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(71) Applicant: **EXXONMOBIL CHEMICAL PATENTS INC.** [US/US]; 5200 Bayway Drive, Baytown, TX 77520 (US).

(72) Inventors: **FALER, Catherine, A.**; 1314 Silver Street, Houston, TX 77007 (US). **WHALLEY, Margaret, T.**; 436 N Live Oak Street, Houston, TX 77003 (US). **JIANG, Pei-jun**; 2603 Mist Flower Court, Katy, TX 77494 (US). **HAGADORN, John, R.**; 4838 Knickerbocker Street, Houston, TX 77035 (US). **ATIENZA, Crisita Carmen, H.**; 1042 W. 26th Street, Houston, TX 77008 (US). **CARPENTER, Alex, E.**; 4300 Bay Area Boulevard, Apt. 1027, Houston, TX 77058 (US). **RODRIGUEZ, George**; 13827 Placid Brook Court, Houston, TX 77059 (US).

(74) Agent: **BELL, Catherine, L.** et al.; Exxonmobil Chemical Company, Law Technology, P.O. Box 2149, Baytown, TX 77522-2145 (US).

(54) Title: NON-COORDINATING ANION TYPE ACTIVATORS CONTAINING CATION HAVING LARGE ALKYL GROUPS

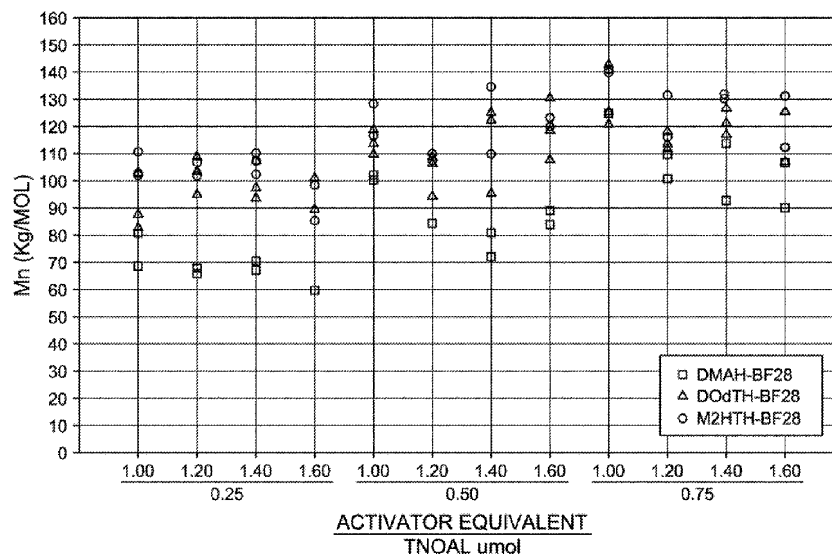


FIG. 1

(57) Abstract: The present disclosure provides borate or aluminate activators comprising cations having linear alkyl groups, catalyst systems comprising, and methods for polymerizing olefins using such activators. Specifically, the present disclosure provides activator compounds represented by Formula: $[R^1R^2R^3EH]_d^+[M^{k+}Q_n]^{d-}$, wherein: E is nitrogen or phosphorous; d is 1, 2 or 3; k is 1, 2, or 3; n is 1, 2, 3, 4, 5, or 6; $n-k=d$; R^1 is C_1 - C_{20} linear alkyl group; each of R^2 and R^3 is a C_1 - C_{40} linear alkyl group, a meta- and/or para-substituted phenyl group, an alkoxy group, a silyl group, a halogen, or a halogen containing group, wherein $R^1+R^2+R^3>15$ carbon atoms; M is an element selected from group 13, typically B or Al; and each Q is independently a hydride, bridged or unbridged dialkylamido, halide, alkoxide, aryloxide, hydrocarbyl, substituted hydrocarbyl, halocarbyl,

[Continued on next page]

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