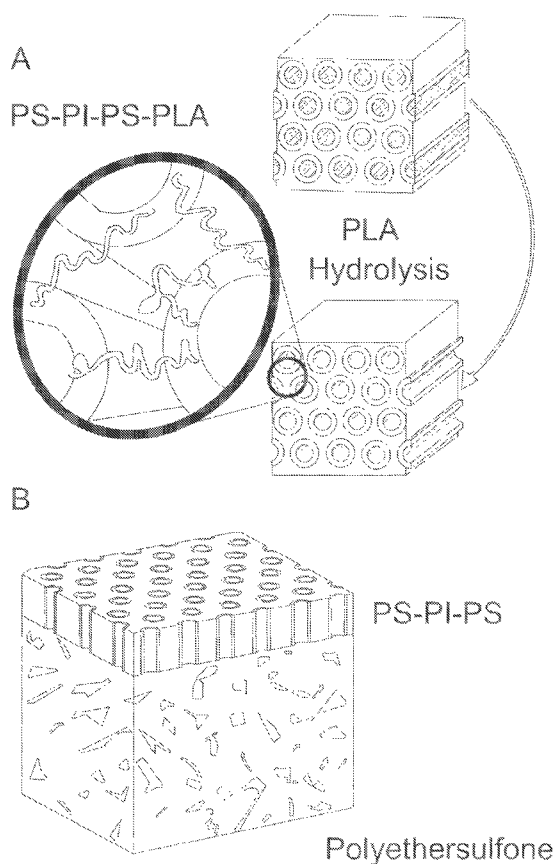




- (51) International Patent Classification:
C08F 8/00 (2006.01)
- (21) International Application Number:
PCT/US2014/013186
- (22) International Filing Date:
27 January 2014 (27.01.2014)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
61/758,982 31 January 2013 (31.01.2013) US
- (71) Applicant: REGENTS OF THE UNIVERSITY OF MINNESOTA [US/US]; 200 Oak St SE, Suite 600, Minneapolis, MN 55455 (US).
- (72) Inventors: HILLMYER, Marc, Andrew; 4916 Knox Avenue S., Minneapolis, MN 55419 (US). JACKSON, Elizabeth, Ashley; 4010 Peabody Street, Duluth, MN 55804 (US). LEE, Youngmin; 1400 Martin Street, Apt. 3071, State College, PA 16803 (US).
- (74) Agent: PILLAI, Xavier; Leydig, Voit & Mayer, Ltd., Two Prudential Plaza, Suite 4900, 180 North Stetson Avenue, Chicago, IL 60601-6780 (US).
- (81) Designated States (*unless otherwise indicated, for every kind of national protection available*): AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IR, IS, JP, KE, KG, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SA,

[Continued on next page]

(54) Title: NANOPOROUS FILTRATION MEMBRANES



(57) Abstract: Disclosed are a nanoporous membrane suitable for use in ultrafiltration comprising nanoporous cross-linked poly(styrene)-*block*-poly(isoprene)-*block*-poly(styrene) and a composite comprising the porous membrane and a microporous support. Also disclosed are methods of preparing the nanoporous membrane and the composite membrane.



SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM,
TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM,
ZW.

EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU,
LV, MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK,
SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ,
GW, KM, ML, MR, NE, SN, TD, TG).

(84) Designated States (*unless otherwise indicated, for every
kind of regional protection available*): ARIPO (BW, GH,
GM, KE, LR, LS, MW, MZ, NA, RW, SD, SL, SZ, TZ,
UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, RU, TJ,
TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK,

Published:

— *with international search report (Art. 21(3))*