PCT WORLD INTELLECTUAL PROPERTY ORGANIZATION
International Bureau

(103)

INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification 6 : C08L 23/16	A1	(11) International Publication Number: WO 99/14271
		(43) International Publication Date: 25 March 1999 (25.03.99)

(21) International Application Number: PCT/US98/19568

(22) International Filing Date: 18 September 1998 (18.09.98)

(30) Priority Data:
60/059,555 19 September 1997 (19.09.97) US

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(81) Designated States: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).

Published
With international search report.
Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.

(54) Title: NARROW MWD, COMPOSITIONALLY OPTIMIZED ETHYLENE INTERPOLYMER COMPOSITION, PROCESS FOR MAKING THE SAME AND ARTICLE MADE THEREFROM

(57) Abstract

The present invention pertains to an ethylene interpolymer composition characterized as having a narrow molecular weight distribution (MWD) and optimized compositional uniformity, a process for making such a composition and a fabricated article made from such composition. The novel composition is characterized as having at least two polymer components, the first component having an ATREF peak temperature, T_{peak1} and a viscosity average molecular weight, M_{v1}, and the second component having an ATREF peak temperature, T_{peak2}, and a viscosity average molecular, M_{v2}, wherein the temperature differential between T_{peak2} and T_{peak1} decreases with increased composition density and M_{v1}/M_{v2} is less than or equal to 1.2. The novel composition is further characterized as having a M_w/M_n of less than or equal to 3.3 as determined by gel permeation chromatography, an I_{10}/I_2 6.6, and a composition density less than 0.945 gram/cubic centimeter. The novel composition exhibits high, balanced toughness properties, good processibility and surprisingly improved optical properties and is particularly well-suited for use in applications such as lamination films trash can liners and heavy duty shipping bags, especially as a blown film.