

Title (en)
LUBRICATING OIL COMPOSITION FOR DIESEL ENGINES

Title (de)
SCHMIERÖLZUSAMMENSETZUNG FÜR DIESELMOTOREN

Title (fr)
COMPOSITION D'HUILE LUBRIFIANTE POUR MOTEURS DIESEL

Publication
EP 2569404 B1 20200122 (EN)

Application
EP 11718753 A 20110511

Priority
• JP 2011104510 A 20110509
• JP 2010109425 A 20100511
• EP 2011057585 W 20110511

Abstract (en)
[origin: WO2011141495A1] Lubricating oil composition for use in diesel engines which comprises, in the base oil, not more than 0.3% by mass of sulphated ash, from 0.01 to 0.2% by mass of nitrogen in succinimides, from 0.05 to 0.12% by mass of zinc in zinc dithiophosphates, from 0.02 to 0.3% by mass of nitrogen in amine-based anti-oxidants, and from 0.01 to 0.08% by mass of boron, which further has a total value of [(zinc amount in zinc dithiophosphates) x (nitrogen amount in succinimides)] and [(zinc amount in zinc dithiophosphates) x (nitrogen amount in amine-based anti-oxidants)] as regards the aforementioned of from 0.015 to 0.06, and which does not contain salicylate, phenate or sulphonate metallic detergents. The intention is to obtain a lubricating oil composition for use in diesel engines which does not contain a metallic detergent yet maintains excellent engine (piston) detergency while preventing DPF clogging, and which reduces valve-train wear.

IPC 8 full level
C10M 141/12 (2006.01)

CPC (source: EP US)
C10M 141/12 (2013.01 - EP US); **C10M 2205/0225** (2013.01 - EP US); **C10M 2205/04** (2013.01 - EP US); **C10M 2205/173** (2013.01 - EP US); **C10M 2207/289** (2013.01 - EP US); **C10M 2209/084** (2013.01 - EP US); **C10M 2215/06** (2013.01 - EP US); **C10M 2215/064** (2013.01 - EP US); **C10M 2215/065** (2013.01 - EP US); **C10M 2215/066** (2013.01 - EP US); **C10M 2215/086** (2013.01 - EP US); **C10M 2215/223** (2013.01 - EP US); **C10M 2215/28** (2013.01 - EP US); **C10M 2223/045** (2013.01 - EP US); **C10M 2229/02** (2013.01 - EP US); **C10N 2030/04** (2013.01 - EP US); **C10N 2030/06** (2013.01 - EP US); **C10N 2030/10** (2013.01 - EP US); **C10N 2030/42** (2020.05 - EP US); **C10N 2030/43** (2020.05 - EP US); **C10N 2030/44** (2020.05 - EP US); **C10N 2030/45** (2020.05 - EP US); **C10N 2040/25** (2013.01 - EP US); **C10N 2040/252** (2020.05 - EP US); **C10N 2040/253** (2020.05 - EP US)

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)
WO 2011141495 A1 20111117; BR 112012028762 A2 20160719; CN 102939365 A 20130220; CN 102939365 B 20151125; EP 2569404 A1 20130320; EP 2569404 B1 20200122; ES 2776987 T3 20200803; JP 20111256374 A 20111222; JP 5687951 B2 20150325; RU 2012153201 A 20140620; RU 2560964 C2 20150820; US 2013267449 A1 20131010

DOCDB simple family (application)
EP 2011057585 W 20110511; BR 112012028762 A 20110511; CN 201180029999 A 20110511; EP 11718753 A 20110511; ES 11718753 T 20110511; JP 2011104510 A 20110509; RU 2012153201 A 20110511; US 201113696841 A 20110511