



(51) International Patent Classification:

C07C 41/01 (2006.01) *B01J 19/18* (2006.01)
C07C 41/06 (2006.01) *B01J 23/04* (2006.01)
C07C 41/38 (2006.01) *B01J 35/12* (2006.01)
C07C 43/12 (2006.01)

(21) International Application Number:

PCT/AU2019/051411

(22) International Filing Date:

19 December 2019 (19.12.2019)

(25) Filing Language:

English

(26) Publication Language:

English

(71) Applicant: **COMMONWEALTH SCIENTIFIC AND INDUSTRIAL RESEARCH ORGANISATION** [AU/AU]; Clunies Ross Street, Acton, Australian Capital Territory 2601 (AU).

(72) Inventors: **TSANAKTSIDIS, John**; c/o Commonwealth Scientific And Industrial Research Organisation, Clunies Ross Street, Acton, Australian Capital Territory 2601 (AU).
ELDRIDGE, Cecily; c/o Commonwealth Scientific And Industrial Research Organisation, Clunies Ross Street, Ac-

ton, Australian Capital Territory 2601 (AU). **COURTNEY, Scott**; c/o Medical Developments International Limited, 4 Caribbean Dr, Scoresby, Victoria 3179 (AU).

(74) Agent: **DAVIES COLLISON CAVE PTY LTD**; Level 15, 1 Nicholson Street, Melbourne, Victoria 3000 (AU).

(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,

(54) Title: PREPARATION OF HALOGENATED ALKOXYETHANE

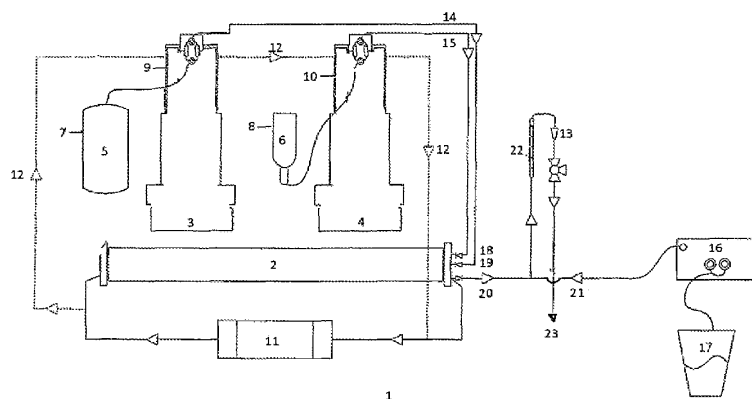


Figure 1

(57) Abstract: A process for continuous preparation of halogenated alkoxyethane of general formula $\text{XC1HC-CF}_2\text{OR}$, where X is -Cl or -f and OR is C_{1-4} alkoxy, the process comprising a step of introducing in a flow reactor reaction components comprising (i) a compound of general formula XC1HC-CYF_2 , where each of X and Y is independently -Cl or -F, (ii) a base, and (iii) a C_{1-4} alkanol, wherein a) the flow reactor comprises one or more tubular flow line(s) through which the reaction components flow as a reaction mixture, c) the halogenated alkoxyethane is formed at least upon the reaction components mixing, with the so formed halogenated alkoxyethane flowing out of the flow reactor in a reactor effluent, and b) the base is one that forms a salt soluble in the alkanol during formation of the halogenated alkoxyethane.

[Continued on next page]

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).

Published:

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