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WORLD INTELLECTUAL PROPERTY ORGANIZATION  
International Bureau



2900868-2  
1998

INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

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| (51) International Patent Classification <sup>6</sup> :<br><b>C08L 25/02, 23/02</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  | <b>A1</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | (11) International Publication Number: <b>WO 98/10018</b>     |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | (43) International Publication Date: 12 March 1998 (12.03.98) |
| (21) International Application Number: <b>PCT/US97/15546</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |  | (74) Agent: CARTER, James, G.; Patent Dept., B-1211, 2301 Brazosport Boulevard, Freeport, TX 77541 (US).                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                               |
| (22) International Filing Date: 4 September 1997 (04.09.97)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                               |
| (30) Priority Data:<br>08/707,784 4 September 1996 (04.09.96) US                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  | (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, HU, 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, US, VZ, VN, YU, ZW, ARIPO patent (GH, KE, LS, MW, SD, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG). |                                                               |
| (60) Parent Application or Grant<br>(63) Related by Continuation<br>US 08/707,784 (CIP)<br>Filed on 4 September 1996 (04.09.96)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |  | Published<br>With international search report.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                               |
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| (54) Title: BLENDS OF $\alpha$ -OLEFIN/VINYLDENE AROMATIC MONOMER AND/OR HINDERED ALIPHATIC OR CYCLOALIPHATIC VINYLDENE MONOMER INTERPOLYMERS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                               |
| (57) Abstract<br><p>Blends of polymeric materials comprising a plurality of interpolymers each having (1) from 0.5 to 65 mole percent of either (a) at least one vinylidene aromatic monomer or (b) at least one hindered aliphatic or cycloaliphatic vinylidene monomer, or (c) a combination of at least one vinylidene aromatic monomer and at least one hindered aliphatic vinylidene monomer, and (2) from 35 to 99 mole percent of at least one aliphatic alpha olefin having from 2 to 20 carbon atoms; and wherein interpolymer components differ in that (i) the amount of vinylidene aromatic monomer residue and/or hindered aliphatic or cycloaliphatic vinylidene monomer residue in any interpolymer component differs from another by at least 0.5 mole percent; and/or (ii) there is a difference of at least 20 percent between the number average molecular weight (Mn) of interpolymer components. These blends of interpolymer components give enhanced properties or processability when compared to the individual polymers comprising the blend.</p> |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                               |

