



(51) International Patent Classification:

C07C 2/36 (2006.01) *C07C 11/02* (2006.01)
C08F 10/00 (2006.01) *C07C 11/107* (2006.01)

(21) International Application Number:

PCT/IB2014/061237

(22) International Filing Date:

6 May 2014 (06.05.2014)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

2013/03363 9 May 2013 (09.05.2013) ZA

(71) Applicant: **SASOL TECHNOLOGY (PROPRIETARY) LIMITED** [ZA/ZA]; 1 Sturdee Avenue, 2196 Rosebank (ZA).

(72) Inventors: **MOKHADINYANA, Molise Stephen**; 4 Masasa Complex, Toon van den Heever Street, 1947 Sasolburg (ZA). **MAUMELA, Munaka Christopher**; 3 Tygerberg Street, Vaalpark, 1947 Sasolburg (ZA). **MOGOROSI, Moses Mokgolela**; 13 Three Mountains Estate, Graskop Street, Vaalpark, 1947 Sasolburg (ZA). **OVERETT, Matthew James**; 76 Basroyd Drive, Bassonia, 2061 Johannesburg (ZA). **VAN DEN BERG, Jan-Albert**; El Manor 8, Delius Street, SW5 - Parksouth, 1910 Vanderbijlpark (ZA). **JANSE VAN RENSBURG, Werner**; 24 Hakea Crescent, 1911 Vanderbijlpark (ZA). **BLANN, Kevin**; 5 Alberante Estates, De La Rey Road, Alberante, 1449 Johannesburg (ZA).

(74) Agents: **SPOOR & FISHER** et al.; P O Box 454, 0001 Pretoria (ZA).

(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, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IR, IS, JP, KE, KG, 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, 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, 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, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, KM, ML, MR, NE, SN, TD, TG).

Declarations under Rule 4.17:

— as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))

Published:

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

(54) Title: TETRAMERISATION OF ETHYLENE

(57) Abstract: A process for the tetramerisation of ethylene includes contacting ethylene with a catalyst under ethylene oligomerisation conditions. The catalyst comprises a source of chromium, a ligating compound, and an activator. The ligating compound includes a phosphine that forms part of a cyclic structure.



WO 2014/181250 A1