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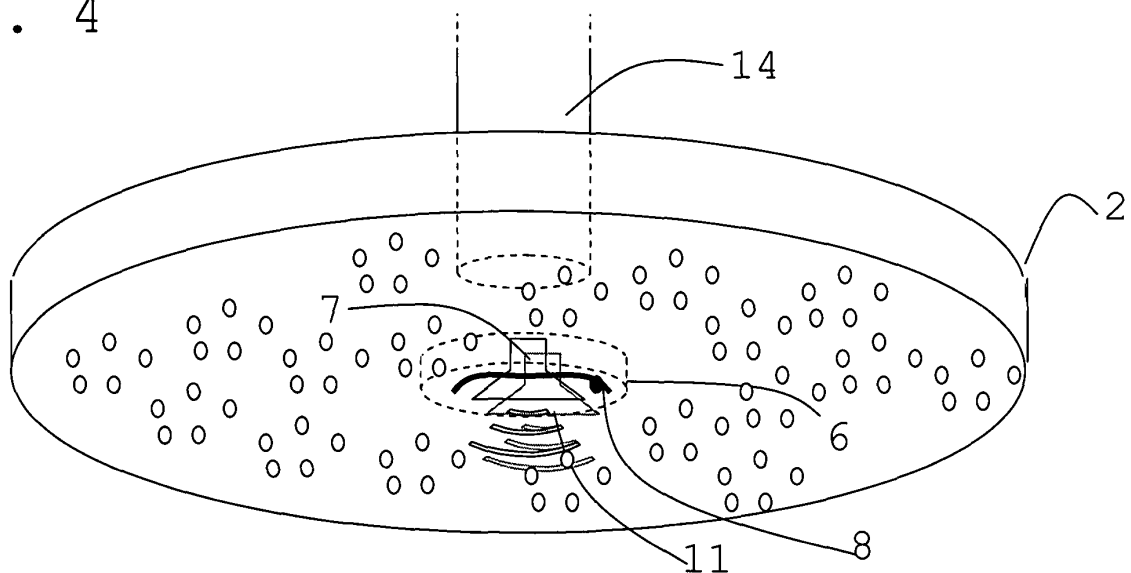
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AL BA RS(72) Inventor: **Nobili, Fabrizio****6534 San Vittore (CH)**(74) Representative: **Zardi, Marco****M. Zardi & Co. S.A.****Via Pioda 6****6900 Lugano (CH)**(71) Applicant: **Nobili, Fabrizio****6534 San Vittore (CH)****(54) Improved sprayhead or nozzle for shower**

(57) The invention refers to a sprayhead or nozzle of the rainshower type (2) for a shower assembly (3) mounted in a bathroom and provided with a connection hose (13) for connecting to a flow and temperature adjustment control for water sprayed by a shower. The sprayhead

comprises a radio receiving apparatus (7) which is mounted in a water-proof portion (6) of said rainshower (2) and is provided with at least a loudspeaker (11) for allowing a user to enjoy music therapy while having a shower.

Fig. 4

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Description

Technical field

[0001] The present invention relates to an improved sprayhead or nozzle for shower.

[0002] More in particular, but not exclusively, the invention refers to a rainshower for a shower assembly or to a panel for a shower assembly with associated rainshower provided with fittings for connection to hot water and/or cold water terminal spray elements for spraying water into a shower room or shower box.

Known art

[0003] As is well known in this specific technical field, sprayheads or nozzles for showers are known, which are called rainshowers, and which represent the terminal element of a shower assembly provided in a bathroom.

[0004] The water supplied as rain drops from the rainshower is normally pre-mixed by means of mixer taps of the shower assembly, to which the hot and cold water fittings of a water distribution system for sanitary water are connected.

[0005] In recent years, also wall mounted shower panels are more and more used, which combine the opening/closing and water mixing control elements as well as the same nozzles.

[0006] In some instances, the shower panel integrates all the hydraulic elements for a shower box, in order to provide the only integrated element to be mounted in the shower box, with the obvious exception of the shower bottom pan and peripheral walls of the same shower box.

[0007] In any case, the nozzle represents the most important element of the shower assembly, together with the mixing tap, and in the course of time, the design has focused on size and shape of nozzles and sprayheads.

[0008] The different combinations of sprayheads or the number and distribution of nozzles, which usually are the components of a rainshower in a shower panel, have gradually transformed the same panel in a unit for water massage or at least for relaxing the user, according to an increasing demand.

[0009] At last it is to be noted that alternative therapies like aromatherapy and/or chromotherapy during the shower and in a household environment are more and more required by users. Shower boxes for water massage integrating aroma dispensers or colored lights are provided in order to satisfy these increasing needs of the users; however, these solutions are very expensive and require very invasive installations, which radically transform the bathroom.

[0010] The object of the invention is to provide an improved sprayhead or nozzle for a shower, which has structural and functional characteristics, such as to allow the user to enjoy musical therapy during the shower.

[0011] Another object of the invention is to provide a sprayhead or nozzle for a shower, of the rainshower type,

which has structural and functional characteristics such as to be particularly simple and cost effective.

[0012] A further object of the invention is to provide a sprayhead or nozzle for a shower, of the rainshower type, which has structural and functional characteristics such as to be easily mounted on pre-existing shower assemblies.

[0013] A further object of the invention is to provide a shower panel provided with a rainshower having structural and functional characteristics such as to achieve above said objects.

Summary of the invention

[0014] The idea on which the present invention is based in order to solve above said problem is to provide the rainshower with a radio receiving apparatus mounted inside a sealed portion of the rainshower, which is provided with at least a loudspeaker for allowing a user to enjoy music therapy while having a shower.

[0015] The characteristics and advantages of the rainshower sprayhead according to the invention will be evident from the following description of one embodiment of the same, which is illustrative and non limiting, with reference to appended drawings.

Brief description of the drawings

[0016]

Fig. 1 shows a perspective partial sectional view of a shower box comprising a rainshower according to the present invention.

Fig. 2 shows a perspective view of a rainshower of fig. 1.

Fig. 3 shows an enlarged perspective view of rainshower of fig. 2.

Fig. 4 shows a perspective view of a second embodiment of the rainshower according to the invention.

Detailed description

[0017] With reference to figures, 1 generally and schematically illustrates an improved sprayhead or nozzle for a shower, according to the present invention.

[0018] More in particular, the invention refers to a rainshower 2 for a shower assembly 3, which is provided with a mixer control 4 for adjusting the flow and temperature of water to be sprayed. The shower assembly may be mounted in a conventional shower box 15, in a bathroom.

[0019] As is schematically shown in fig. 2, the showerhead 2 comprises a plurality of spray holes 9, which are circumferentially arranged according to a ceiling rose like pattern around a central nozzle 10. The sprayhead 2 may be provided with a mechanical control for switching the water flow in order to output water in a single central flow or spray water in a rainshower through the plurality of holes 9, which are distributed according to a circular

crown or ceiling rose like pattern.

[0020] Obviously, the mixer control of the shower assembly 3 is connected in a per se conventional manner to the spray terminal elements for hot and/or cold water, which spray into a shower room or box, which is not illustrated.

[0021] The sprayhead 2 is obviously provided with a connection hose 14 for connecting to the shower assembly 3.

[0022] Advantageously, according to the invention, the sprayhead 2 is provided with a radio receiving apparatus 7, which is mounted in a water-proof portion 6 of the same sprayhead, as schematically shown in fig. 3.

[0023] The radio receiving apparatus is battery operated, the batteries being of the conventional type and hence not being shown, and is provided with a control 8 for powering on and adjusting the volume, which is positioned in such a way as to be readily operated by the user, preferably above the sprayhead 2, i.e. in its portion not being affected by water flow, at the junction between the sprayhead 2 and connection hose 13 for shower assembly 3.

[0024] The water-proof portion 6 of sprayhead may be provided in turn at its upper portion A, on the opposite side of spray holes 9.

[0025] The radio receiving apparatus 7 is provided with at least a loudspeaker 11 for allowing the user to enjoy music therapy while taking a shower.

[0026] The loudspeaker may be arranged with an upward orientation in order to diffuse the audio signal above the rainshower 2, propagating music above the shower box 15.

[0027] In an alternative embodiment, the loudspeaker 11 may be positioned in the center of the sprayhead 2, effectively replacing the central nozzle. In this way, the central portion of sprayhead is used for providing the water-proof room 6, in which the radio receiving apparatus 7 is housed.

[0028] In this exemplary embodiment, the power on control 8 may be a circular ring nut slidably surrounding the loudspeaker and partially enveloping the loudspeaker 11. The user may rotate this ring nut, also for increasing the volume of sound emitted by the radio receiving apparatus.

[0029] In this second embodiment, shown in fig. 3, the loudspeaker 11 substantially closes the water-proof chamber 6, in which the radio receiving apparatus 7 and respective power supply batteries are housed.

[0030] However, it is possible to provide a low voltage supply which connects the apparatus 7 to sprayhead 2 on the outside and along the connection hose of shower assembly 3, inside a shielded conduit, in which an electrical low voltage connection is housed.

[0031] In a per se conventional way, the apparatus 7 is also provided with a tuning control.

[0032] In a modified embodiment, within the scope of the present invention, the radio receiving apparatus 7 is still mounted inside the sprayhead 2, which however, in

this case, is integral with a panel 5 of the shower assembly.

[0033] In this case, the housing for the radio receiving apparatus 7 and batteries is provided in a rear chamber of panel 5.

[0034] Optionally, the electrical low voltage power supply connections are housed inside slots also provided on the rear side of panel 5 of shower assembly.

[0035] The shower sprayhead according to the invention solves the technical problem and offers various advantages, the first of which is the fact that the user may enjoy music therapy while taking a shower.

[0036] It is also to be noted that the invention may be used as a replacement for nozzles or rainshowers of already mounted shower assemblies, and doesn't require wall finishing works of any kind.

Claims

1. Sprayhead or nozzle of the rainshower type (2) for a shower assembly (3) mounted in a bathroom and provided with a connection hose (13) for connecting to a flow and temperature adjustment control for water sprayed by a shower, **characterized in that** it comprises a radio receiving apparatus (7) which is mounted in a water-proof portion (6) of rainshower (2) and is provided with at least a loudspeaker (11) for allowing a user to enjoy music therapy while having a shower.
2. Sprayhead or nozzle of the rainshower type (2) according to claim 1, **characterized in that** said water-proof portion (6) is provided in a sprayhead portion which is opposite with respect to a spraying portion.
3. Sprayhead or nozzle of the rainshower type according to claim 1, **characterized in that** said water-proof portion (6) is provided in a central position of said sprayhead and is surrounded by a ceiling-rose like circular arrangement of rainshower spray nozzles (9).
4. Sprayhead or nozzle of the rainshower type according to claim 1, **characterized in that** said loudspeaker (11) closes the water-proof housing portion (6) of said radio receiving apparatus.
5. Sprayhead or nozzle of the rainshower type according to claim 1, **characterized in that** it comprises a control (8) for activating and adjusting the audio volume, which is positioned in the sprayhead portion opposite to a spraying portion.
6. Sprayhead or nozzle of the rainshower type according to claim 1, **characterized in that** it comprises a control for activation and audio volume adjustment, which is shaped like a circular ring nut, which slidably

envelopes said loudspeaker (11).

7. Sprayhead or nozzle of the rainshower type according to claim 1, **characterized in that** it also comprises a tuning control for said radio receiving apparatus (7). 5
8. Panel (5) for a shower assembly of the type including the control and water spraying elements of the shower and which is associated to a rainshower sprayhead, **characterized in that** the rainshower sprayhead is structured according to claim 1. 10

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Fig. 1

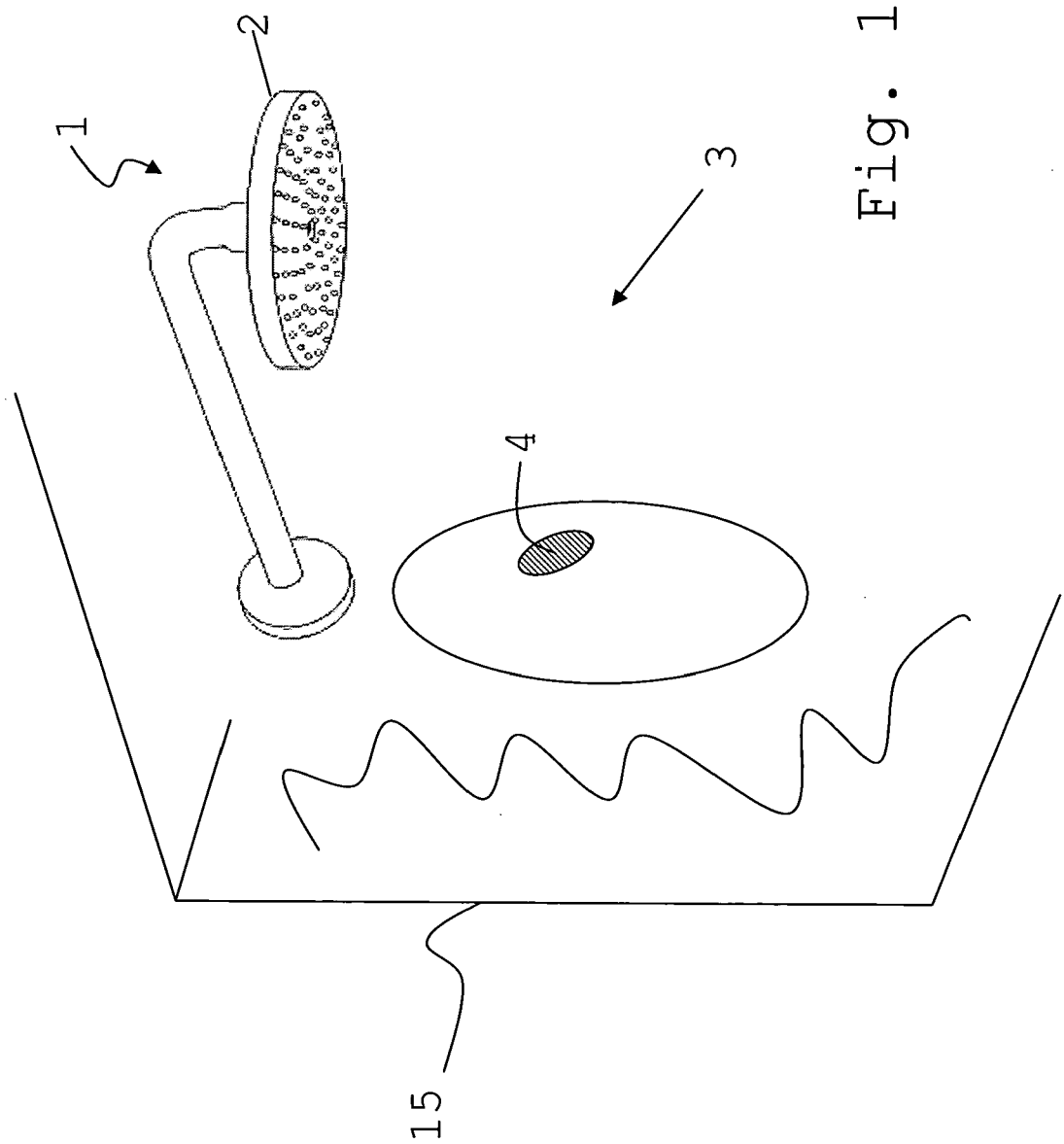


Fig. 1

Fig. 2

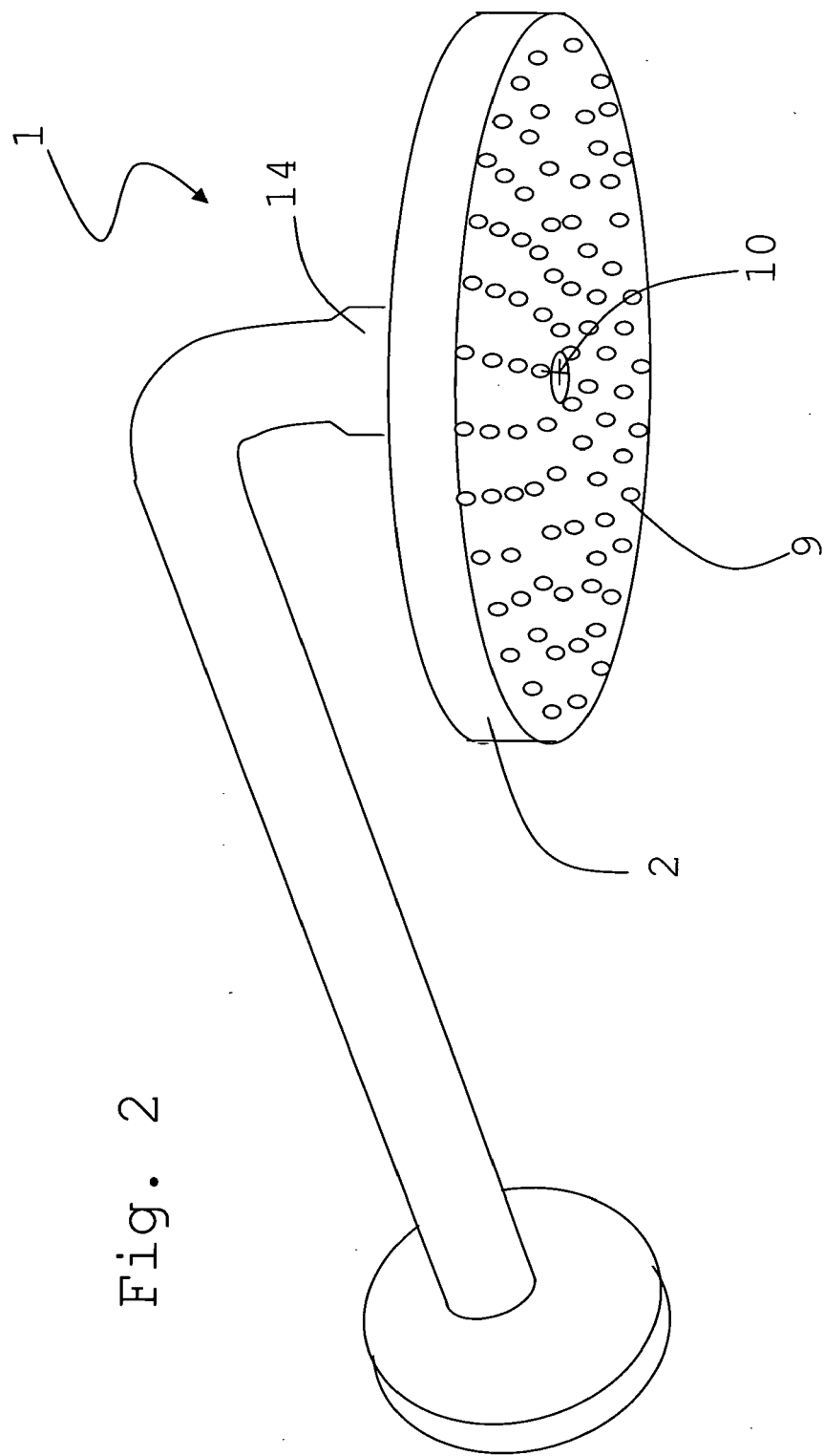


Fig. 2

Fig. 3

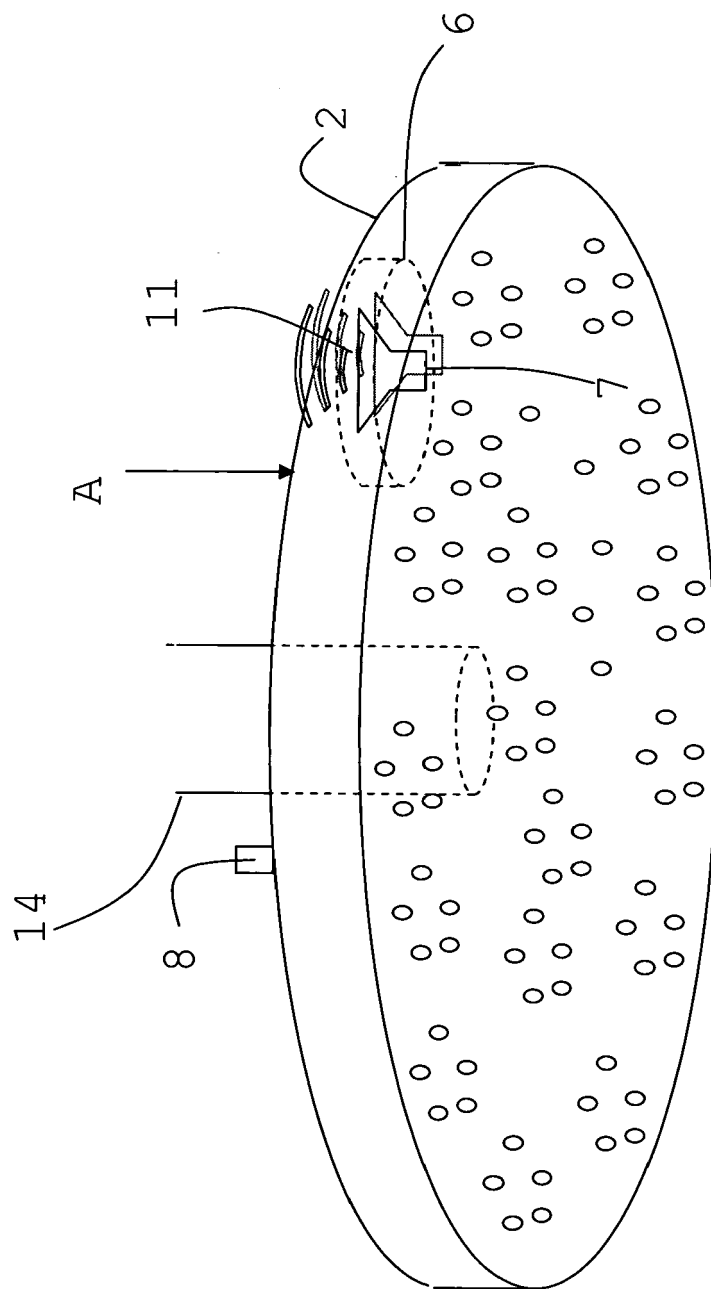


Fig. 3

Fig. 4

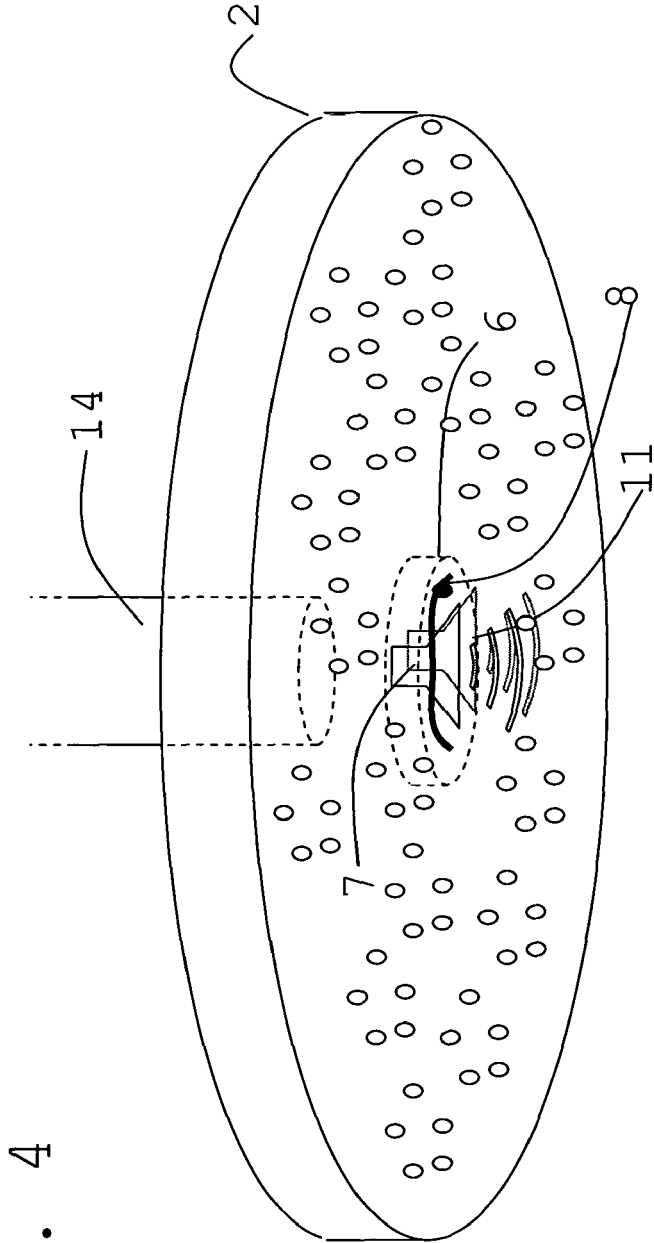


Fig. 4



EUROPEAN SEARCH REPORT

Application Number
EP 09 00 2190

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
X A	US 2003/211838 A1 (WAGENECK RUSSELL E [US]) 13 November 2003 (2003-11-13) * the whole document *	1-2,4-5, 7-8 6	INV. B05B1/18 A47K3/28 A61H33/06
X A	US 2004/078891 A1 (YIP RUDOLPH CHI WAI [HK]) 29 April 2004 (2004-04-29) * paragraph [0030] - paragraph [0031] * * claim 10 * * paragraph [0033] - paragraph [0034]; claim 13 *	1,3-4,8 5	E03C1/04 H04R5/02
X	US 5 140 254 A (KATZMAN DAVID [US]) 18 August 1992 (1992-08-18) * the whole document *	1-2,5,7	
X	US 2009/031492 A1 (FOUTZ GREGORY J [US] ET AL) 5 February 2009 (2009-02-05) * paragraph [0003] * * paragraph [0022] * * figures *	1,3-4	
E	DE 10 2007 052229 A1 (HANS GROHE AG [DE]) 30 April 2009 (2009-04-30) * claims 9,10; figures *	1	
The present search report has been drawn up for all claims			
Place of search The Hague		Date of completion of the search 21 August 2009	Examiner Barré, Vincent
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			

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EPO FORM 1503 03.02 (P04C01)

**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

EP 09 00 2190

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.
The members are as contained in the European Patent Office EDP file on
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21-08-2009

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