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(54) Water distributor

(57) A water distributor device comprising a hollow main body (1) connected to a base (2), is provided, the device being further characterised by first ground-securing (4,5) means; second ground-securing means (24); a valve (8) for the opening/closing of said main body (1); and means (6,7) for the connection to a water supply source.

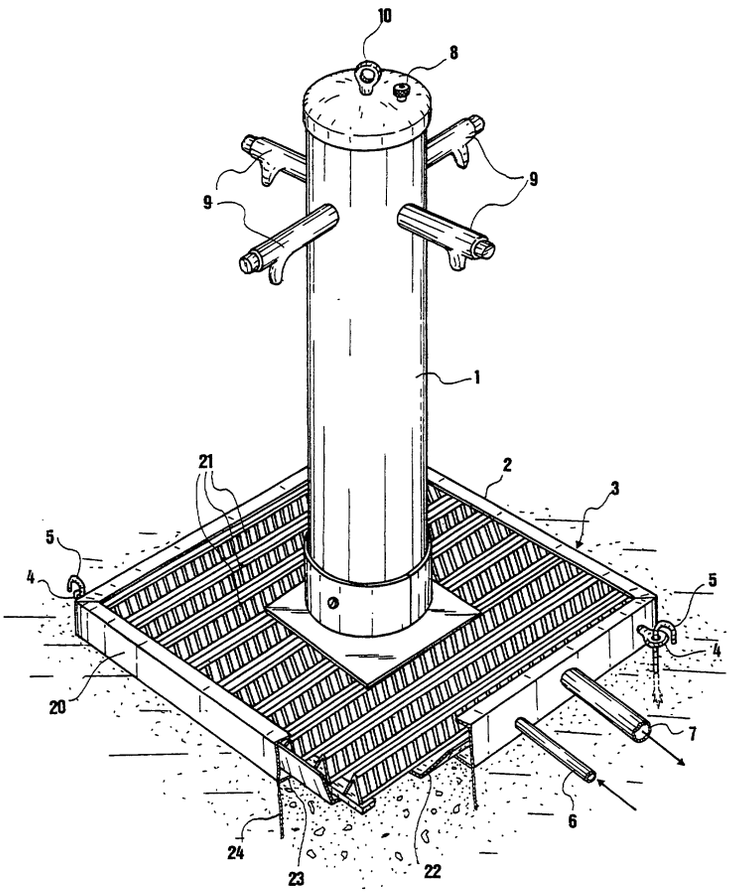

FIG.1

EP 1 179 642 A1

Description

[0001] The present invention relates to a water distributor device of the type for providing water on locations lacking a water supply network.

[0002] Water distributor devices for public use of the type having a column made of metallic material, stone, concrete or the like, and being provided of a tap ware connected thereto for the water dispensing, are already known. These devices are usually located on public city grounds like squares, streets, stations, etc., near to a water distribution network. Such devices, though sturdy arid practical, have the drawback of not being removable once positioned, hence being unsuitable for the location thereof on public sites lacking a nearby water supply network. For instance, in case of public performances or social events, refugee camps, first-aid camps, etc., for which broad areas such as sports grounds or outdoors are used, given the lack of a supply network of the precious liquid in the immediate surroundings thereof, there subsists the actual impossibility of providing users with water distributor devices. Moreover, even in case of a pre-existing distribution network, the sole answer would be to carry out a ground breaking for fixedly locating a distributor device of the state of the art, then removing the device from the ground once the event or performance has ended.

[0003] Alternatively, and to the above-mentioned end, water-supply trucks are provided, which besides holding and carrying water to the area of interest can distribute the water contained therein to the users by suitable tap wares mounted thereon.

[0004] This solution, though convenient, has a first drawback in that it has to provide a truck of too small a capacity to a high number of users, thereby entailing the need of a sustained supply in order to meet the overall demand. A second drawback thereof lies in the fact that surely, apart from instances of dire need, users could find water-truck supplying upsetting.

[0005] Hence, an object of the present invention is to overcome the drawbacks of the state of the art by providing a water distributor device that may easily and removably be positioned in any ambient or site, regardless of the distance of the nearer water supply network from the distribution spot.

[0006] A further object of the present invention is to provide a water distributor device that may easily, quickly and removably be connected to a fixed or movable supply network in any ambient, for sustainedly supplying the users.

[0007] A further object of the present invention is to provide a water distributor device of easy implementation and very low maintenance, sturdy, and last but not least inexpensive.

[0008] Hence, the present invention provides a water distributor device comprising a main body and a base, characterised in that it further comprises:

- first means for ground-securing;
- second means for ground-securing;
- means for the opening/closing of said main body; and
- connecting means to a water distribution network.

[0009] A detailed description of a preferred embodiment of the present invention will hereinafter be provided, given by way of example and not for limitative purposes, making reference to the annexed drawings, wherein:

FIG. 1 is a partial perspective view, showing the water distributor device of the present invention;
FIG. 2 is a plan view, partially showing in detail a portion of the distributor device of the present invention; and
FIG. 3 is an elevational and partially longitudinally sectional view of the distributor device of the present invention.

[0010] With reference to FIG. 1, it shows the distributor device of the present invention. According to the invention, the device has a main body 1 integrally connected to a base 2. The main body 1 is shaped as a hollow column, made of ferrous material suitable for water piping which is also weldable. The base has a substantially square-based parallelepiped shape, water collection means 3 (better illustrated hereinafter) being formed therein. On the other hand, at the peripheral outer walls of the base 2 a plurality of annular members 4, apt to house respective fixing pins 5 (only three of which being shown in the figure) for the ground-securing the structure, is provided.

[0011] Furthermore, at a side wall of the base 2 two pipe fitting members 6 and 7 apt to be connected to the related supply and drain piping, respectively, are housed. The pipe fitting member 6 is directly connected to the main body 1.

[0012] On the other hand, at the upper portion of the main body 1 a valve 8 for the air venting during the activation of the device (better illustrated hereinafter) is located. Further, on the top of the main body 1, four water distribution taps 9 are located.

[0013] At the upper end wall of the body 1 an annular member 10 for hoisting, transporting and ground-positioning of the distributor device is formed.

[0014] With reference now to FIG. 2, the water collection means 3 formed in the base 2 is shown in plant and with two detailed cross sectional views. More precisely, the base 2 is substantially made of four walls 20, inside which a plurality of longitudinal members 21, having an "inverted-V" cross section shape and made integral onto two opposite walls 20, is arranged. The arrangement of the members 21 inside the base 2 is such that it forms a corrugated filtering surface, suitable for allowing the water to flow but filtering foreign matter. Moreover, the "inverted-V" configuration allows the immediate down-

ward conveying of the falling water, thereby avoiding annoying squirts towards the users. Furthermore, at the area below the members 21 a flat water-collecting surface 22 is located, apt to gravity-conveying the water to the drain element 7.

[0015] The base 2 is closed at the bottom thereof by a wall 23. The wall 23 is integrally mounted onto the side walls 20 so as to form a downward-protruding peripheral edge 24 apt to constitute a second ground-securing means when the base is ground-located.

[0016] With reference to FIG. 3, it shows the internal arrangement of the components of the distributor device of the present invention. More precisely, the base 2 is apt to be removably ground-secured with the fixing pins 5 when the latter are housed in the respective elements 4. The stability of the structure is further ensured by the fact that the edges 24 of the side walls 20 engage the ground, thus carrying out an interference locking.

[0017] Then, the device can be connected to a fixed or removable external supply piping by coupling it to the pipe fitting member 6, and to a possible drain piping by coupling to the drain member 7. Then, the member 6 is internally connected to the main body 1, which is brimmed by the water once the same starts flowing. To this end, the valve 8 is at first opened to allow the venting of the air in the main body 1, thus allowing the internal flooding of the main body 1, and then being closed for the functioning.

[0018] Then, the taps 9 can supply water under effect of the hydrostatic pressure inside the main body 1. The water thus supplied is collected by the underlying base 2 and, once filtered from possible foreign matter by means of the members 21, it is conveyed via the plate 22 to the drain pipe element 7.

[0019] The device of the present invention entails a first advantage in that it can easily be transported and positioned, even manually, by virtue of the intrinsic lightness of the component members and material thereof.

[0020] Moreover, a second advantage of the device of the present invention lies in that the same may be connected to a fixed piping of a supply network as well as to a removable piping from a remote distribution source.

[0021] A third advantage of the water distributor of the present invention lies in that, by virtue of the peculiar ground-securing means thereof, the same may be positioned on any type of ground, be it hard or soft, and according to the contingent needs, without affecting the stability thereof.

Claims

1. A water distributor device comprising a main body (1) and a base (2), **characterised in that** it further comprises:
   - first means (4,5) for ground-securing;
   - second means (24) for ground-securing;
   - means for the opening/closing (8) of said main body (1);and
   - connecting means (6,7) to a water distribution network.

2. The water distributor device according to the preceding claim, wherein said first ground securing means is a plurality of fixing members (5) apt to be removably ground-located and housed in respective seats (4) formed in said base (2).

3. The water distributor device according to claim 1 or 2, wherein said second securing means is an edge wall (24) perimetrically protruding from the bottom portion of said base (2) and apt to be ground-engaged.

4. The water distributor device according to claim 1 or 2 or 3, wherein said opening/closing means is a valve (8) located at the upper portion of said main body (1).

5. The water distributor device according to anyone of the preceding claims, wherein said base has, at the inside thereof, water-collecting means (21,22).

6. The water distributor device according to the preceding claim, wherein said water-collecting means is an area comprising a plurality of water-conveying members (21) and a water-collecting surface (22) located below said plurality of members (21).

7. The water distributor device according to anyone of the preceding claims, wherein said connecting means comprises a pipe fitting member (6) housed within said base (2) and connected to said main body (1).

8. The water distributor device according to anyone of the preceding claims, wherein said main body (1) further comprises means (10) for the hoisting, transport and/or positioning thereof.

9. The water distributor device according to the preceding claim, wherein said hoisting and transporting means is an annular member (10) integrally arranged at the upper portion of said main body (1).

10. The water distributor device according to anyone of the preceding claims, wherein said main body has a plurality of taps (9) for distributing the water.

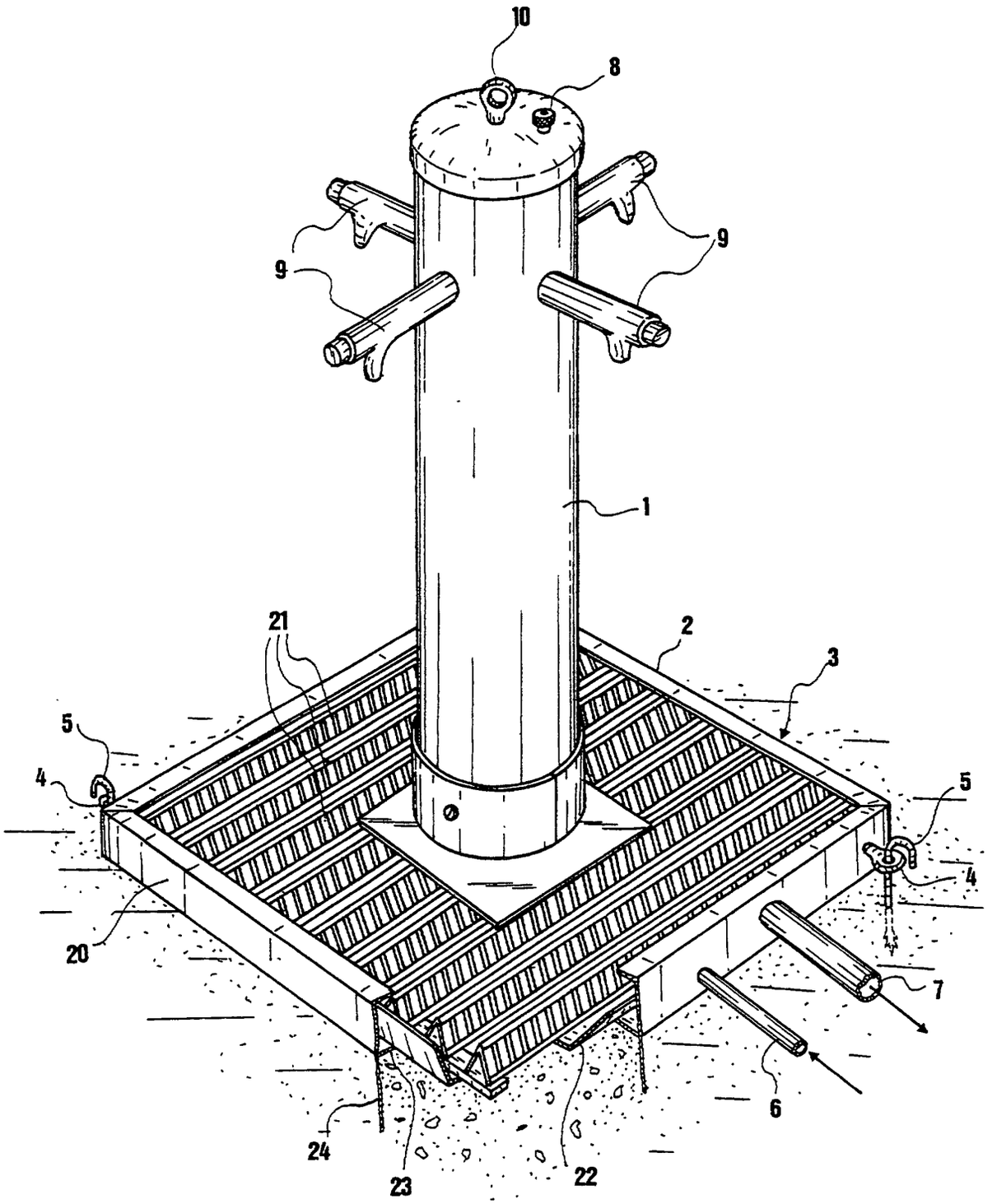

FIG.1

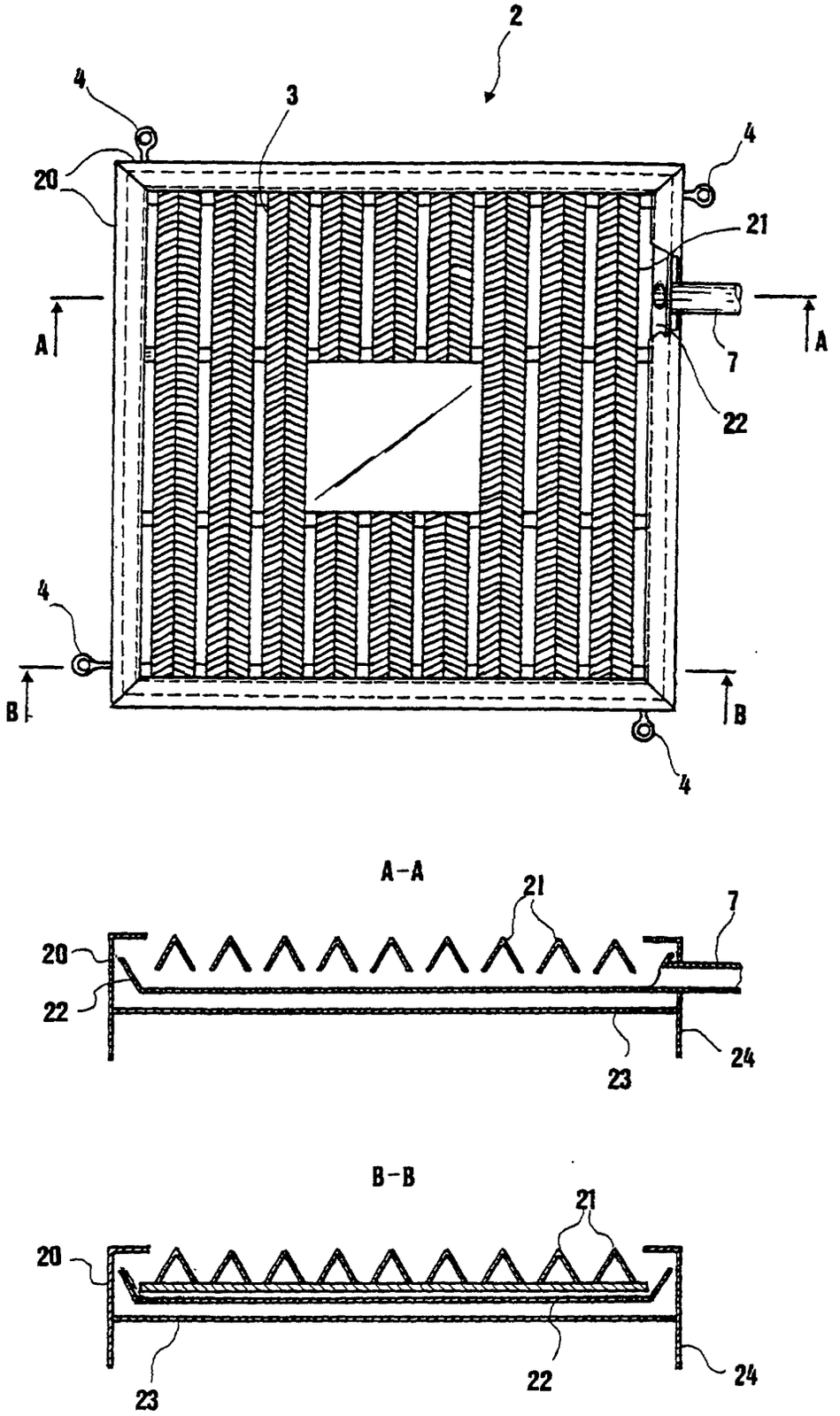

FIG.2

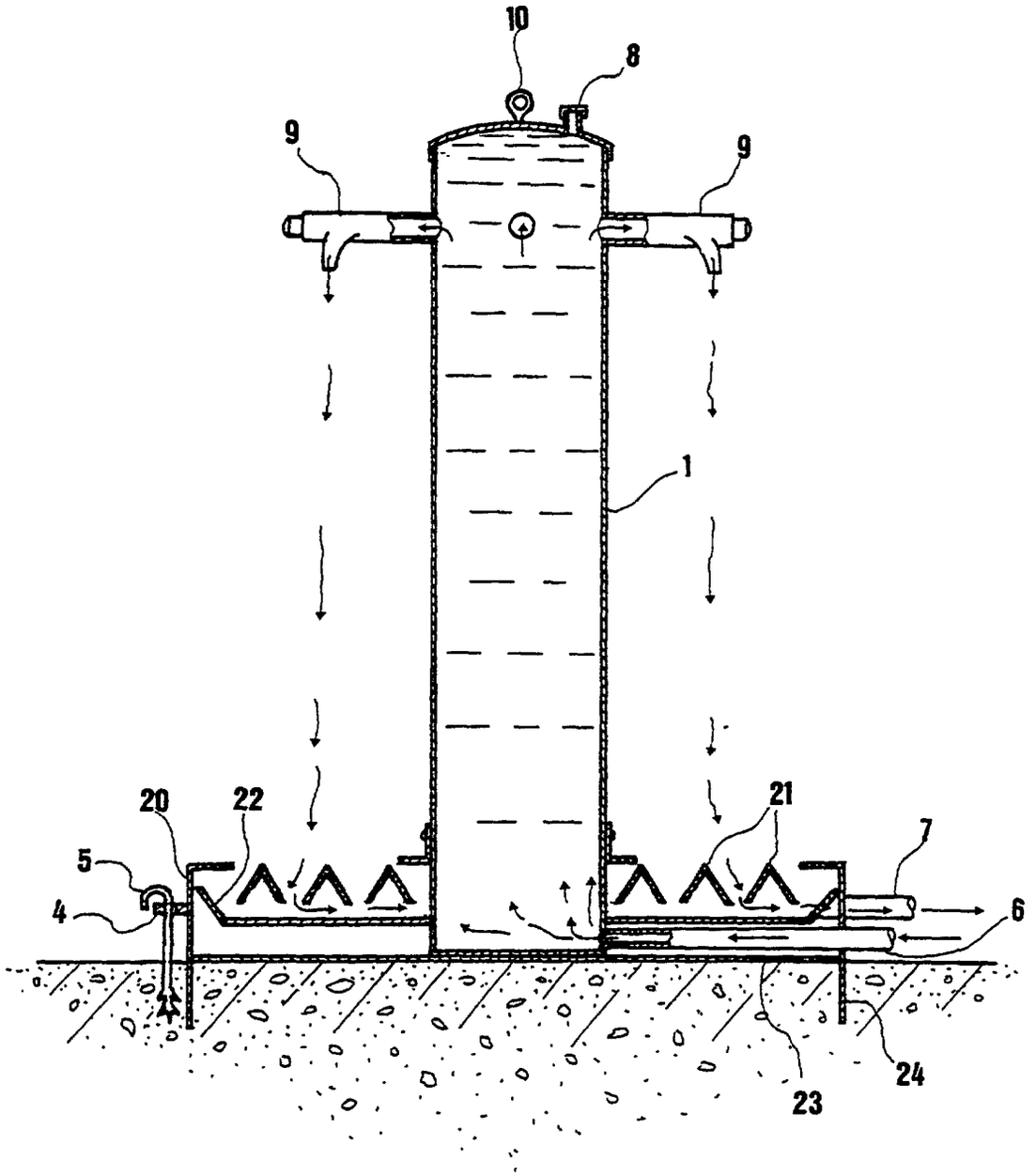

FIG.3

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EUROPEAN SEARCH REPORT

Application Number
EP 00 83 0576

DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.7)
X	US 3 568 928 A (WRIGHT,ALLEN C.) 9 March 1971 (1971-03-09) * column 1, line 52 - column 2, line 9 * * column 4, line 6 - line 23 * * figures 1,3 *	1-5,7	E03B9/20
X	US 3 081 945 A (DICKEY,A.C.) 19 March 1963 (1963-03-19) * column 2, line 5 - line 56 * * figures 1,2 *	1,4,5, 7-9	
A		10	
A	DE 230 197 C (SUCHARDT,JEAN) 27 November 1909 (1909-11-27) * page 1, line 50 - line 63 * * figure 2 *	1,4-6	
			TECHNICAL FIELDS SEARCHED (Int.Cl.7) E03B A01K A47K

The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
THE HAGUE	13 December 2000	Urbahn, S

CATEGORY OF CITED DOCUMENTS

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EPO FORM 1503 03.82 (P04C01)

ANNEX TO THE EUROPEAN SEARCH REPORT ON EUROPEAN PATENT APPLICATION NO. EP 00 83 0576

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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13-12-2000

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 3568928 A	09-03-1971	NONE	
US 3081945 A	19-03-1963	NONE	
DE 230197 C		NONE	

EPO FORM P0459

For more details about this annex : see Official Journal of the European Patent Office, No. 12/82