

Title (en)

Fuel oils with improved lubricity, comprising mixtures of fatty acids and paraffin dispersing agents and an improved lubricity additive

Title (de)

Brennstofföle mit verbesserter Schmierwirkung, enthaltend Mischungen aus Fettsäuren mit Paraffindispersgatoren, sowie ein schmierverbesserndes Additiv

Title (fr)

Carburants ayant un pouvoir lubrifiant amélioré, comprenant des mélanges d'acides gras avec dispersants de paraffine, tout comme un additif améliorant le pouvoir lubrifiant

Publication

EP 1803791 A3 20071003 (DE)

Application

EP 07005870 A 20011106

Priority

- EP 01126254 A 20011106
- DE 10058359 A 20001124

Abstract (en)

[origin: EP1209215A2] Cold-stabilized fatty acid composition comprises: (a) 1-99 wt.% saturated mono- or di-carboxylic acids with 6-50 (C) carbon atoms; (b) 1-99 wt.% unsaturated mono- or di-carboxylic acids with 6-50 C atoms; and (c) 0.01-90 wt.% of a polar nitrogen-containing compound that is effective as a wax dispersant in middle distillates. Independent claims are also included for the following: (1) A solution comprising the fatty acid composition and 1-80 wt.% organic solvent. (2) Fuel oils comprising a middle distillate with a sulfur content of up to 0.05 wt.% and either the fatty acid composition or solution (1).

IPC 8 full level

C10L 1/18 (2006.01); **C10L 1/188** (2006.01); **C10L 1/14** (2006.01); **C10L 1/22** (2006.01); **C10L 1/222** (2006.01); **C10L 1/224** (2006.01); **C10L 10/04** (2006.01); **C10L 10/08** (2006.01); **C10L 10/14** (2006.01); **C10L 10/18** (2006.01); **C10L 1/16** (2006.01)

CPC (source: EP US)

C10L 1/14 (2013.01 - EP US); **C10L 1/143** (2013.01 - EP US); **C10L 10/04** (2013.01 - EP US); **C10L 10/08** (2013.01 - EP US); **C10L 10/14** (2013.01 - EP US); **C10L 1/1616** (2013.01 - EP US); **C10L 1/1824** (2013.01 - EP US); **C10L 1/1852** (2013.01 - EP US); **C10L 1/1855** (2013.01 - EP US); **C10L 1/1881** (2013.01 - EP US); **C10L 1/1883** (2013.01 - EP US); **C10L 1/1885** (2013.01 - EP US); **C10L 1/1888** (2013.01 - EP US); **C10L 1/19** (2013.01 - EP US); **C10L 1/191** (2013.01 - EP US); **C10L 1/1966** (2013.01 - EP US); **C10L 1/1981** (2013.01 - EP US); **C10L 1/221** (2013.01 - EP US); **C10L 1/2222** (2013.01 - EP US); **C10L 1/2225** (2013.01 - EP US); **C10L 1/224** (2013.01 - EP US); **C10L 1/2364** (2013.01 - EP US); **C10L 1/238** (2013.01 - EP US); **C10L 1/2383** (2013.01 - EP US); **C10L 1/2387** (2013.01 - EP US)

Citation (search report)

- [A] EP 0829527 A1 19980318 - EXXON RESEARCH ENGINEERING CO [US]
- [A] EP 0780460 A1 19970625 - EXXON RESEARCH ENGINEERING CO [US]
- [A] EP 0272889 A2 19880629 - EXXON CHEMICAL PATENTS INC [US]

Designated contracting state (EPC)

AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR

DOCDB simple family (publication)

EP 1209215 A2 20020529; **EP 1209215 A3 20030813**; **EP 1209215 B1 20071010**; CA 2363700 A1 20020524; CA 2363700 C 20100406; DE 10058359 A1 20020606; DE 10058359 B4 20051222; DE 50113115 D1 20071122; DE 50114718 D1 20090402; DE 50114719 D1 20090402; EP 1801188 A2 20070627; EP 1801188 A3 20071003; EP 1801188 B1 20090218; EP 1803791 A2 20070704; EP 1803791 A3 20071003; EP 1803791 B1 20090218; ES 2295098 T3 20080416; JP 2002167586 A 20020611; JP 5317380 B2 20131016; US 2002095857 A1 20020725; US 2004083644 A1 20040506; US 6610111 B2 20030826; US RE40758 E 20090623

DOCDB simple family (application)

EP 01126254 A 20011106; CA 2363700 A 20011123; DE 10058359 A 20001124; DE 50113115 T 20011106; DE 50114718 T 20011106; DE 50114719 T 20011106; EP 07005870 A 20011106; EP 07005871 A 20011106; ES 01126254 T 20011106; JP 2001301435 A 20010928; US 60609503 A 20030625; US 93849504 A 20040910; US 99359001 A 20011116