

Title (en)

POLYETHYLENE COMPOSITION HAVING IMPROVED ENVIRONMENTAL STRESS CRACKING RESISTANCE

Title (de)

POLYETHYLENZUSAMMENSETZUNG MIT VERBESSERTER BESTÄNDIGKEIT GEGENÜBER UMGEBUNGSBEDINGTER SPANNUNGSRISSBILDUNG

Title (fr)

COMPOSITION DE POLYÉTHYLÈNE PRÉSENTANT UNE RÉSISTANCE AMÉLIORÉE À LA FISSURATION SOUS CONTRAINE PROVOQUÉE PAR L'ENVIRONNEMENT

Publication

EP 3830186 A1 20210609 (EN)

Application

EP 19742340 A 20190717

Priority

- US 201862711096 P 20180727
- EP 2019069209 W 20190717

Abstract (en)

[origin: WO2020020716A1] A polyethylene composition having increased environmental stress crack resistance comprises a polymer blend of a high density polyethylene (HOPE) and a styrenic block copolymer (SBC). The styrenic block polymer is at least one of a non-hydrogenated styrene-isoprene-styrene (SIS) block copolymer and a styrene-butadiene-styrene (SBS) block copolymer. In a method of forming a polyethylene composition having increased environmental stress crack resistance, a high density polyethylene (HOPE) is modified by combining the HOPE with a styrenic block copolymer (SBC) of at least one of a non- hydrogenated styrene-isoprene-styrene (SIS) block copolymer and a styrene-butadiene- styrene (SBS) block copolymer.

IPC 8 full level

C08L 23/06 (2006.01); **B65D 41/40** (2006.01); **B67B 3/00** (2006.01)

CPC (source: EP)

C08L 23/06 (2013.01); **C08L 2203/10** (2013.01); **C08L 2207/062** (2013.01)

Citation (search report)

See references of WO 2020020716A1

Cited by

WO2021094524A1

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

WO 2020020716 A1 20200130; CN 113195619 A 20210730; CN 113195619 B 20240112; EP 3830186 A1 20210609

DOCDB simple family (application)

EP 2019069209 W 20190717; CN 201980060534 A 20190717; EP 19742340 A 20190717