

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
28 July 2005 (28.07.2005)

PCT

(10) International Publication Number
WO 2005/068519 A3

(51) International Patent Classification⁷: **C08F 210/16**,
4/642

[US/US]; 834 Revere Way East, Bartlesville, OK 74006 (US).

(21) International Application Number:
PCT/US2005/000278

(74) Agent: **HUSEMAN, Cheryl, L.**; 10001 Six Pines Drive,
The Woodlands, TX 77380 (US).

(22) International Filing Date: 6 January 2005 (06.01.2005)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
10/755,083 9 January 2004 (09.01.2004) US

(81) Designated States (*unless otherwise indicated, for every kind of national protection available*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(71) Applicant (*for all designated States except US*):
CHEVRON PHILLIPS CHEMICAL COMPANY, LP [US/US]; 10001 Six Pines Drive, The Woodlands, TX 77380 (US).

(84) Designated States (*unless otherwise indicated, for every kind of regional protection available*): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

(72) Inventors; and

(75) Inventors/Applicants (*for US only*): **JENSEN, Michael, D.** [US/US]; 2008 Skyline Place, Bartlesville, OK 74006 (US). **MCDANIEL, Max, P.** [US/US]; 1601 Melmart Drive, Bartlesville, OK 74006 (US). **MARTIN, Joel, L.** [US/US]; 636 SE Kenwood Drive, Bartlesville, OK 74006 (US). **BENHAM, Elizabeth, A.** [US/US]; 9310 Katie Grace Circle, Spring, TX 77379 (US). **MUNINGER, Randy** [US/US]; 400512 West 1200 Road, Dewey, OK 74029 (US). **JERDEE, Gary** [US/US]; 6402 Armitage Street, Orange, TX 77632 (US). **SUKHADIA, Ashish, M.** [US/US]; 1605 Cherokee Place, Bartlesville, OK 74006 (US). **YANG, Qing** [CN/US]; 2917 Montrose Drive, Bartlesville, OK 74996 (US). **THORN, Matthew**

Published:

— with international search report

(88) Date of publication of the international search report:
1 December 2005

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: CATALYST COMPOSITIONS AND POLYOLEFINS FOR EXTRUSION COATING APPLICATIONS

(57) Abstract: This invention relates to the field of olefin polymerization catalyst compositions, and methods for the polymerization and copolymerization of olefins, including polymerization methods using a supported catalyst composition. In one aspect, the present invention encompasses a catalyst composition comprising the contact product of a first metallocene compound, a second metallocene compound, at least one chemically-treated solid oxide, and at least one organoaluminum compound. The new resins were characterized by useful properties in impact, tear, adhesion, sealing, extruder motor loads and pressures at comparable melt index values, and neck-in and draw-down.



WO 2005/068519 A3