

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

(19) World Intellectual Property
Organization
International Bureau

(43) International Publication Date
24 June 2021 (24.06.2021)



(10) International Publication Number
WO 2021/119717 A1

(51) International Patent Classification:

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

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).

(21) International Application Number:

PCT/AU2019/051412

Published:

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

(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 COM-
MONWEALTH SCIENTIFIC AND INDUSTRIAL
RESEARCH, ORGANISATION, Clunies Ross Street, Ac-
ton, Australian Capital Territory 2601 (AU). ELDRIDGE,
Cecily; c/o COMMONWEALTH SCIENTIFIC AND
INDUSTRIAL RESEARCH, ORGANISATION, Clunies
Ross Street, Acton, Australian Capital Territory 2601 (AU).
COURTNEY, Scott; c/o Medical Developments Interna-
tional 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

(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 XC1C=CF_2 , (ii) a base, and (iii) a C_{1-4} alkanol, wherein a) the flow reactor comprises one or more tubular
flow line(s) having an internal cross-sectional area of less than 115 mm^2 through which the reaction components flow as a reaction
mixture, and b) 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.

WO 2021/119717 A1