

(19) World Intellectual Property Organization  
International Bureau



(43) International Publication Date  
12 February 2009 (12.02.2009)

PCT

(10) International Publication Number  
**WO 2009/020598 A1**

(51) International Patent Classification:  
**B01D 61/00** (2006.01)

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(21) International Application Number:  
PCT/US2008/009409

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(22) International Filing Date: 5 August 2008 (05.08.2008)

(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.

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
11/890,641 7 August 2007 (07.08.2007) US

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(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, 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).

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Published:

— with international search report

(54) Title: ACID TOLERANT POLYMERIC MEMBRANE AND PROCESS FOR THE RECOVERY OF ACID USING POLYMERIC MEMBRANES

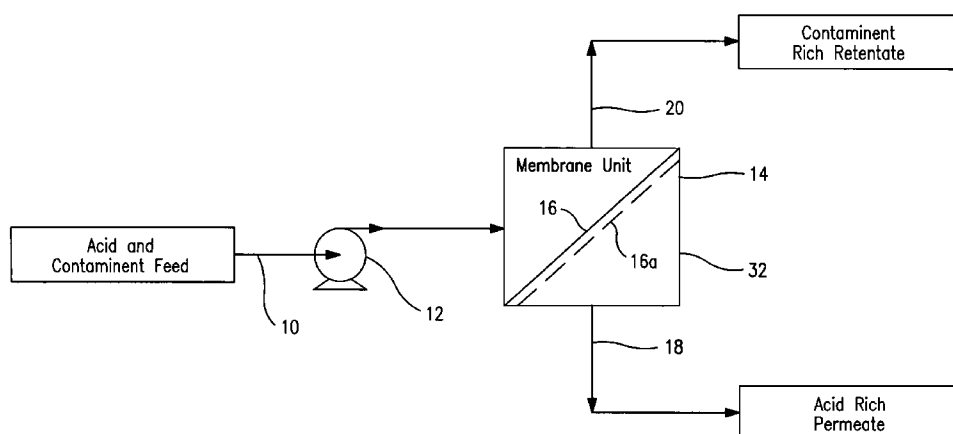


FIG. 1

(57) Abstract: A multi-layer membrane structure including a crosslinked polymeric membrane, such as a crosslinked polyvinyl sulfate membrane or a crosslinked copolymer polyvinyl sulfate and polyvinyl alcohol membrane, is provided. The membrane structure is suitable for use in an acid environment, and is suitable for recovering acid from a feed mixture comprising acid, hydrocarbons and water.