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(21) International Application Number: PCT/US96/11207 (22) International Filing Date: 28 June 1996 (28.06.96) (30) Priority Data: 60/000,687 30 June 1995 (30.06.95) US (71) Applicant (for all designated States except US): PALL CORPORATION [US/US]; 2200 Northern Boulevard, East Hills, NY 11548 (US). (72) Inventors; and (75) Inventors/Applicants (for US only): RIOS, Luis [US/US]; 18 Concord Drive, Holtsville, NY 11742 (US). ALEX, Tony [IN/US]; 1418 Cecily Drive, Merrick, NY 11566 (US). GSELL, Thomas, C. [US/US]; 40 Valentine Avenue, Glen Cove, NY 11542 (US). GILDERSLEEVE, Michael, R. [US/US]; 18 Rolling Hills Drive, Nesconset, NY 11767 (US). (74) Agents: EVENS, Carl, J. et al.; Leydig, Voit & Mayer, Suite 300, 700 Thirteenth Street, N.W., Washington, DC 20005 (US).		(81) Designated States: AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DE (Utility model), DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN, ARIPO patent (KE, LS, MW, SD, SZ, UG), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG). Published With international search report. Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.
(54) Title: SEPARATION SYSTEMS AND METHODS (57) Abstract A vibratory separation system having a drive mechanism for imparting a vibratory motion to a membrane module to enhance filtration. The membrane module comprises one or more filter elements secured to one another, each having a permeable membrane. The vibratory motion imparted to the membrane module generates a dynamic flow boundary layer at the permeable membranes. This fluid shear boundary layer, in turn, generates lift, thereby inhibiting fouling of the membranes.		