

Title (en)

IMPROVED PROCESSABILITY OF METALLOCENE-CATALYZED POLYOLEFINS

Title (de)

METALLOCENE KATALYSIERTE POLYOLEFINEN MIT VERBESSERTEN VERARBEITUNG

Title (fr)

APTITUDE AU TRAITEMENT AMELIOREE POUR DES POLYOLEFINES CATALYSEES PAR ALLIAGES ORGANOMETALLIQUES

Publication

EP 0820485 A1 19980128 (EN)

Application

EP 96911725 A 19960410

Priority

- US 9605039 W 19960410
- US 42165595 A 19950413

Abstract (en)

[origin: WO9632441A1] Metallocene-catalyzed polyolefins exhibit a tendency to increase motor loads and torque when extruded, due to their relative shear insensitivity. The use of a solid solvent combined with the linear polyolefin can reduce motor loads and torque to improve processability. The solid solvent chosen should leave the physical properties of an extrusion fabricated article substantially unaltered when compared to the properties of the linear polyolefin itself. The linear polyolefin will have a Mw/Mn less than 2.8. The solid solvent will have: a disassociation temperature (Tdi) below the processing temperature of the combination of linear polyolefin and solid solvent, an association temperature (Ta) above the crystallization temperature of the linear polyolefin; a solubility index from 15 to 20 MPa<1/2>, a Mn from 250 to 5000; an extractibility (in combination with the polyolefin) in n-hexane at 50 DEG C below 5.5 weight percent for the total blend, a degradation temperature in excess of 300 DEG C, and a refractive index within +/- 10% of the refractive index of the linear polyolefin.

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C08L 23/04; **C08L 23/10**

IPC 8 full level

C08L 23/04 (2006.01); **C08L 23/10** (2006.01)

CPC (source: EP)

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Citation (search report)

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