

(51) International Patent Classification:
C08F 10/06 (2006.01)(21) International Application Number:
PCT/US2010/042065(22) International Filing Date:
15 July 2010 (15.07.2010)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
12/541,752 14 August 2009 (14.08.2009) US(71) Applicant (for all designated States except US):
EXXONMOBIL CHEMICAL PATENTS INC.
[US/US]; 5200 Bayway Drive, Baytown, TX 77520-2101 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **CROWTHER, Donna, J.** [US/US]; 2725 Moss Ct., Seabrook, TX 77586 (US). **JIANG, Peijun** [US/US]; 119 Mariner Cove Court, League City, TX 77573 (US). **KOLB, Rainer** [DE/US]; 3411 Park Spring Lane, Kingwood, TX 77345 (US).(74) Agents: **TIMMINS, Stephen** et al.; Exxonmobil Chemical Company, Law Technology, P. O. Box 2149, Baytown, TX 77522-2149 (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, 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, IS, JP, KE, KG, KM, 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, PE, PG, PH, PL, PT, RO, RS, RU, 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.

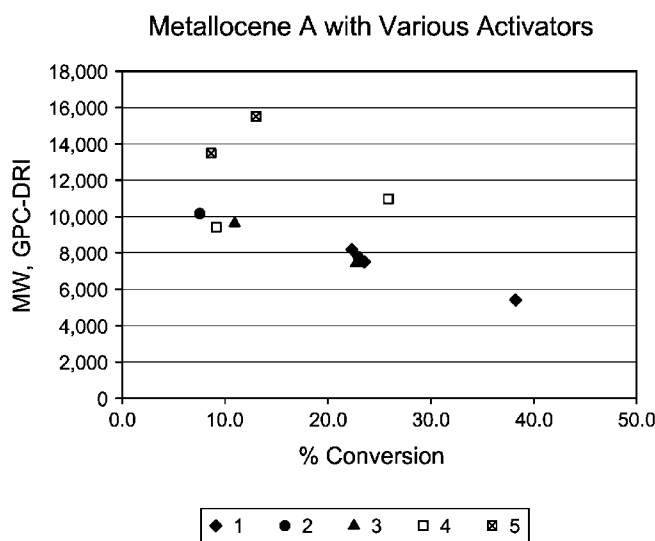
(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LR, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Declarations under Rule 4.17:

[Continued on next page]

(54) Title: CATALYST SYSTEM, PROCESS FOR OLEFIN POLYMERIZATION, AND POLYMER COMPOSITIONS PRODUCED THEREFROM

Fig. 1



(57) Abstract: Provided are catalyst systems, processes for polymerizing one or more olefins, polymers resulting therefrom, and articles prepared from such polymers. The processes comprise contacting under polymerization conditions one or more olefin monomers, preferably propylene, with a catalyst system comprising a transition metal compound and an activator of the formula (1) or (2) as described herein. The polymer compositions described herein exhibit advantageously narrow composition distributions and high melting points in comparison to conventional polymers having the same comonomer content. The polymers described herein exhibit improved properties, e.g., pellet stability, impact properties, heat seal properties, and structural integrity in film and fabricated parts applications.



-
- *as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))*
- *as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))*
- Published:**
- *without international search report and to be republished upon receipt of that report (Rule 48.2(g))*