

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau

(43) International Publication Date
11 April 2019 (11.04.2019)



(10) International Publication Number
WO 2019/070134 A3

(51) **International Patent Classification:**
C01D 3/06 (2006.01) *C02F 1/26* (2006.01)

(21) **International Application Number:**
PCT/NZ2018/050135

(22) **International Filing Date:**
03 October 2018 (03.10.2018)

(25) **Filing Language:** English

(26) **Publication Language:** English

(30) **Priority Data:**
62/567,545 03 October 2017 (03.10.2017) US

(71) **Applicant: AQUAFORTUS TECHNOLOGIES LIMITED** [NZ/NZ]; Level 1, 57 Symonds Street, Grafton, Auckland, 1010 (NZ).

(72) **Inventors: BRIGGS, Daryl Joseph;** 13b Stephanie Close, Glenfield, Auckland, 0629 (NZ). **PRAKASH, Chaitra;** IE Luna Apartments, 16 Burton Street, Grafton, Auckland (NZ).

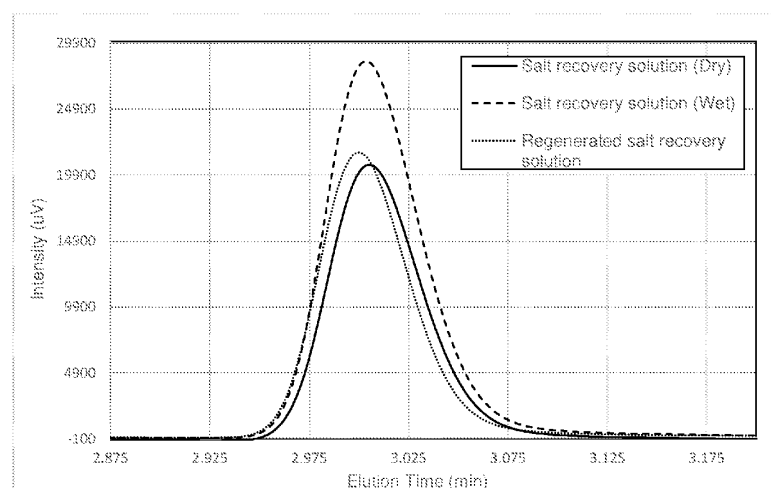
(74) **Agent: IN-LEGAL, Limited;** Level 2, 158 Victoria Street, Te Aro, Wellington, 6011 (NZ).

(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, DJ, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IR, IS, JO, JP, KE, KG, KH, KN, KP, KR, KW, KZ, LA, LC, LK, LR, LS, 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, 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.

(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, 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, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM,

(54) **Title:** A SALT RECOVERY SOLUTION AND PROCESSES OF USE THEREOF

Figure 3



(57) **Abstract:** The present invention relates to a salt recovery solution and to a process for separating a salt from an aqueous solution. The present disclosure also relates to a salt recovery solution and to its use to concentrate a salt or brine solution by recovering water therefrom. The salt recovery solution suitable for recovering a salt from an aqueous solution comprises at least one tertiary amine containing compound; and at least one enolisable carbonyl.

[Continued on next page]

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))*
- *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))*
- *in black and white; the international application as filed contained color or greyscale and is available for download from PATENTSCOPE*

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

02 January 2020 (02.01.2020)