

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
15 November 2007 (15.11.2007)

PCT

(10) International Publication Number
WO 2007/130705 A2

(51) International Patent Classification:
B01D 46/02 (2006.01) **B01D 46/52** (2006.01)

(21) International Application Number:
PCT/US2007/060780

(22) International Filing Date: 19 January 2007 (19.01.2007)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
11/342,136 27 January 2006 (27.01.2006) US

(71) Applicant (for all designated States except US): **MECS, INC.** [US/US]; Corporate Pointe, 14522 South Outer Forty Road, Chesterfield, Missouri 63017 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **ZIEBOLD, Steven, A.** [US/US]; 6245 L1 Road, Waterloo, IL 62298 (US). **AZWELL, Douglas** [US/US]; 2735 Arrow Heights Drive, Maryland Heights, MO 63043 (US). **MUELLER, Frederick, L.** [US/US]; 105 Santschi Way, Herculaneum, MO 63048 (US).

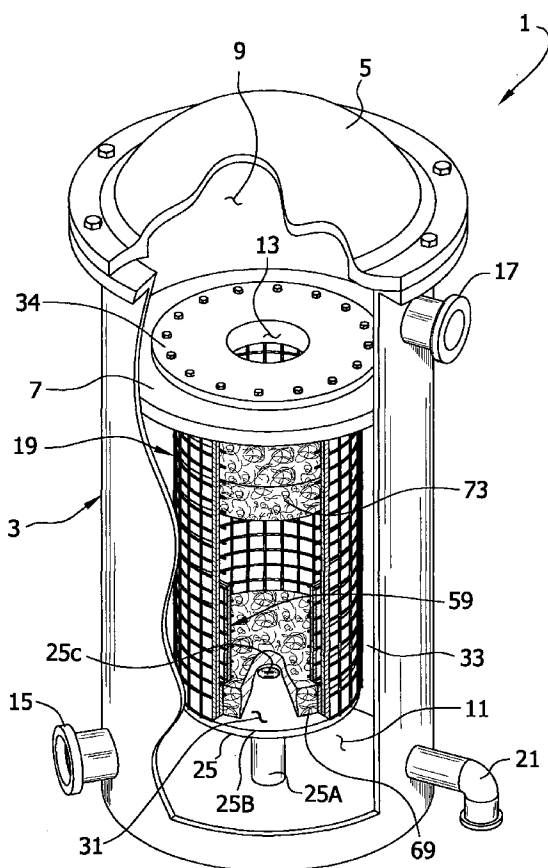
(74) Agent: **KEIL, Vincent, M.**; Senniger Powers, 1 Metropolitan Sq., 16th Floor, St. Louis, MI 63102 (US).

(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, GT, 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, ME, 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).

[Continued on next page]

(54) Title: FIBER BED ASSEMBLY AND FIBER BED THEREFOR



(57) Abstract: A fiber bed assembly for a mist eliminator that operates at high efficiency and inhibits re-entrained liquid from leaving the mist eliminator. The fiber bed assembly has a construction that facilitates rapid drainage of liquid collected by the fiber bed. A pre-filter media can be employed upstream of the primary collection media to remove larger liquid drops. The pre-filter media can be used in unique combination with other features to reduce liquid re-entrainment, and/or allow increased flow capacity.



Published:

— without international search report and to be republished
upon receipt of that report

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.