

Title (en)

COPOLYMERS MADE FROM ALPHA-OLEFINS AND OLEFINIC DICARBOXYLIC ACID ESTER AND THEIR USE AS POUR POINT DEPRESSANTS FOR CRUDE OILS AND MINERAL OILS

Title (de)

COPOLYMERE UMFASSEND -OLEFINE UND OLEFINDICARBONSÄUREESTER, DEREN HERSTELLUNG UND VERWENDUNG ALS POUR-POINT-DEPRESSANTS FÜR ROHÖLE, MINERALÖLE ODER MINERALÖLPRODUKTE

Title (fr)

COPOLYMÈRES DES ALPHA-OLÉFINES ET DES ESTER D'ACIDES DICARBOXYLIQUES ET L'UTILISATION COMME DES AMÉLIORANTS DE POINT D'ÉCOULEMENT

Publication

**EP 3380589 B1 20191030 (DE)**

Application

**EP 16797890 A 20161117**

Priority

- EP 15196769 A 20151127
- EP 2016077935 W 20161117

Abstract (en)

[origin: WO2017089212A1] The invention relates to copolymers comprising C14 to C50 olefins and at least two different olefin dicarboxylic acid esters and optionally maleic acid or maleic acid derivatives. The olefin dicarboxylic acid esters are, first, esters having linear C18 to C50 alkyl groups and, second, esters having short-chain linear, branched, or cyclic alkyl groups or esters having aromatic groups. The invention further relates to a method for producing such copolymers and to the use thereof as pour point depressants for crude oil, mineral oil, and/or mineral oil products, preferably as pour point depressants for crude oil.

IPC 8 full level

**C10L 1/196** (2006.01); **C10L 10/04** (2006.01); **C10L 10/14** (2006.01); **C10L 10/16** (2006.01)

CPC (source: EA EP US)

**C10L 1/1641** (2013.01 - EP); **C10L 1/1966** (2013.01 - EA EP US); **C10L 10/04** (2013.01 - EA EP US); **C10L 10/14** (2013.01 - EA EP US); **C10L 10/16** (2013.01 - EA EP US); **C10L 2200/0453** (2013.01 - EA EP US); **C10L 2230/14** (2013.01 - EA EP US); **C10L 2270/026** (2013.01 - EA EP US); **C10L 2270/10** (2013.01 - EA EP US)

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

DOCDB simple family (publication)

**WO 2017089212 A1 20170601**; CA 3003953 A1 20170601; CA 3003953 C 20231017; CN 108291163 A 20180717; CN 108291163 B 20200626; EA 035184 B1 20200512; EA 201891271 A1 20181228; EP 3380589 A1 20181003; EP 3380589 B1 20191030; ES 2769078 T3 20200624; SG 11201804366R A 20180628; US 10781385 B2 20200922; US 11236282 B2 20220201; US 2018355266 A1 20181213; US 2020369972 A1 20201126

DOCDB simple family (application)

**EP 2016077935 W 20161117**; CA 3003953 A 20161117; CN 201680068135 A 20161117; EA 201891271 A 20161117; EP 16797890 A 20161117; ES 16797890 T 20161117; SG 11201804366R A 20161117; US 201615778723 A 20161117; US 202016993668 A 20200814