



(51) International Patent Classification:

C08F 4/654 (2006.01) *C08F 4/642* (2006.01)
C08F 4/646 (2006.01) *C08F 2/38* (2006.01)
C08F 4/643 (2006.01)

(21) International Application Number:

PCT/US2017/020880

(22) International Filing Date:

06 March 2017 (06.03.2017)

(25) Filing Language:

English

(26) Publication Language:

English

(71) Applicants: **W.R. GRACE & CO.-CONN.** [US/US];
 7500 Grace Drive, Columbia, Maryland 21044 (US).
BRASKEM AMERICA, INC. [US/US]; 1735 Market
 Street, 28th Floor, Philadelphia, Pennsylvania 19103 (US).

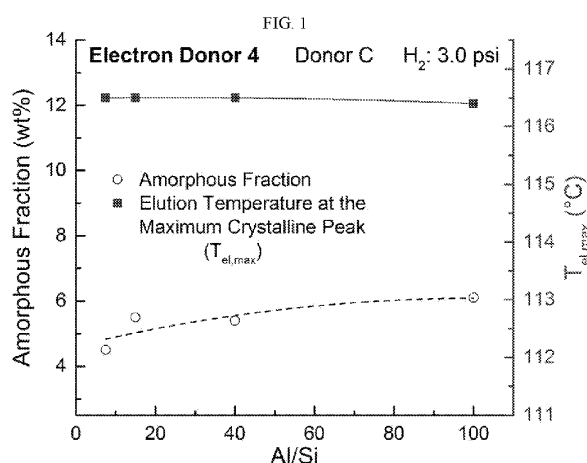
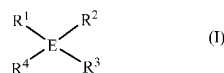
(72) Inventors: **NGUYEN, Binh Thanh**; 113 Crescent Bay
 Dr, League City, Texas 77573 (US). **FERNANDES, Jonas
 Alves**; 550 Technology Dr, Pittsburgh, Pennsylvania 15217
 (US). **XI, Zhenxing**; 4638 Jaymar Drive, Sugar Land,
 Texas 77479 (US).

(74) Agent: **LOMPREY, Jeffrey R.** et al.; Foley & Lardner
 LLP, 3000 K Street N.W., Suite 600, Washington, District
 of Columbia 20007 (US).

(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, 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,
 TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW,
 KM, ML, MR, NE, SN, TD, TG).

(54) Title: ELECTRON DONORS FOR ZIEGLER-NATTA PRECATALYST PREPARATION AND CATALYST SYSTEM FOR
 OLEFIN POLYMERIZATION



(57) Abstract: A solid precatalyst component for use in olefinic polymerization, includes titanium, magnesium, and an electron donor compound; wherein: the electron donor compound is at least one compound represented by Formula (I).

[Continued on next page]

Published:

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