

Title (en)

FUEL ADDITIVE MIXTURES FOR GASOLINES WITH SYNERGISTIC IVD PERFORMANCE

Title (de)

KRAFTSTOFFADDITIVGEMISCH FÜR OTTOKRAFTSTOFFE MIT SYNERGISTISCHER IVD-PERFORMANCE

Title (fr)

MELANGES D'ADDITIFS POUR ESSENCE PRESENTANT UNE PERFORMANCE SYNERGIQUE EN MATIERE DE DEPOTS SUR LES SOUPAPES D'ADMISSION (IVD)

Publication

**EP 1495096 B1 20080730 (DE)**

Application

**EP 03714778 A 20030305**

Priority

- DE 10209830 A 20020306
- EP 0302253 W 20030305

Abstract (en)

[origin: WO03074637A1] The invention relates to novel fuels for Otto engines, containing a synergistically acting mixture of a detergent additive component (A) and a synthetic carrier oil component (B). Said detergent additive component (A) forms at least one bond with a basic nitrogen atom which is substituted with a hydrocarbyl radical having an average numerical molecular weight of about 500 to 1300, the detergent additive component (A) being contained in the fuel at a ratio of about 30 to 180 ppm by weight. The carrier oil component (B) consists of at least one compound of general formula R-O-(A-O)X-H (I), in which R represents a linear or branched C6-C18 alkyl group, A represents a C3 or C4 alkyl group, and X represents an integer value of 5 to 35, said carrier oil component (B) being contained in the fuel at a ratio of about 10 to 180 ppm by weight.

IPC 8 full level

**C10L 1/14** (2006.01); **C10L 1/22** (2006.01); **C10L 1/06** (2006.01); **C10L 1/182** (2006.01); **C10L 1/185** (2006.01); **C10L 1/222** (2006.01);  
**C10L 1/234** (2006.01); **C10L 10/00** (2006.01); **C10L 1/18** (2006.01)

CPC (source: EP KR US)

**C10L 1/14** (2013.01 - KR); **C10L 1/146** (2013.01 - EP US); **C10L 10/06** (2013.01 - EP US); **C10L 1/1985** (2013.01 - EP US);  
**C10L 1/2383** (2013.01 - EP US)

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PT RO SE SI SK TR

Designated extension state (EPC)

LT LV

DOCDB simple family (publication)

**WO 03074637 A1 20030912;** AT E402989 T1 20080815; AU 2003219018 A1 20030916; AU 2003219018 B2 20081106;  
BR 0308149 A 20050111; BR 0308149 B1 20130205; CA 2478643 A1 20030912; CA 2478643 C 20100921; CN 100523147 C 20090805;  
CN 1639308 A 20050713; DE 10209830 A1 20030918; DE 50310247 D1 20080911; EP 1495096 A1 20050112; EP 1495096 B1 20080730;  
ES 2307917 T3 20081201; HR P20040921 A2 20041231; IL 163811 A0 20051218; JP 2005527655 A 20050915; KR 20040096660 A 20041116;  
MX PA04008390 A 20041126; NO 20043916 L 20040920; NZ 534860 A 20061027; PL 203764 B1 20091130; PL 372618 A1 20050725;  
US 2005155280 A1 20050721; US 7601185 B2 20091013; ZA 200408006 B 20051228

DOCDB simple family (application)

**EP 0302253 W 20030305;** AT 03714778 T 20030305; AU 2003219018 A 20030305; BR 0308149 A 20030305; CA 2478643 A 20030305;  
CN 03805354 A 20030305; DE 10209830 A 20020306; DE 50310247 T 20030305; EP 03714778 A 20030305; ES 03714778 T 20030305;  
HR P20040921 A 20041005; IL 16381103 A 20030305; JP 2003573091 A 20030305; KR 20047013857 A 20030305;  
MX PA04008390 A 20030305; NO 20043916 A 20040920; NZ 53486003 A 20030305; PL 37261803 A 20030305; US 50576704 A 20040826;  
ZA 200408006 A 20041005