

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
17 June 2004 (17.06.2004)

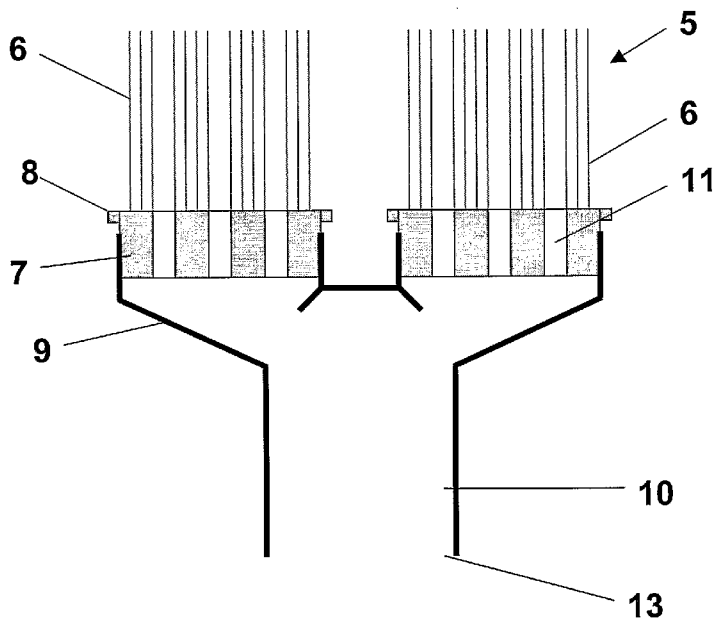
PCT

(10) International Publication Number
WO 2004/050221 A1

- (51) International Patent Classification⁷: **B01D 65/08**, 65/02
- (21) International Application Number:
PCT/AU2003/001632
- (22) International Filing Date: 5 December 2003 (05.12.2003)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
2002953111 5 December 2002 (05.12.2002) AU
- (71) Applicant (for all designated States except US): **U.S. FILTER WASTEWATER GROUP, INC.** [US/US]; 181 Thorn Hill Road, Warrendale, PA 15086 (US).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): **ZHA, Fufang** [AU/AU]; 15A Grand Avenue, West Ryde, NSW 2114 (AU). **PHELPS, Roger, William** [AU/AU]; 32 Reading Avenue, Kings Langley, NSW 2147 (AU). **BROIS, Etienne, Ulysse** [FR/AU]; 2/30 Girraween Road, Girraween, NSW 2145 (AU).
- (74) Agent: **BALDWIN SHELSTON WATERS**; 60 Margaret Street, Sydney, NSW 2000 (AU).
- (81) Designated States (*national*): 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, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (*regional*): ARIPO patent (BW, GH, GM, KE, LS, MW, MZ, 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, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).
- Declaration under Rule 4.17:**
— of inventorship (Rule 4.17(iv)) for US only
- Published:**
— with international search report

[Continued on next page]

(54) Title: MIXING CHAMBER



(57) Abstract: A membrane module (5) including a plurality of porous membranes (6) extending in an array and mounted, at least at one end, in a header (8). The header (8) has a number of distribution apertures (11) for distributing a fluid into the module (5) and along a surface or surfaces of the membranes (6). An elongate chamber (10) having one open end (13) and another end is in fluid communication with the distribution apertures (11) for distributing the fluid to the distribution apertures (11).

WO 2004/050221 A1



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.