

**PCT**WORLD INTELLECTUAL PROPERTY ORGANIZATION
International Bureau

INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification ⁶: B32B 5/14, B01D 39/14, B05D 5/00	A1	(11) International Publication Number: WO 97/26134 (43) International Publication Date: 24 July 1997 (24.07.97)
(21) International Application Number: PCT/US97/01496 (22) International Filing Date: 22 January 1997 (22.01.97) (30) Priority Data: 60/010,294 22 January 1996 (22.01.96) US (71) Applicant: MEMTEC AMERICA CORPORATION [US/US]; Suite 700, 9690 Deereco Road, Timonium, MD 21093 (US). (72) Inventors: WANG, I-Fan; 13248 Sparren Avenue, San Diego, CA 92129 (US). DITTER, Jerome, F.; 10655 Equestrian Drive, Santa Ana, CA 92705 (US). ZEPF, Robert; 227 North Rios Avenue, Solana Beach, CA 92075 (US). (74) Agent: ALTMAN, Daniel, E.; Knobbe, Martens, Olson & Bear, 16th floor, 620 Newport Center Drive, Newport Beach, CA 92660 (US).	(81) Designated States: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, <u>SG</u> , SI, SK, TJ, TM, TR, TT, UA, UG, 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 <i>With international search report.</i>	
(54) Title: HIGHLY POROUS POLYVINYLDENE DIFLUORIDE MEMBRANES (57) Abstract The present invention relates to the field synthetic polymeric membrane materials formed from casting polyvinylidene difluoride (PVDF) polymer solutions and/or dispersions. Membranes formed in accordance with the present invention are all highly porous. Both internally isotropic membranes and highly asymmetric PVDF membranes are disclosed. The membranes of the invention are useful in a variety of microfiltration and ultrathin applications.		