



(51) International Patent Classification:

B01D 61/02 (2006.01) *B01D 69/14* (2006.01)
B01D 69/10 (2006.01) *B01D 71/56* (2006.01)
B01D 69/12 (2006.01) *B01D 71/68* (2006.01)

(21) International Application Number:

PCT/IB2024/062277

(22) International Filing Date:

05 December 2024 (05.12.2024)

(25) Filing Language:

English

(26) Publication Language:

English

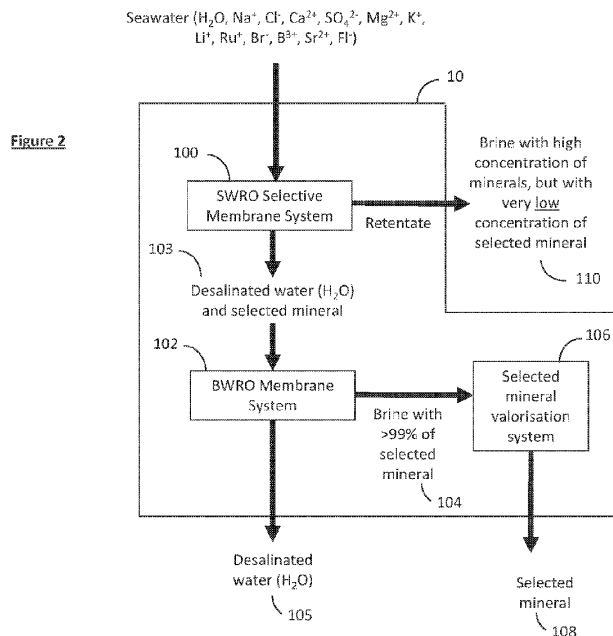
(30) Priority Data:

63/607,049 06 December 2023 (06.12.2023) US

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(54) Title: SELECTIVE MEMBRANE SYSTEM AND METHOD FOR DESALINATION AND MINERAL RECOVERY



(57) Abstract: The present invention relates to a selective membrane for separating desalinated water and a selected mineral salt from seawater or another high-salinity solution, wherein the selective membrane comprises a polysulfone layer and a salt separation layer, and wherein the salt separation layer comprises a polyamide layer comprising one or more ionophore. The invention also relates to a seawater reverse osmosis (SWRO) system comprising the selective membrane; as well as a system and method for recovering a selected mineral salt from seawater using the SWRO system. The invention further provides a method of making the selective 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, BN, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CV, CZ, DE, DJ, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IQ, IR, IS, IT, JM, JO, JP, KE, KG, KH, KN, KP, KR, KW, KZ, LA, LC, LK, LR, LS, LU, LY, MA, MD, MG, MK, MN, MU, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SA, SC, SD, SE, SG, SK, SL, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, WS, ZA, ZM, ZW.

(84) Designated States *(unless otherwise indicated, for every kind of regional protection available)*: ARIPO (BW, CV, GH, GM, KE, LR, LS, MW, MZ, NA, RW, SC, SD, SL, ST, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, RU, TJ, TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, ME, 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).

Published:

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