

Title (en)

Blends of fatty acids with improved cold stability, containing comb polymers, and use thereof in fuel oils

Title (de)

Fettsäuremischungen verbesserter Kältestabilität, welche Kammpolymere enthalten, sowie deren Verwendung in Brennstoffölen

Title (fr)

Mélanges d'acides gras à stabilité à froid améliorée, lesquelles contiennent des polymères en peigne, ainsi que utilisation de ceux-là dans des huiles combustibles

Publication

**EP 1209216 B1 20060830 (DE)**

Application

**EP 01126256 A 20011106**

Priority

DE 10058357 A 20001124

Abstract (en)

[origin: CA2363699A1] Fuel oils having improved lubricity, comprising mixtures of fatty acids with comb polymers The invention relates to low-temperature-stabilized fatty acid mixtures comprising A) from 10 to 99.99% by weight of fatty acid mixtures comprising A1) from 1 to 99% by weight of at least one saturated mono- or dicarboxylic acid having 6 to 50 carbon atoms, A2) from 1 to 99% by weight of at least one unsaturated mono- or dicarboxylic acid having 6 to 50 carbon atoms, and B) from 0.01 to 90% by weight of copolymers comprising B1) from 40 to 60 mol% of bivalent structural units of the formula (see formula I or II) where X = O or N - R1, in which a and b = 0 or 1 and a + b = 1, and B2) from 60 to 40 mol% of bivalent structural units of the formula -H2C-CR2R3- ~B2 and, if desired, B3) from 0 to 20 mol% of bivalent structural units derived from polyolefins, where the polyolefins can be derived from monoolefins having 3 to 5 carbon atoms, and in which a) R1 is an alkyl or alkenyl radical having from 10 to 40 carbon atoms or an alkoxyalkyl radical having from 1 to 100 alkoxy units and from 1 to 30 carbon atoms in the alkyl radical, and b) R3 is a radical of the formula OCOR4 or COOR4, in which R4 is C1-C24- alkyl, and c) the number of carbon atoms in the polyolefin molecules on which the structural units B3) are based is from 35 to 350, and d) R2 is hydrogen or methyl, and to the use of said mixtures for improving the lubrication properties of low-sulfur middle distillates.

IPC 8 full level

**C10L 1/18** (2006.01); **C08K 5/09** (2006.01); **C08L 35/00** (2006.01); **C10L 1/14** (2006.01); **C10L 1/188** (2006.01); **C10L 1/192** (2006.01); **C10L 1/195** (2006.01); **C10L 10/04** (2006.01); **C10L 10/08** (2006.01); **C10L 10/14** (2006.01)

CPC (source: EP US)

**C10L 1/143** (2013.01 - EP US); **C10L 10/08** (2013.01 - EP US)

Cited by

DE10349851B4; EP2692836A4

Designated contracting state (EPC)

DE ES FI FR GB IT NL SE

DOCDB simple family (publication)

**EP 1209216 A2 20020529**; **EP 1209216 A3 20030813**; **EP 1209216 B1 20060830**; CA 2363699 A1 20020524; CA 2363699 C 20091117; DE 10058357 A1 20020606; DE 10058357 B4 20051215; DE 50110864 D1 20061012; ES 2270936 T3 20070416; JP 2002167585 A 20020611; US 2002099228 A1 20020725; US 6596037 B2 20030722

DOCDB simple family (application)

**EP 01126256 A 20011106**; CA 2363699 A 20011123; DE 10058357 A 20001124; DE 50110864 T 20011106; ES 01126256 T 20011106; JP 2001301434 A 20010928; US 99384701 A 20011116