerhead support.

In spite of the prior art efforts, there remains a need for a showerhead incorporating a detachable handle and spray head. Such a showerhead would provide flexibility in the water stream characteristics and the shower experience.

68572-447

SUMMARY OF THE PRESENT INVENTION

The present invention is a showerhead system for communicating a pressurized water supply. The present invention is an improvement over prior art showerhead systems in that it provides both fixed and interengageable water dispensing units, the fixed unit being supported at a location and comprising a first plurality of nozzles established in a desired contiguous or non-contiguous array. The removable fluid dispensing unit is releasably secured to a receptacle formed within the body of the fixed unit and provides at least one additional, and preferably a plurality of, fluid dispensing nozzle.

The fluid (water) supply is established in selective communication with either or both the fixed and removable dispensing units and such further includes a hose extending from a fluid inlet associated with the fixed dispensing unit and which extends to an inlet end of the removable dispensing unit. A fluid diverter element fluidly communicates the fluid supply with either the fixed dispensing element or, if so adjusted, with only the removable dispensing element via the hose or further with both the fixed and removable dispensing units. The fixed dispensing unit may further include an articulated joint configured intermediate the nozzle and fluid supply and the fixed dispensing unit further includes at least one gripping location to permit readjustment of the fixed unit about the articulating joint.

One aspect of the invention relates to a showerhead system for communicating a fluid supply, said showerhead system comprising: a fixed fluid dispensing unit supported at a location, said fixed dispensing unit comprising at least one nozzle in fluid communication with the fluid supply; a removable fluid

dispensing unit releasably secured to a receptacle established with said fixed dispensing unit forming a dispensing face with said fixed dispensing unit and comprising at least one additional nozzle being connected to a hose in fluid communication with the fluid supply when said removable fluid dispensing unit is dissociated from said fixed fluid dispensing unit; and the fluid supply adapted to being in selective communication with at least one of said fixed and said removable fluid dispensing unit.

Another aspect of the invention relates to a showerhead system for communicating a fluid supply, said showerhead system comprising: a fixed fluid dispensing unit supported at a location, said fixed dispensing unit comprising a plurality of nozzles in fluid communication with the fluid supply; a removable fluid dispensing unit releasably secured to a receptacle established with said fixed dispensing unit forming a dispensing face with said fixed dispensing unit and comprising at least one additional plurality of nozzles being connected to a hose in fluid communication with the fluid supply when said removable fluid dispensing unit is dissociated from said fixed fluid dispensing unit; and a fluid inlet associated with said fixed dispensing unit, a fluid diverter element fluidly communicating said fluid supply with at least one of said fixed and removable dispensing units.

BRIEF DESCRIPTION OF THE DRAWINGS

Reference will now be made to the attached drawings, when read in combination with the following detailed description, wherein like reference numerals refer to like parts throughout the several views, and in which:

Figure 1 is a perspective view of a showerhead assembly according to the present invention having a central removable unit;

Figure 2 is an exploded view of the showerhead assembly depicted in Figure 1;

Figure 3 is a cross-sectional view taken along line 3-3 of Figure 1 and illustrating a first cutaway of a mounted portion of the showerhead assembly;

Figure 4 is a magnified view of the cutaway illustration depicted in Figure 3;

Figure 5 is a cross-sectional view taken along line 5-5 of Figure 1 and illustrating a second and centerline cutaway of the showerhead assembly;

Figure 6 is a perspective view of a showerhead assembly according to the present invention having a basal removable unit;

Figure 7 is a perspective view of a showerhead assembly according to the present invention having a lateral removable unit; and

Figure 8 is a perspective view of a showerhead assembly according to the present invention having an embodiment of a lateral removable unit.

DETAILED DESCRIPTION OF THE INVENTION

The present invention has utility as a bathroom shower fixture. An inventive showerhead system includes a fixed fluid dispensing unit and a removable fluid

dispensing unit releasably secured to a receptacle therefor associated with the fixed dispensing unit such that the fixed dispensing unit and removable dispensing unit in a secured relationship form an integral dispensing face. A fluid supply provides selective communication with at least one of the fixed and removable fluid dispensing units.

Referring to Figure 1, an illustration is shown at 10 of a showerhead assembly and such as which is mounted to a fixed vertical location 12, such as which is typically associated with a shower enclosure or wall surface associated with a bathtub. As previously described, the present invention provides the user with a traditional showerhead experience, additional to the option of removing and manipulating a removable shower handle incorporated into the showerhead. According to the present invention, and as will be further described, the handle optionally functions independently from the head as a water source, or in combination therewith, for the handle and showerhead in their assembled position and dissociated positions, respectively.

Referring again to Figure 1, the showerhead system includes a fixed fluid dispensing unit 14 which is supported at a location 12. The location 12 illustratively includes a vertical or wall surface, or a Roman tub edge. The fixed dispensing unit 14 includes an inlet end 16, such further including an internal passageway for communicating a fluid flow, such as originating from a pipe or tubing extending in communication with the inlet end.

A fluid diverter element 18, such as a valve, "T" connector or other suitable directional flow control element, is located in fluid communication with the inlet fluid supply and a flow outlet associated with the fixed dispensing element 14. As will be further described, the fluid diverter 18 facilitates selective or combined fluid flow to either or both of fixed and removable fluid dispensing units associated with the showerhead system 10.

A plurality of fluid dispensing nozzles 20 are formed along a face of the fixed dispensing unit 14 and are further understood to be provided in either a contiguous or non-contiguous array pattern. It is further understood and envisioned that the dispensing nozzles 20 are optionally formed in any desired pattern or arrangement, and can also be provided in different sizes and spray dispersion patterns within the skill of one in the ordinary art.

The head of the fixed dispensing unit 14 is optionally further repositioned by virtue of an articulating joint 22 located intermediate between the fluid supply inlet 16 and the array of dispensing nozzles 20. The articulating joint 22 is appreciated to be any conventional adjustment mechanism known to the art, such as a ball joint type or other means of adjustment that affords the ability to tilt and/or rotate the inventive showerhead. As is also best again shown in exploded fashion in Figure 2, the articulated joint 22 preferably includes an assembly of fittings and elements to facilitate attachment at one end to a fitting 23 associated with the fluid diverter 18 and, at another end, to a fitting 25 associated with the fixed dispensing head 14.

A gripping location, see rear edge 24, facilitates repositioning of the head associated with the fixed unit 14 and about the articulated joint 22. It is also appreciated that a variety of head configurations are operative in the present invention, these configurations illustratively including multiple nozzles in one contiguous pattern such as a ring, arc, rail and a parabola; and a single nozzle forming a circular or linear opening to create a spray or waterfall-type discharge.

As is best illustrated in the exploded view of Figure 2, a receptacle is formed within the fluid dispensing head associated with the fixed unit and is illustrated by recessed side 26 and base surface 28. In a preferred embodiment, the receptacle surfaces are formed along an axial centerline associated with the fixed dispensing head; however it is understood that the receptacle may also be formed in a side-by-side arrangement or other asymmetric fashion relative to the fixed head, as illustratively depicted with respect to Figures 6-8.

Referring again to Figures 1, 2 and 5, a removable fluid dispensing unit is illustrated at 30 and, as best again illustrated in Figure 2, includes a body exhibiting a backside configuration, and such that it may be mechanically and releasably secured within the side 26 and base recessed surface 28 formed in the fixed dispensing unit 14. As again is best shown in Figure 2, an apertured cutout, see inner walls 27, is formed in the fixed dispensing unit 14 and seats an associated outer perimeter 29 of the removable dispensing unit 30 upon the same being mounted within the recessed side 26 and base surface 28 of the fixed head.

It is further appreciated that a retaining portion is optionally integrated into the removable dispensing unit 30 or, alternatively, represents complementary securing components that attach to a handle and/or showerhead of an inventive system. It is also envisioned and understood that the removable fluid dispensing unit 30 may be secured to the fixed unit 14 such as through the use of Velcro® (hook and loop) portions, spring-loaded retainer pins, cradles, or other securements consistent with the forces and humidity associated with the showerhead use environment.

The removable unit 30 includes at least one plurality of fluid dispensing nozzles and, in a preferred embodiment, may include a first array of nozzles 32 formed in a planar extending face associated with the removable unit. The array of nozzles 32 are similar to the nozzles 20 which are formed across the face of the fixed unit 14. Preferably, a second array of fluid dispensing nozzles 34 are provided. More preferably, a centrally located nozzle 36 is provided relative to the circular nozzle array 34. Each nozzle array 37 and 34 being established in preferably a non-contiguous pattern and providing a different shape and configuration in order to provide multiple spray function modes associated with the removable fluid dispensing unit illustratively including a variable spray or pulse pattern. A removable unit mode control dial 37 affords mode control for the removable unit 30.

As is again best illustrated with reference to Figure 2, the removable fluid dispensing unit 30 is connected to the water supply through a conduit 38, such as a hose, or other means of conducting the water. One end of the hose 40 is connected to

the removable unit 30 and an opposite end 42 is connected to the diverter or T connection 18. As previously described, the head associated with the fixed dispensing unit 14 is optionally connected to the water supply and/or to the inlet 16 through the diverter 18 and it is contemplated that the diverter valve may include up to three flow adjustment positions to facilitate selective or combined fluid flow through the fixed and/or removable dispensing units. In case of a T connection type with no diverting feature, the water is supplied to the removable and fixed dispensing units at all times.

Referring to Figure 3, a cross section is shown through the fixed dispensing head 14, which shows the head bottom part 44 and the head top part 46, which are assembled together. The head bottom part 44 further exhibits a series of holes that accommodate the nozzles 20. A nozzle plate 48 is located between the two assemblable halves, directing a water flow 50, see Figure 4, to different body areas at different angles. In an alternate variant, the nozzle plates 46 and 48 are not used, and in this case the holes in the head bottom part 44 are provided with the nozzle function. The centerline sectional cutaway of Figure 5 further shows the assembled interaction between the removable unit 30, the head associated with the fixed unit 30, and the articulating/joint assembly 22.

Referring now to Figure 3, a perspective view of an inventive showerhead assembly with an alternate configuration is shown generally at 60 where like numerals correspond to those previously described with respect to preceding Figures

1-5. A fixed dispensing head 64 includes multiple nozzles 20 to define a spray face 66. The nozzles 20 in fluid communication with the inlet 16 by way of the diverter 18 and the joint assembly 22. A recess 67 is adapted to receive a removable fluid dispensing unit 68 therein. The removable dispensing unit 68 having a spray head 69 including fluid dispensing nozzles 32 forming a spray face 70, the face 70 continuous with fixed spray face 66. The removable unit spray head 69 tapering to a handle 72 and retained in position relative to the fixed dispensing head unit 64 by way of a holster 74. It is appreciated that a removable third dispensing head unit 69 is retained within a holster 74 through modes illustratively including friction fit and snap fit. Preferably, a second array of fluid dispensing nozzles 34 are provided in the removable head unit 69. When a second array of fluid dispensing nozzles 34 are present, it is preferred that a removable unit face dial 75 is present to afford mode control for the removable unit 69.

Referring now to Figure 7, an inventive lateral shower head assembly is shown generally at 80 where like numerals correspond to those detailed previously with respect to Figures 1-6. A fixed dispensing head unit 84 has an array of first nozzles 20 defining a spray face 86. Laterally adjacent to the spray face 86 is a recess 87 adapted to receive a removable fluid dispensing head unit 88 having a head 89 that tapers to a handle 92. The nozzles 32 and 34 being in fluid communication with the water inlet 16 by way of hose 38. The fixed fluid dispensing unit 84 is convoluted to form a holster 94 adapted to engage the removable unit 88 intermediate between the

head 89 and the handle 92. The holster 94 securing the removable unit 88 by a mode illustratively including pressure fit and snap fit. A removable unit face dial 75 affords mode control for water dispensation therefrom.

Referring now to Figure 8, a securement variant for retaining a removable fluid dispensing unit to a fixed dispensing unit is shown generally at 100 where like numerals correspond to those detailed previously with respect to Figures 1-7. A fixed dispensing head unit 84 has an array of first nozzles 20 defining a spray face 86. Laterally adjacent to the spray face 86 is a recess 87 adapted to receive a removable fluid dispensing head unit 88 having a head 89 that tapers to a handle 92. The nozzles 32 and 34 being in fluid communication with the water inlet 16 by way of hose 38. The fixed fluid dispensing unit 84 is convoluted to form a holster 94 adapted to engage the removable unit 88 intermediate between the head 89 and the handle 92. The holster 94 securing the removable unit 88 by a mode illustratively including pressure fit and snap fit. A removable unit face dial 75 affords mode control for water dispensation therefrom.

The removable fluid dispensing unit 88 is retained in contact with the fixed unit 104 to form an integral spray face with 106 through a spring-loaded button 110 extended from the fixed unit spray face 106. A spring-loaded pin that extends from the fixed unit 104 into a complementary indentation in the handle 92 retains the removable unit 88 in position. Depression of the button 110 retracts the pin (not shown) allowing for detachment of the removable unit 88. Replacement of the

removable unit 88 depresses the pin which again seats within a complementary indentation in the handle 92. It is appreciated that alternate modes of retaining a removable portion in selective engagement with the fixed portion are known to the art and illustratively include a hinge-pin, male-female, luer, and bayonet fittings.

The preceding figures and description illustrate the general principles of the present invention and some specific embodiments thereof. These are not intended to be a limitation upon the practice of the present invention since numerous modifications and variations will be readily apparent to one skilled in the art upon consideration of the drawings and description. The following claims, including all equivalents thereof, are intended to define the scope of the invention.

What is claimed is:

68572-447

CLAIMS:

1. A showerhead system for communicating a fluid supply, said showerhead system comprising:

a fixed fluid dispensing unit supported at a location, said fixed dispensing unit comprising at least one nozzle in fluid communication with the fluid supply;

a removable fluid dispensing unit releasably secured to a receptacle established with said fixed dispensing unit forming a dispensing face with said fixed dispensing unit and comprising at least one additional nozzle being connected to a hose in fluid communication with the fluid supply when said removable fluid dispensing unit is dissociated from said fixed fluid dispensing unit; and

the fluid supply adapted to being in selective communication with at least one of said fixed and said removable fluid dispensing unit.

2. The showerhead system as described in claim 1, further comprising a plurality of nozzles associated with said fixed fluid dispensing unit.

3. The showerhead system as described in claim 2, further comprising a plurality of nozzles associated with said removable fluid dispensing unit.

4. The showerhead system as described in claim 2, wherein said plurality of nozzles associated with said fixed fluid dispensing unit are located contiguous to one another.

5. The showerhead system as described in claim 1, wherein the fixed fluid dispensing unit has a recess to which is matingly engaged said removable unit.

6. The showerhead system as described in claim 5, wherein said recess extends along a substantial centerline associated with said fixed fluid dispensing unit.

7. The showerhead system as described in claim 1 further comprising a holster affixed to said fixed fluid dispensing unit, said holster adapted to engage said removable unit.

8. The showerhead system as described in claim 7 wherein said removable unit is laterally displaced relative to said fixed fluid dispensing unit.

9. The showerhead system as described in claim 7 wherein said removable unit is basally displaced relative to said fixed fluid dispensing unit.

10. The showerhead system as described in claim 7 further comprising a spring-loaded button controlling a locking pin, said locking pin engaging a complementary depression in said removable unit.

11. The showerhead system as described in claim 1, further comprising a fluid inlet associated with said fixed dispensing unit, a fluid diverter element fluidly communicating said fluid supply with said at least one said fixed and removable dispensing units.

12. The showerhead system as described in claim 11, further comprising a conduit communicating said fluid diverter with said removable fluid dispensing unit.

13. The showerhead system as described in claim 1 further comprising an articulating joint intermediate between said at least one nozzle of said fixed dispensing unit and the fluid supply.

14. The showerhead system as described in claim 1, wherein said removable dispensing unit has a plurality of spray function modes.

15. The showerhead system as described in claim 14 further comprising a mode control dial intermediate between the at least one additional nozzle of said removable fluid dispensing unit and the fluid supply.

16. The showerhead system as described in claim 14 wherein said fixed fluid dispensing unit further comprises at least one gripping location to permit readjustment of said fixed unit about an articulating joint.

17. The showerhead system as described in claim 1 wherein said fixed fluid dispensing unit has a face through which is formed a plurality of nozzles.

18. The showerhead system as described in claim 15, further comprising at least one individual plurality of nozzles associated with a fluid dispensing surface of said removable unit.

19. A showerhead system for communicating a fluid supply, said showerhead system comprising:

a fixed fluid dispensing unit supported at a location, said fixed dispensing unit comprising a plurality of nozzles in fluid communication with the fluid supply;

a removable fluid dispensing unit releasably secured to a receptacle established with said fixed dispensing unit forming a dispensing face with said fixed dispensing unit and comprising at least one additional plurality of nozzles being connected to a hose in fluid communication with the fluid supply when said removable fluid dispensing unit is dissociated from said fixed fluid dispensing unit; and

a fluid inlet associated with said fixed dispensing unit, a fluid diverter element fluidly communicating said fluid supply with at least one of said fixed and removable dispensing units.

20. The showerhead system as described in claim 19, wherein the fixed fluid dispensing unit has a recess to which is matingly engaged said removable unit.

21. The showerhead system as described in claim 19 further comprising a holster affixed to said fixed fluid dispensing unit, said holster adapted to engage said removable unit.

22. The showerhead system as described in claim 21 wherein said removable unit is laterally displaced relative to said fixed fluid dispensing unit.

23. The showerhead system as described in claim 21 wherein said removable unit is basally displaced relative to said fixed fluid dispensing unit.

24. The showerhead system as described in claim 21 further comprising a spring-loaded button controlling a locking pin, said locking pin engaging a complementary depression in said removable unit.

25. The showerhead system as described in claim 19, wherein said removable dispensing unit has a plurality of spray function modes.

26. The showerhead system as described in claim 25 further comprising a mode control dial intermediate between the at least one additional nozzle of said removable fluid dispensing unit and the fluid supply.

27. The showerhead system as described in claim 25 wherein said fixed fluid dispensing unit further comprises at least one gripping location to permit readjustment of said fixed unit about an articulating joint.

SMART & BIGGAR
OTTAWA, CANADA

PATENT AGENTS

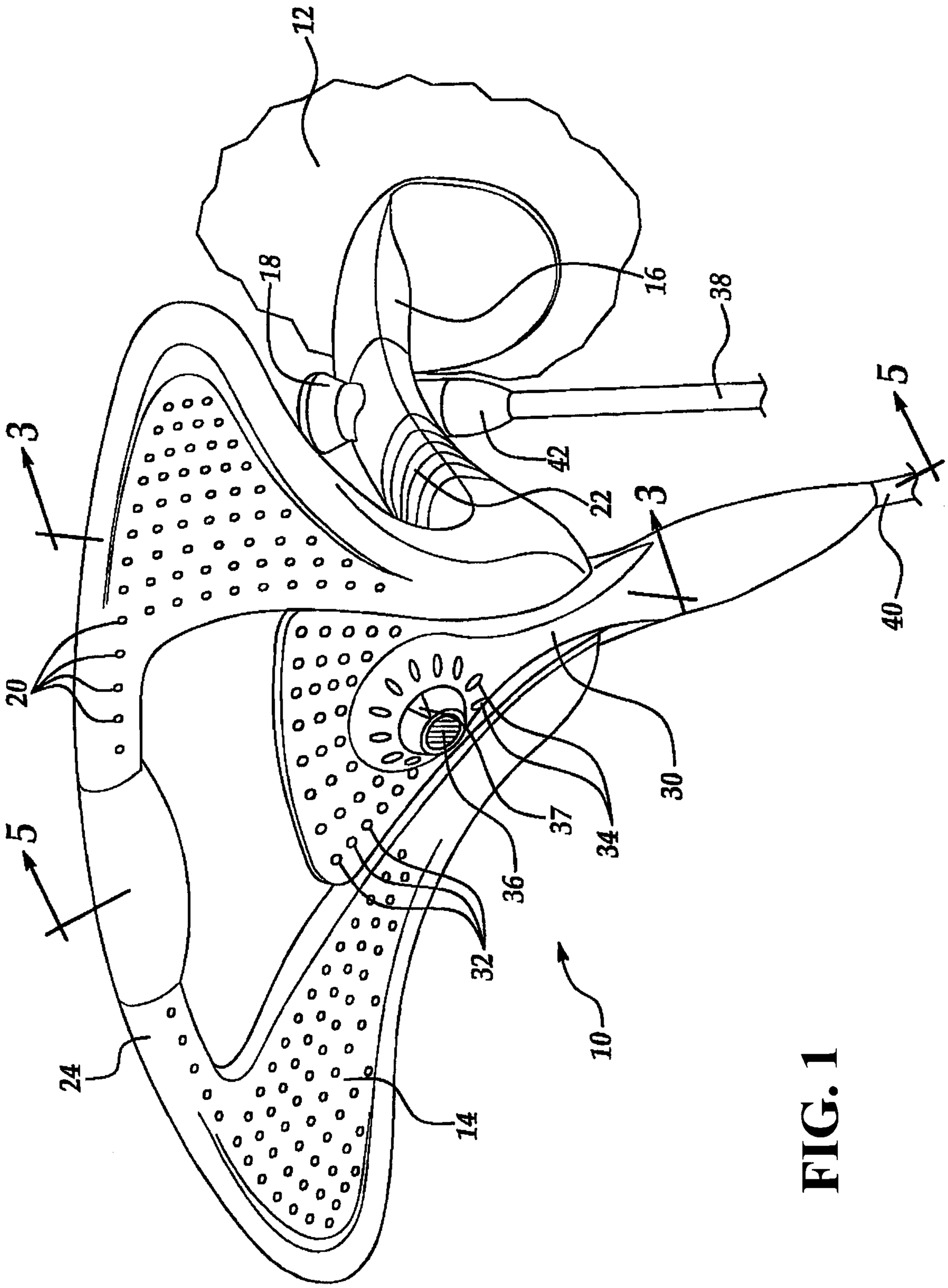


FIG. 1

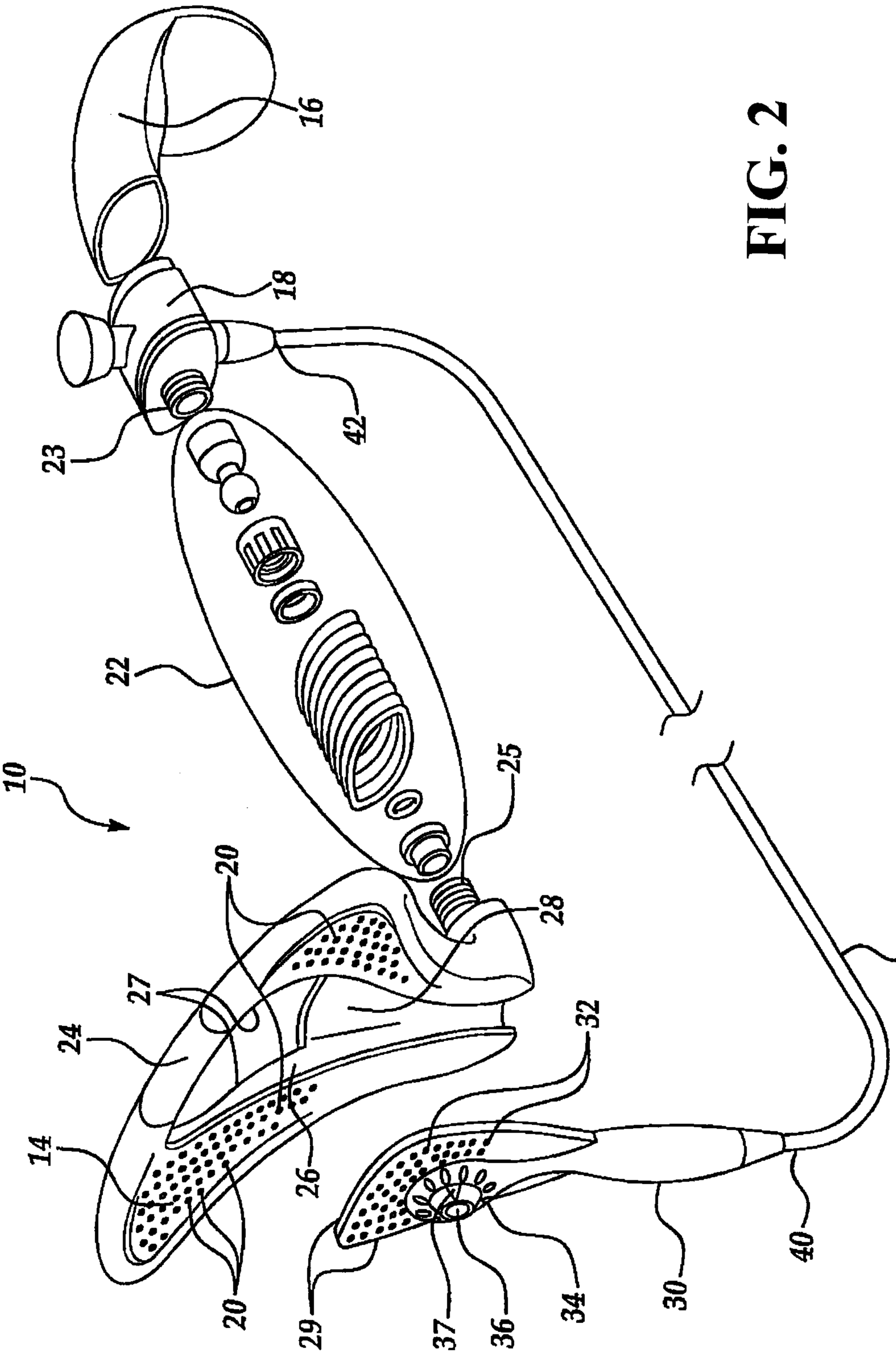


FIG. 2

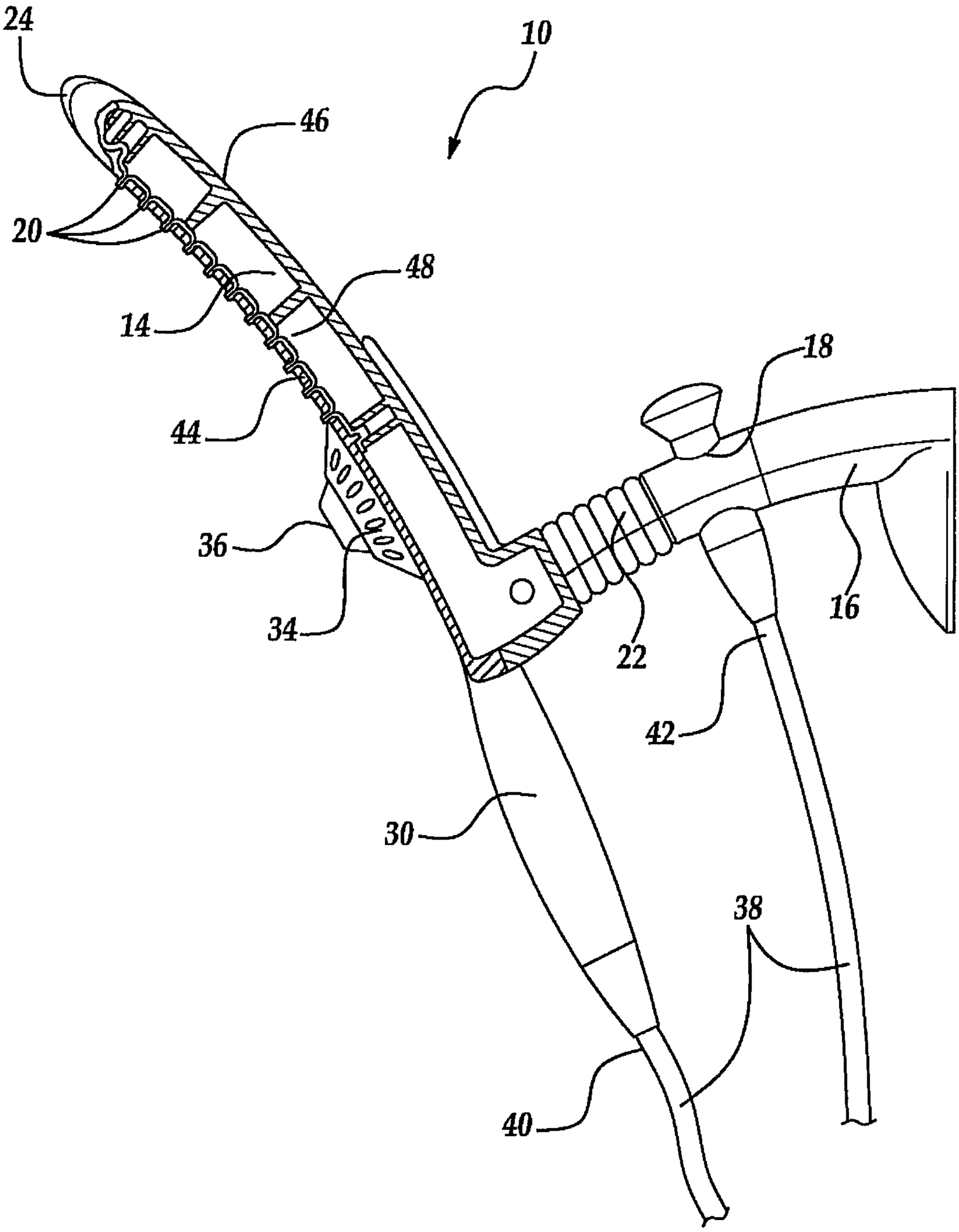


FIG. 3

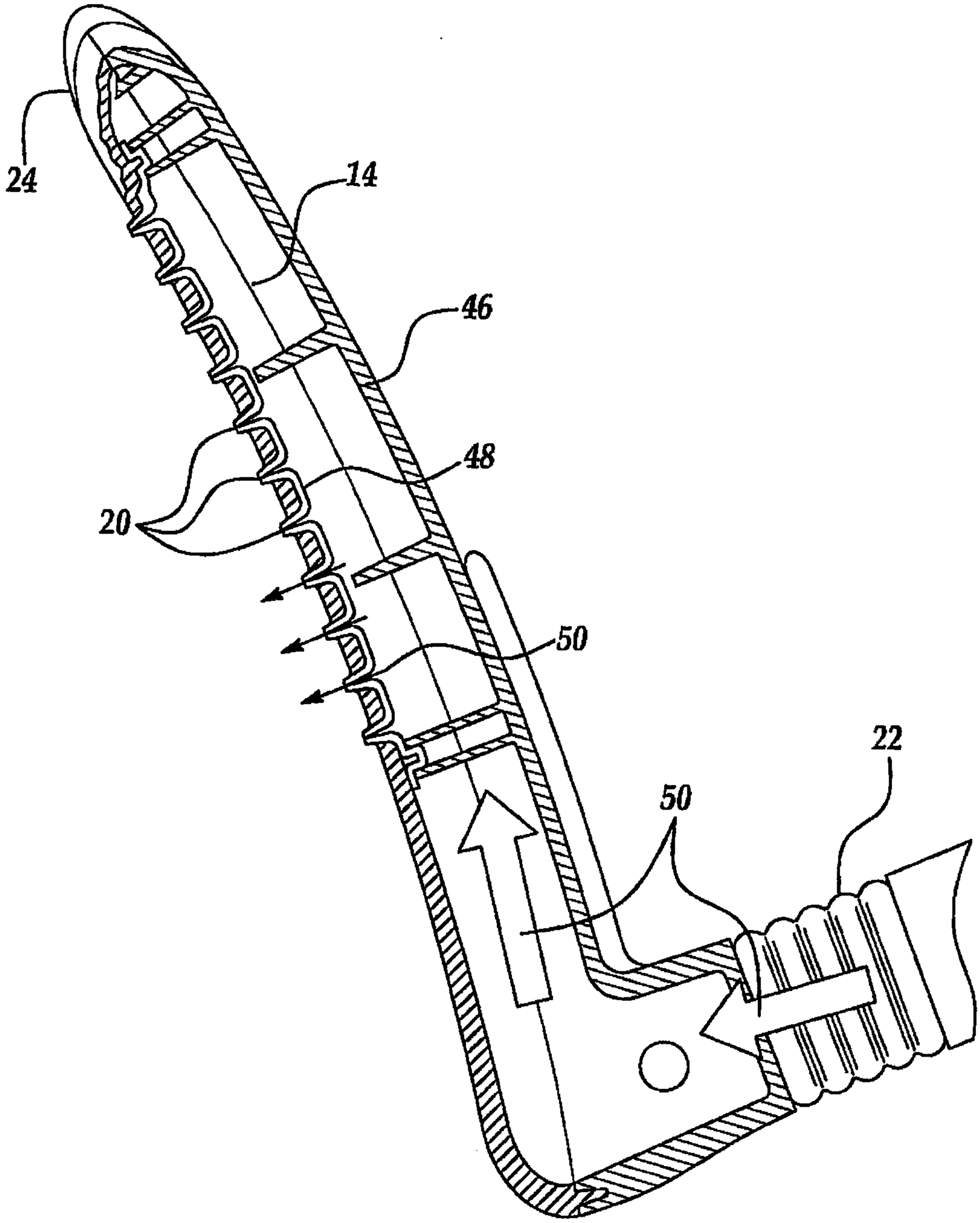


FIG. 4

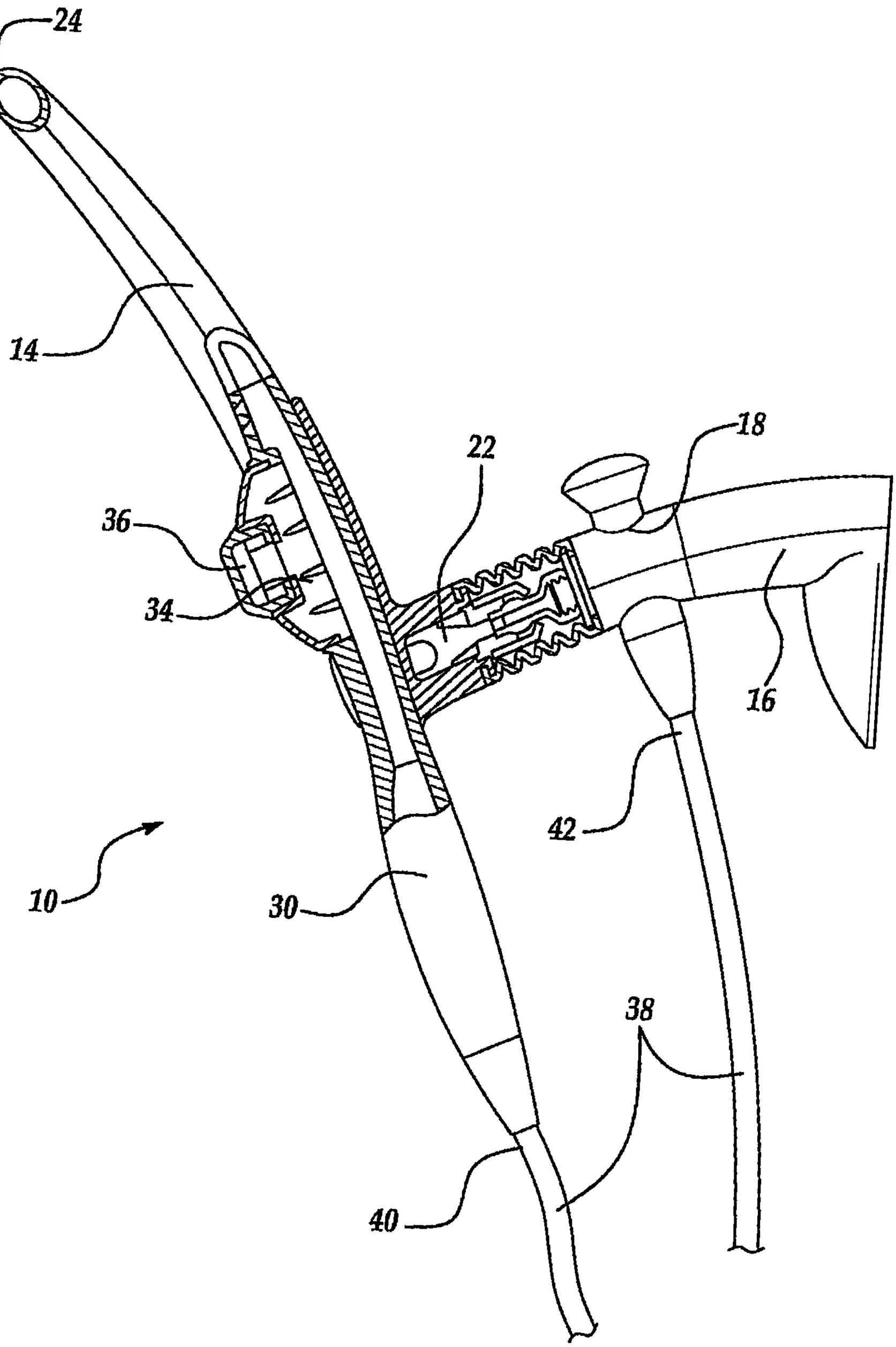


FIG. 5

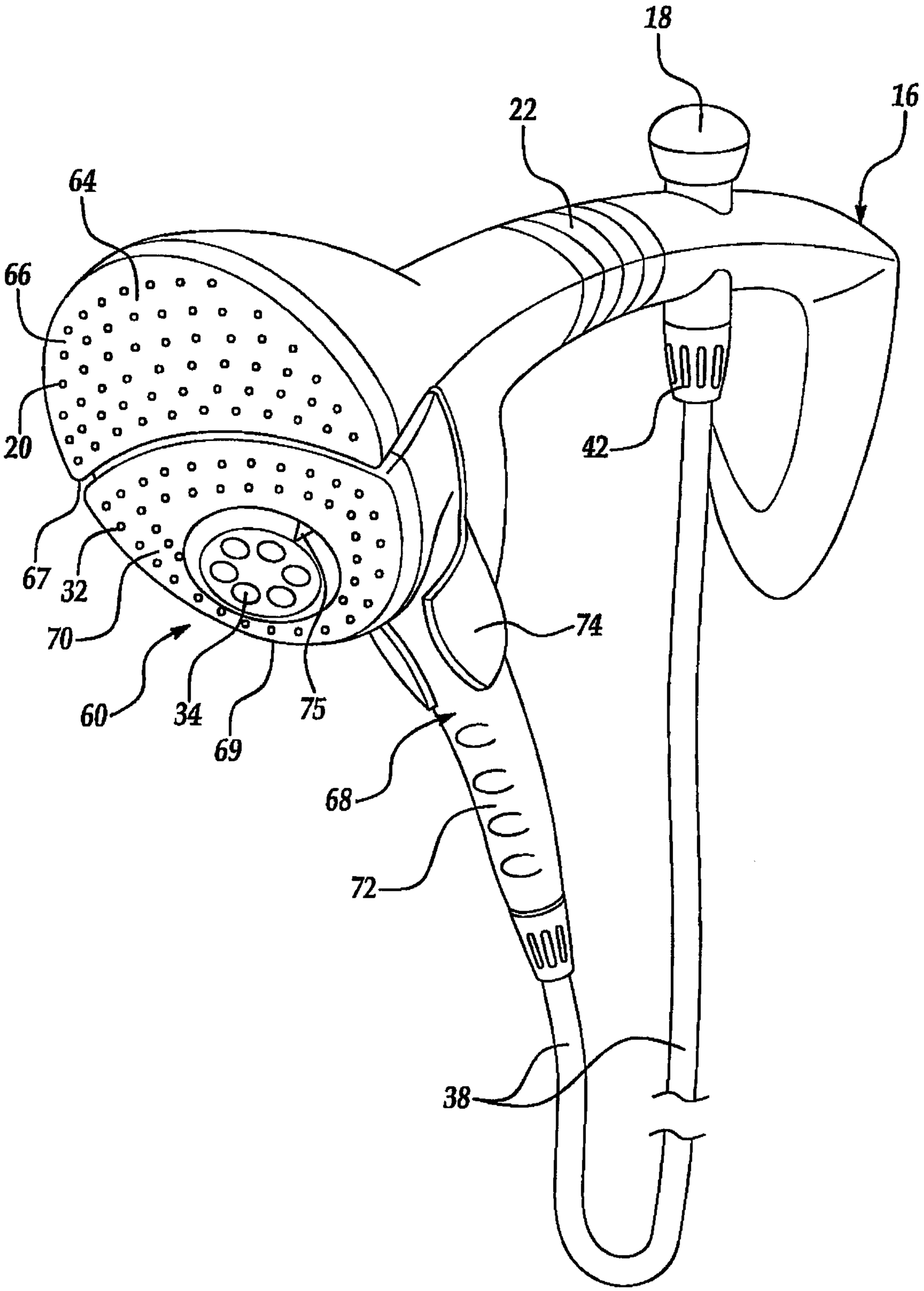


FIG. 6

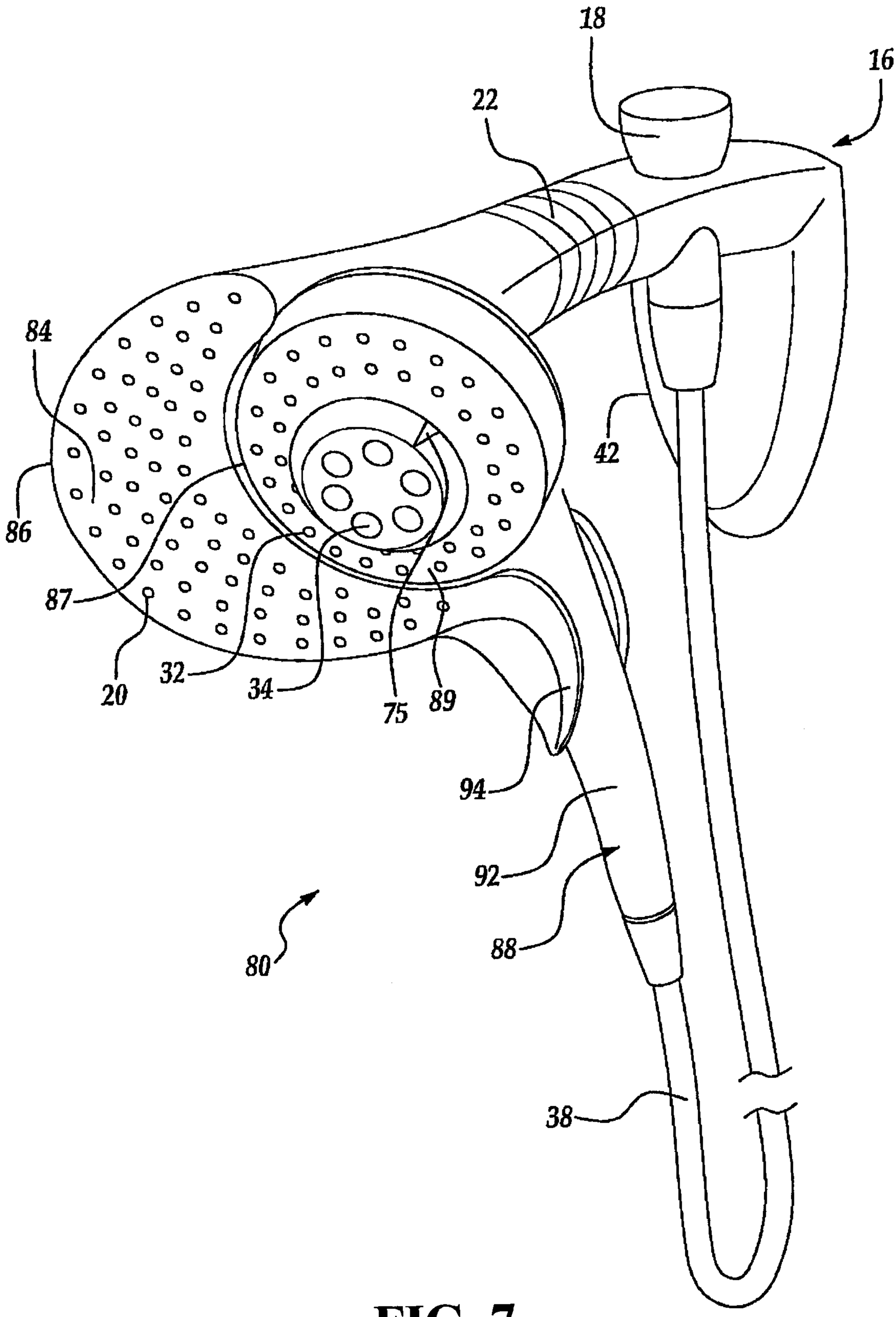


FIG. 7

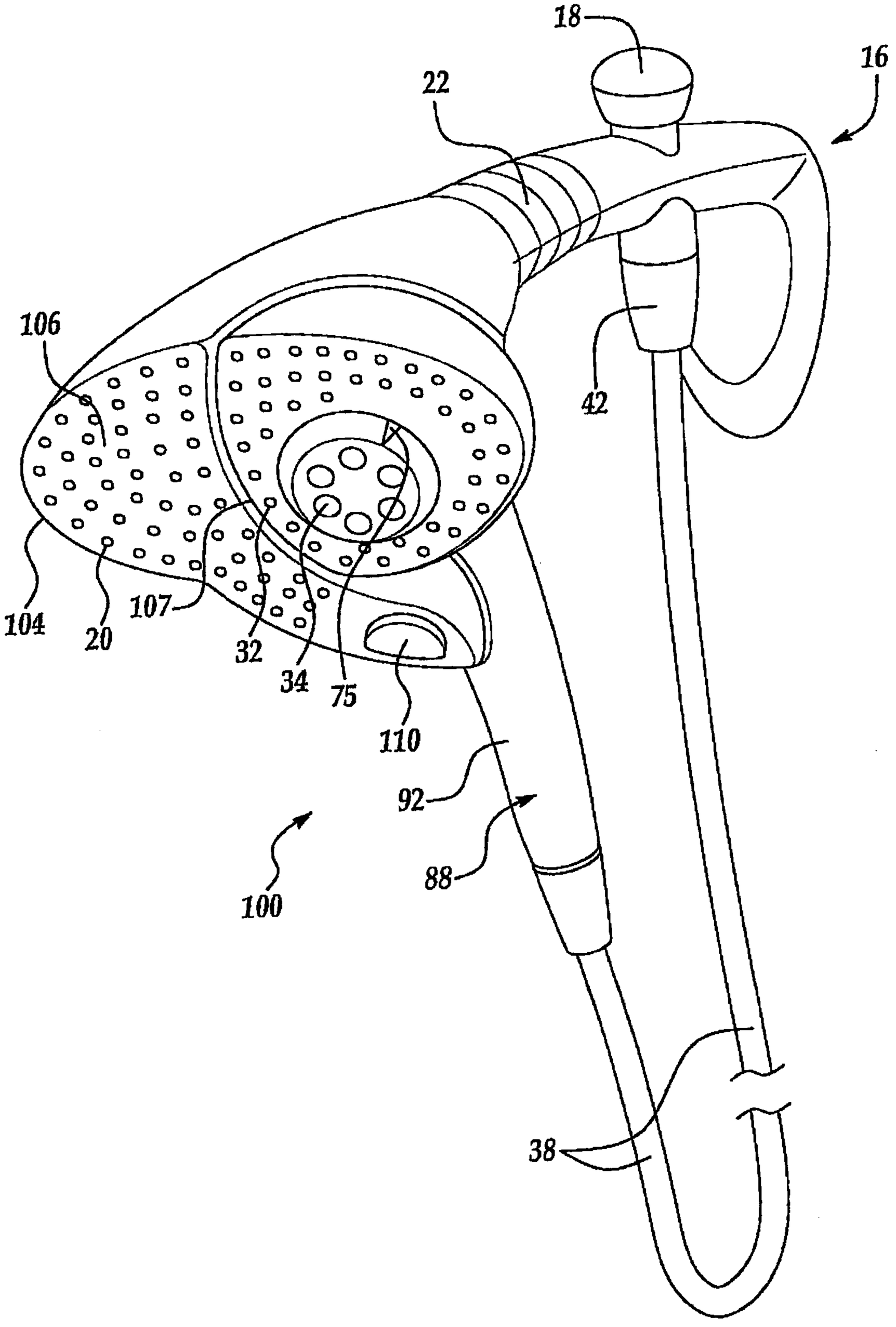
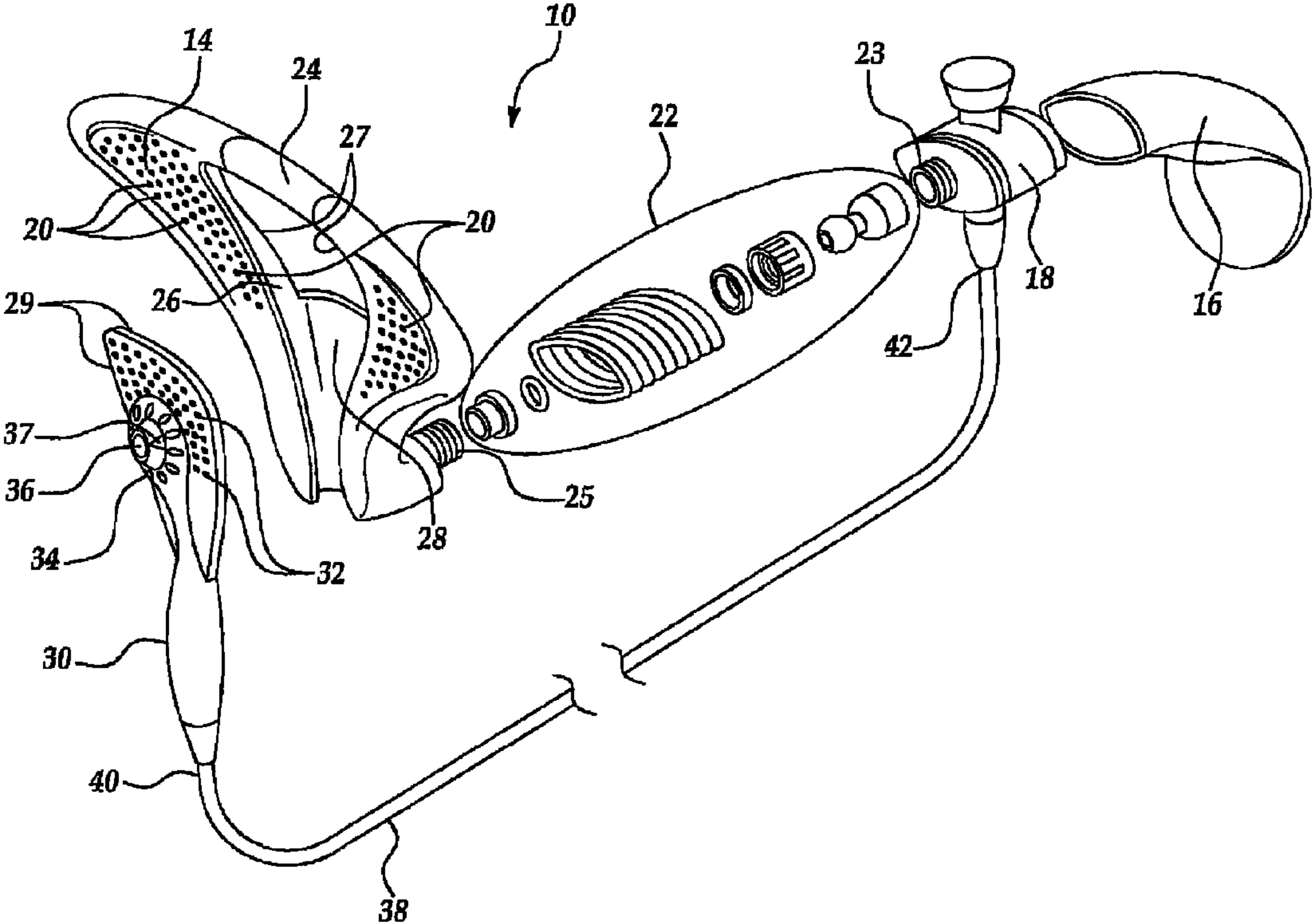


FIG. 8


10
14
24
27
23
22
20
20
18
16
29
26
42
37
36
25
34
28
32
30
40
38