Title (en)

ULTRASONIC ACTIVATOR.

Title (de)

ULTRASCHALLAKTIVATOR.

Title (fr)

ACTIVATEUR A ULTRASONS.

Publication

Application

EP 0673677 A1 19950927 (EN)

EP 94914252 A 19921102

Priority RU 9200195 W 19921102

Abstract (en)

The proposed ultrasonic activator comprises at least two interconnected operating chambers (4) arranged within a housing (1); the first chamber is provided with an inlet nozzle (16), the second with an outlet nozzle (18). Within each operating chamber (4) is mounted a stator (7) and a rotor (6) which is mounted on a drive shaft; the stator and rotor are provided with opposing apertures (10, 12) through which the liquid can flow. Each rotor (6) comprises a runner (8) of a rotary pump, the runner being provided at the outlet (14) with a rigidly mounted ring (9) with apertures (10) through which the liquid flows. The width of each of these apertures is equal to the width of each aperture (12) of the stator (7), and the total area of the apertures (10) of the ring (9) of the rotor (6) is equal to the total area of the apertures (12) of the stator (7) and amounts to 0.1-0.7 of the area of the inlet (15) into the corresponding runner (8); the spacing of the apertures (10) of the ring (9) on the rotor (6) and that of the apertures (12) of the stator (7) is equal to 2-2.25 times the widths of these apertures (10, 12), the operating chambers (4) being interconnected by diffusers (13) connecting the outlet (14) of the preceding runner (8) with the inlet (15) of the subsequent runner (8) via a diffuser (13) which is provided with a choke (17) situated after the outlet nozzle (18). <IMAGE>

IPC 1-7

B01F 7/00; B01F 11/02

IPC 8 full level

B01F 11/02 (2006.01)

CPC (source: EP)

B01F 25/50 (2022.01); B01F 27/271 (2022.01); B01F 31/831 (2022.01); B01F 33/81 (2022.01); B01F 33/811 (2022.01)

Cited by

CN110508175A; US7942572B2; CN102085460A; US11718797B2; US2010103767A1; US2010260008A1; US8702298B2; US8985844B2

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