

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
8 March 2007 (08.03.2007)

PCT

(10) International Publication Number
WO 2007/025345 A1

(51) International Patent Classification:

C02F 1/24 (2006.01) C02F 1/78 (2006.01)
C02F 1/40 (2006.01) C02F 103/44 (2006.01)
C02F 1/74 (2006.01)

(21) International Application Number:

PCT/AU2006/001280

(22) International Filing Date:

4 September 2006 (04.09.2006)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

2005904812	2 September 2005 (02.09.2005)	AU
2005905966	28 October 2005 (28.10.2005)	AU
2006900216	17 January 2006 (17.01.2006)	AU
2006901510	24 March 2006 (24.03.2006)	AU

(71) Applicant (for all designated States except US): **CUMMINS CORP LIMITED** [AU/AU]; 16-18 Kingston Drive, Gaven, Gold Coast, Queensland 4211 (AU).

(72) Inventor; and

(75) Inventor/Applicant (for US only): **CUMMINS, Ian Geoffrey** [AU/AU]; 16-18 Kingston Drive, Gaven, Gold Coast, Queensland 4211 (AU).

(74) Agent: **GARDNER, John, R., G.**; Suite 398, 15 Albert Avenue, Broadbeach, Gold Coast, Queensland 4218 (AU).

(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, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

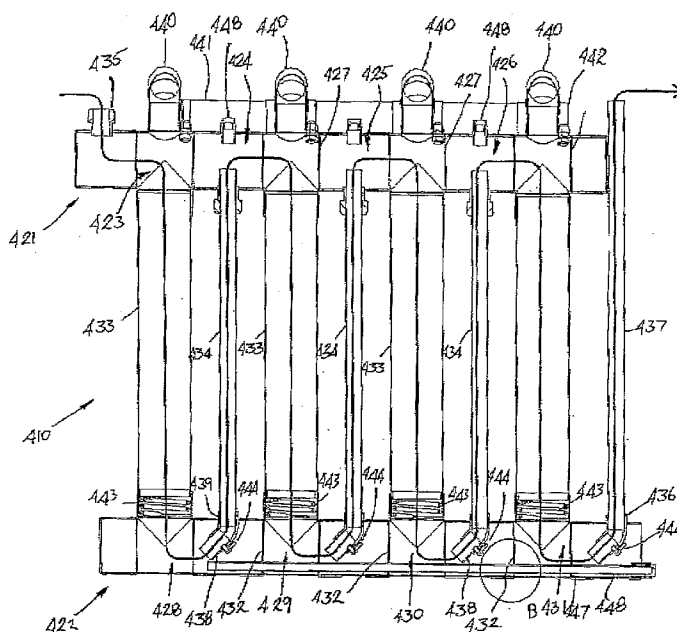
(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, 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).

Published:

— with international search report

[Continued on next page]

(54) Title: WATER TREATMENT APPARATUS



(57) Abstract: Water purification or treatment apparatus (410) including a plurality of elongated water treatment chambers (433), each chamber (433) being normally oriented in a substantially vertical attitude, return pipes (434) interconnecting the chambers (433) whereby water to be treated flows in series through the respective chambers (433), gas outlets (443) for supplying gas such as ozone to the respective chambers (433) for bubbling upwardly through water flowing in the chambers (433) and creating a foam at the upper surface of water in the chamber (433) and means (440) for collecting the foam.

WO 2007/025345 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.