

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
31 May 2007 (31.05.2007)

PCT

(10) International Publication Number
WO 2007/061587 A1

(51) International Patent Classification:
C08F 210/16 (2006.01) *C08J 5/18* (2006.01)

(21) International Application Number:
PCT/US2006/042529

(22) International Filing Date: 31 October 2006 (31.10.2006)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/739,681 23 November 2005 (23.11.2005) US

(71) Applicant (for all designated States except US): **DOW GLOBAL TECHNOLOGIES INC.** [US/US]; Washington Street, 1790 Building, Midland, MI 48674 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **NIETO, Jesus** [ES/ES]; Joan Rebull, 92, E-43850 Cambrils (ES). **HAGEN, Hendrik** [ES/ES]; Cavallers 6, 2, 3, E-43003 Tarragona (ES).

(74) Agent: **DELINE, Douglas, N.**; The Dow Chemical Co., Intellectual property, P.O. Box 1967, Midland, MI 48641-1967 (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, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

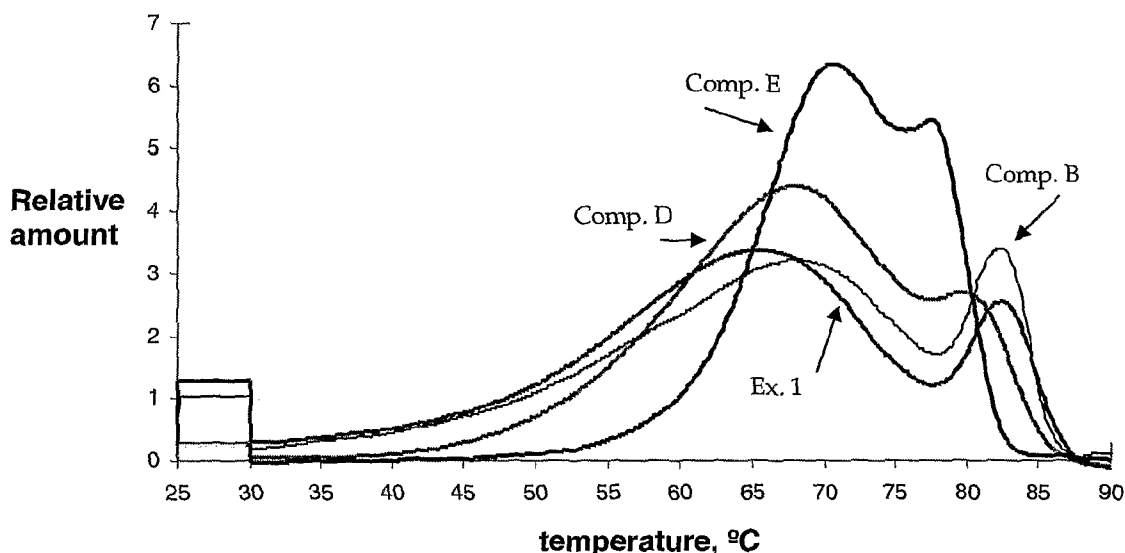
(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, 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).

Published:

— with international search report

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: HETEROGENEOUS, COMPOSITIONALLY PHASE SEPARATED, ETHYLENE ALPHA-OLEFIN INTERPOLYMERS



(57) Abstract: The present invention pertains to a heterogeneous ethylene/ α -olefin copolymer having a relatively high melt index range (I_2 from 1.1 to 1.6 dg/min.), low density (0.915 to 0.919 g/cc) and narrow molecular weight distribution (I_{10}/I_2 from 7.0 to 7.7), and highly separated composition distribution as determined by SCBD; a process for making such a copolymer; blends thereof with additional polymers; and fabricated articles, especially films, made there from.