



- (51) International Patent Classification:
B01D 71/00 (2006.01) **B01D 61/02** (2006.01)
B01D 69/10 (2006.01)
- (21) International Application Number:
PCT/US2009/040732
- (22) International Filing Date:
15 April 2009 (15.04.2009)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
- | | | |
|------------|-------------------------------|----|
| 61/045,237 | 15 April 2008 (15.04.2008) | US |
| 61/045,262 | 15 April 2008 (15.04.2008) | US |
| 61/045,247 | 15 April 2008 (15.04.2008) | US |
| 61/045,252 | 15 April 2008 (15.04.2008) | US |
| 61/045,234 | 15 April 2008 (15.04.2008) | US |
| 61/045,249 | 15 April 2008 (15.04.2008) | US |
| 61/079,794 | 10 July 2008 (10.07.2008) | US |
| 61/088,666 | 13 August 2008 (13.08.2008) | US |
| 61/104,905 | 13 October 2008 (13.10.2008) | US |
| 61/122,351 | 12 December 2008 (12.12.2008) | US |
| 61/122,345 | 12 December 2008 (12.12.2008) | US |
| 61/122,354 | 12 December 2008 (12.12.2008) | US |
| 61/122,352 | 12 December 2008 (12.12.2008) | US |
| 61/122,346 | 12 December 2008 (12.12.2008) | US |
- 61/122,342 12 December 2008 (12.12.2008) US
61/122,347 12 December 2008 (12.12.2008) US
61/122,343 12 December 2008 (12.12.2008) US
61/122,355 12 December 2008 (12.12.2008) US
61/122,348 12 December 2008 (12.12.2008) US
61/122,344 12 December 2008 (12.12.2008) US
61/122,350 12 December 2008 (12.12.2008) US
61/122,341 12 December 2008 (12.12.2008) US
61/122,357 13 December 2008 (13.12.2008) US
61/122,358 13 December 2008 (13.12.2008) US
61/156,394 27 February 2009 (27.02.2009) US
61/156,388 27 February 2009 (27.02.2009) US
61/164,031 27 March 2009 (27.03.2009) US
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(54) Title: HYBRID NANOPARTICLE TFC MEMBRANES

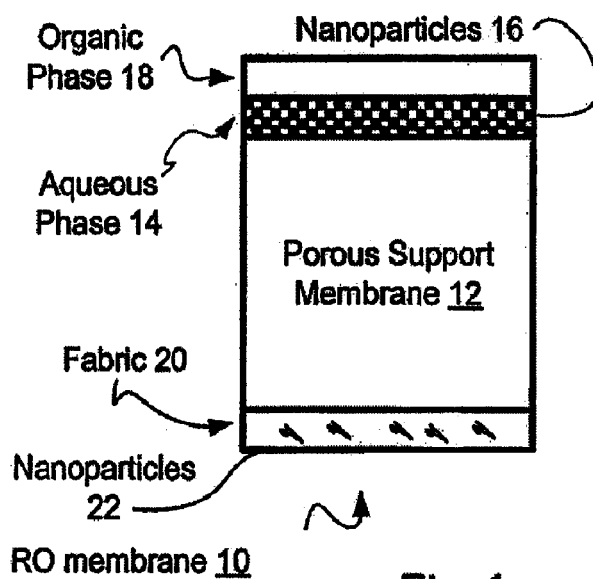


Fig. 1

(57) Abstract: Reverse osmosis membranes made by interfacial polymerization of a monomer in a nonpolar (e.g. organic) phase together with a monomer in a polar (e.g. aqueous) phase on a porous support membrane. Interfacial polymerization process is disclosed for preparing a highly permeable RO membrane, comprising: contacting on a porous support membrane, a) a first solution containing 1,3-diaminobenzene, and b) a second solution containing trimethylol chloride, wherein at least one of solutions a) and b) contains nanoparticles when said solutions are first contacted, and recovering a highly permeable RO membrane.



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(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, BR, BW, BY, BZ, CA, CH, 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, IS, JP, KE, KG, KM, 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, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, ST, 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, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, 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 (Art. 21(3))*
- *with amended claims (Art. 19(1))*

(88) **Date of publication of the international search report:**

28 January 2010

Date of publication of the amended claims:

1 April 2010