

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
10 July 2003 (10.07.2003)

PCT

(10) International Publication Number
WO 03/055920 A1

- (51) International Patent Classification⁷: **C08F 6/02**, (74) Agent: **HANSBRO, Kevin, R.**; The Dow Chemical Company, Intellectual Property, P.O. Box 1967, Midland, MI 48641-1967 (US).
C08L 23/00
- (21) International Application Number: PCT/US02/40141
- (22) International Filing Date:
13 December 2002 (13.12.2002)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
60/345,292 21 December 2001 (21.12.2001) 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): **LAKEMAN, Pascal, E., R., E., J.** [NL/NL]; Antwerpsestraatweg 255, 4624 JH Bergen op Zoom, NL-4530 AA Terneuzen (NL). **THOEN, Johan, A.** [BE/NL]; Dommelstraat 22, NL-4535 HB Terneuzen (NL).
- (81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, YU, ZA, ZM, ZW.
- (84) Designated States (*regional*): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR), OAPI patent (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: ADDITIVE FOR RENDERING INERT ACIDIC OR HALOGEN-CONTAINING COMPOUNDS CONTAINED IN OLEFIN POLYMERS

(57) Abstract: A process for producing olefin polymers, which comprises the steps of polymerizing an olefin monomer in a polymerization zone in the presence of a catalyst comprising a transition metal compound to form an olefin polymer, and adding at the end of or downstream from the polymerization zone a composition having a weight averaged molecular weight of at least 100 and containing a group R, a cation Y, an anionic group $-C(R^1)_2-X^-$, and optionally a group $-C(R^1)_2-X-H$, the composition having a relative mole fraction n of cations Y and a relative mole fraction m of group $-C(R^1)_2-X-H$, wherein $0 < n \leq 1$, $0 \leq m < 1$, and $n+m=1$. Use of such a composition for rendering inert undesired quantities of acidic compounds or halogen-containing compounds present in an olefin polymer by mixing the olefin polymer intimately with the additive composition.



WO 03/055920 A1