

Title (en)

IMPROVED LUBRICANT PERFORMANCE FROM ADDITIVE-TREATED FUELS

Title (de)

VERBESSERTE SCHMIERMITTELLEISTUNG VON MIT ZUSATZSTOFFEN BEHANDELTEN BRENNSTOFFEN

Title (fr)

AMELIORATIONS APORTEES AUX PROPRIETES DE LUBRIFICATION DE CARBURANTS TRAITES AVEC UN ADDITIF

Publication

EP 0693103 A4 19960320 (EN)

Application

EP 94912919 A 19940331

Priority

- US 9403558 W 19940331
- US 4308393 A 19930405

Abstract (en)

[origin: WO9422988A1] A fuel composition improves the antiwear and viscosity controlling properties of an internal combustion engine lubricating oil during operation of the engine. Small amounts of the fuel composition combine with the engine lubricating oil during engine operation and this provides an antioxidant boost to the lubricating oil. Preferably the fuel contains at least 57 g/1000 l (20 lbs/1000 barrels) of a substituted dicyclic aromatic amine which is free of benzylic hydrogen atoms such as a mono- and/or di- alpha -methyl styrene alkylated phenylenediamine and/or a hindered phenol such as a monostyreneated mono-isobuteneated cresol or di C16 alkyl phenol. A synergistic effect is demonstrated by a mixture of the aromatic amine and hindered phenol. The fuels used in the composition include gasolines and diesel fuels.

IPC 1-7

C10L 1/22; **C10L 1/18**

IPC 8 full level

C10L 1/14 (2006.01); **C10L 1/183** (2006.01); **C10L 1/22** (2006.01); **C10L 1/223** (2006.01); **C10L 10/08** (2006.01); **C10L 1/18** (2006.01); **C10L 1/24** (2006.01); **F02B 3/06** (2006.01)

CPC (source: EP)

C10L 1/14 (2013.01); **C10L 1/143** (2013.01); **C10L 1/1832** (2013.01); **C10L 1/1835** (2013.01); **C10L 1/223** (2013.01); **C10L 1/1852** (2013.01); **C10L 1/198** (2013.01); **C10L 1/2225** (2013.01); **C10L 1/232** (2013.01); **C10L 1/2406** (2013.01); **F02B 3/06** (2013.01)

Citation (search report)

- [X] FR 2528065 A1 19831209 - LUBRIZOL CORP [US]
- [X] US 3888776 A 19750610 - SILVERSTEIN JOSEPH J
- [XY] US 3463731 A 19690826 - ECKE GEORGE G, et al
- [XY] US 3839210 A 19741001 - BEISWANGER J, et al
- [Y] US 3944492 A 19760316 - WHEELER EDWARD L
- See references of WO 9422988A1

Designated contracting state (EPC)

AT BE DE FR GB IT NL SE

DOCDB simple family (publication)

WO 9422988 A1 19941013; AU 6528394 A 19941024; AU 689773 B2 19980409; EP 0693103 A1 19960124; EP 0693103 A4 19960320; JP H08508772 A 19960917

DOCDB simple family (application)

US 9403558 W 19940331; AU 6528394 A 19940331; EP 94912919 A 19940331; JP 52238594 A 19940331