

Title (en)

Heavy duty diesel engine lubricating oil compositions

Title (de)

Schmierölszusammensetzungen für Hochleistungs-Dieselmotor

Title (fr)

Compositions d'huiles lubrifiantes pour moteur diesel de grande puissance

Publication

EP 1323816 A1 20030702 (EN)

Application

EP 02258378 A 20021204

Priority

- EP 02258378 A 20021204
- EP 01310820 A 20011221

Abstract (en)

The use of an effective amount of one or more compounds capable of reducing friction coefficients under mixed lubrication or boundary lubrication conditions in a heavy duty diesel engine lubricating oil composition for improving the fuel economy of a heavy duty diesel engine.

IPC 1-7

C10M 163/00

IPC 8 full level

C10M 163/00 (2006.01)

CPC (source: EP)

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Citation (search report)

- [X] US 6010987 A 20000104 - STIEFEL EDWARD IRA [US], et al
- [X] US 6232279 B1 20010515 - STEIGERWALD EDGAR ANDREAS [DE]
- [X] WO 9928420 A1 19990610 - EXXON CHEMICAL PATENTS INC [US], et al
- [X] US 3290245 A 19661206 - SCOTCHFORD ELLIOTT JOHN, et al
- [X] WO 0071649 A1 20001130 - INFINEUM USA LP [US], et al
- [X] EP 1087008 A1 20010328 - INFINEUM INT LTD [GB]
- [X] US 4938883 A 19900703 - SLAMA FRANCIS J [US]
- [X] US 6331510 B1 20011218 - CURTIS THOMAS T [GB], et al
- [X] US 5719107 A 19980217 - OUTTEN EDWARD FRANCIS [US], et al
- [X] WO 0160957 A1 20010823 - EXXONMOBIL RES & ENG CO [US], et al
- [X] US 6329328 B1 20011211 - KOGANEI KATSUYA [JP], et al
- [PX] EP 1191089 A1 20020327 - INFINEUM INT LTD [GB]
- [E] EP 1262538 A2 20021204 - INFINEUM INT LTD [GB]
- [E] EP 1266953 A1 20021218 - INFINEUM INT LTD [GB]

Cited by

EP1386958A1; EP1683852A1; EP1512737A1

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

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