

Title (en)

Motor fuel additive formulation comprising ester products and a detergent-dispersant agent

Title (de)

Esterprodukte und Detergenz-Dispergiermittel enthaltende Brennstoffzusätze-Formulierung

Title (fr)

Formulation d'additifs pour carburants comprenant des produits à fonction ester et un détergent-dispersant

Publication

EP 0530094 B1 19970521 (FR)

Application

EP 92402335 A 19920824

Priority

FR 9110851 A 19910830

Abstract (en)

[origin: EP0530094A1] Additive formulation for engine fuels comprising at least one constituent (A) and at least one constituent (B), the said constituent (A) consisting of at least one composition containing the products resulting from the reaction of at least one dicarboxylic compound (D) in which the carboxylic functional groups are separated by not more than 6 carbon atoms, with at least one glycol or polyoxyalkylene glycol monoether (E) of general formula (I): $R_{<1>-O-(R_{<2>-O})_n-H$ in which $R_{<1>}$ denotes a hydrocarbon group containing from 1 to 30 carbon atoms, $R_{<2>}$ denotes a divalent hydrocarbon group containing from 2 to 6 carbon atoms and n is a number from 1 to 60; and the said constituent (B) consisting of at least one detergent-dispersant product. This formulation preferably additionally includes a constituent (C) chosen from the group made up of mineral or synthetic lubricating oils and polyglycols which are soluble in the fuel. Use as multifunctional additives for fuels employed in internal combustion engines, in particular for those employed in spark ignition engines.

IPC 1-7

C10L 1/14

IPC 8 full level

C10L 1/182 (2006.01); **C10L 1/14** (2006.01); **C10L 1/18** (2006.01); **C10L 1/185** (2006.01); **C10L 1/188** (2006.01); **C10L 1/232** (2006.01); **C10L 10/18** (2006.01); **C10L 1/16** (2006.01); **C10L 1/22** (2006.01)

CPC (source: EP US)

C10L 1/143 (2013.01 - EP US); **C10L 1/146** (2013.01 - EP US); **C10L 1/1616** (2013.01 - EP US); **C10L 1/1985** (2013.01 - EP US); **C10L 1/232** (2013.01 - EP US); **C10L 1/238** (2013.01 - EP US); **C10L 1/2383** (2013.01 - EP US)

Citation (examination)

EP 0491439 A1 19920624 - SHELL INT RESEARCH [NL]

Cited by

GB2261441B; EP0704519A1; AU2006247828B2; US5633216A; EP0627483A1; FR2705969A1; EP0889111A3; EP0892034A3; EP0596769A1; US5425788A; US5591323A; US6579329B1; US8070837B2; US6280488B1; WO2006124438A1

Designated contracting state (EPC)

AT BE CH DE DK ES GB GR IT LI LU NL PT SE

DOCDB simple family (publication)

EP 0530094 A1 19930303; **EP 0530094 B1 19970521**; AT E153369 T1 19970615; CA 2077148 A1 19930301; DE 69219835 D1 19970626; DE 69219835 T2 19970911; DK 0530094 T3 19970721; ES 2103910 T3 19971001; FR 2680796 A1 19930305; FR 2680796 B1 19941021; GR 3023785 T3 19970930; JP H05194965 A 19930803; MY 108084 A 19960815; NO 923388 D0 19920828; NO 923388 L 19930301; TW 233329 B 19941101; US 5433755 A 19950718

DOCDB simple family (application)

EP 92402335 A 19920824; AT 92402335 T 19920824; CA 2077148 A 19920828; DE 69219835 T 19920824; DK 92402335 T 19920824; ES 92402335 T 19920824; FR 9110851 A 19910830; GR 970401424 T 19970617; JP 23033692 A 19920828; MY P119921552 A 19920828; NO 923388 A 19920828; TW 81107133 A 19920909; US 93641092 A 19920831