

Title (en)
LUBRICATING OIL COMPOSITION

Title (de)
SCHMIERÖLZUSAMMENSETZUNG

Title (fr)
COMPOSITION D'HUILE LUBRIFIANTE

Publication
EP 2067846 A1 20090610 (EN)

Application
EP 07828525 A 20070927

Priority
• JP 2007068779 W 20070927
• JP 2006265785 A 20060928

Abstract (en)
The lubricating oil composition contains a base oil; (A) an acidic alkyl phosphate ester having a C6 to C20 alkyl group; (B) a dialkylamine and/or a trialkylamine; and (C) (c-1) a sulfur compound in an amount of 0.2 to 0.6 mass% as reduced to S, the sulfur compound containing no poly-sulfur bond which is equal to or longer than -S-S-S- in a molecule thereof and having an S content of the molecule of 15 mass% or more and (c-2) an optional thiophosphoric acid trihydrocarbyl ester in an amount of 0.1 to 1.0 mass%, the ester being represented by formula (I): ##### (R-O-) 3 P=S#####(I) (wherein R represents a C6 to C20 hydrocarbyl group) and having a P content of the composition of 150 to 500 ppm by mass The lubricating oil composition has excellent anti-seizure performance, excellent anti-fatigue performance (e.g., anti-FZG-micropitting performance), and reduced sludge formation in an oxidation test.

IPC 8 full level
C10M 141/10 (2006.01); **C10M 169/04** (2006.01)

CPC (source: EP US)
C10M 141/10 (2013.01 - EP US); **C10M 169/04** (2013.01 - EP US); **C10M 2207/288** (2013.01 - EP US); **C10M 2207/289** (2013.01 - EP US); **C10M 2215/04** (2013.01 - EP US); **C10M 2215/044** (2013.01 - EP US); **C10M 2219/00** (2013.01 - EP US); **C10M 2219/022** (2013.01 - EP US); **C10M 2219/024** (2013.01 - EP US); **C10M 2219/066** (2013.01 - EP US); **C10M 2219/08** (2013.01 - EP US); **C10M 2219/082** (2013.01 - EP US); **C10M 2219/086** (2013.01 - EP US); **C10M 2219/104** (2013.01 - EP US); **C10M 2219/106** (2013.01 - EP US); **C10M 2223/04** (2013.01 - EP US); **C10M 2223/043** (2013.01 - EP US); **C10M 2223/047** (2013.01 - EP US); **C10N 2030/06** (2013.01 - EP US); **C10N 2030/10** (2013.01 - EP US); **C10N 2040/04** (2013.01 - EP US)

Cited by
EP2246412A4; EP2546324A4; US9029305B2; EP2771440A1; EP2428552B1

Designated contracting state (EPC)
BE DE ES GB

Designated extension state (EPC)
AL BA HR MK RS

DOCDB simple family (publication)
EP 2067846 A1 20090610; **EP 2067846 A4 20110302**; **EP 2067846 B1 20120321**; CN 101517056 A 20090826; CN 101517056 B 20121114; ES 2384584 T3 20120709; IN 1716CHN2009 A 20150710; JP 2014012855 A 20140123; JP 5373400 B2 20131218; JP 5710720 B2 20150430; JP WO2008038701 A1 20100128; US 2010009880 A1 20100114; US 2014051618 A1 20140220; WO 2008038701 A1 20080403

DOCDB simple family (application)
EP 07828525 A 20070927; CN 200780036025 A 20070927; ES 07828525 T 20070927; IN 1716CHN2009 A 20090326; JP 2007068779 W 20070927; JP 2008536419 A 20070927; JP 2013194438 A 20130919; US 201314063368 A 20131025; US 44318507 A 20070927