

Title (en)
LUBRICANT OIL COMPOSITION FOR INTERNAL COMBUSTION ENGINE

Title (de)
SCHMIERÖLZUSAMMENSETZUNG FÜR EINEN VERBRENNUNGSMOTOR

Title (fr)
COMPOSITION D'HUILE LUBRIFIANTE POUR MOTEUR À COMBUSTION INTERNE

Publication
EP 3037505 A1 20160629 (EN)

Application
EP 14835748 A 20140813

Priority

- JP 2013169118 A 20130816
- JP 2014071388 W 20140813

Abstract (en)
A lubricant oil composition for internal combustion engines with which further reduction of friction can be achieved to provide excellent fuel efficiency is provided. (A) A lubricant oil base oil having a kinematic viscosity at 100°C of 2.0 to 5.0 mm²/s; (B) a molybdenum-based friction modifier in an amount of 0.005 to 0.2 mass% in terms of the mass of the molybdenum relative to the total mass of the composition; (C) a metal-based detergent in an amount of 0.01 to 1 mass% in terms of the mass of the metal relative to the total mass of the composition; and (D) 0.01 to 10 mass% of at least one compound selected from amino acids having a C 6-24 alkyl, alkenyl, or acyl group, and/or derivatives of the amino acids.

IPC 8 full level
C10M 163/00 (2006.01); **C10M 169/04** (2006.01); **C10N 10/04** (2006.01); **C10N 10/12** (2006.01); **C10N 20/02** (2006.01); **C10N 20/04** (2006.01); **C10N 30/00** (2006.01); **C10N 30/06** (2006.01); **C10N 40/25** (2006.01); **C10N 60/14** (2006.01)

CPC (source: EP US)
C10M 101/02 (2013.01 - US); **C10M 129/54** (2013.01 - US); **C10M 133/18** (2013.01 - US); **C10M 135/18** (2013.01 - US); **C10M 137/10** (2013.01 - US); **C10M 163/00** (2013.01 - EP US); **C10M 169/04** (2013.01 - US); **C10M 169/045** (2013.01 - EP US); **C10M 2203/1025** (2013.01 - EP US); **C10M 2207/125** (2013.01 - EP US); **C10M 2207/262** (2013.01 - EP US); **C10M 2207/289** (2013.01 - EP US); **C10M 2209/084** (2013.01 - EP US); **C10M 2215/04** (2013.01 - EP US); **C10M 2215/042** (2013.01 - EP US); **C10M 2215/08** (2013.01 - EP US); **C10M 2215/082** (2013.01 - EP US); **C10M 2215/102** (2013.01 - EP US); **C10M 2215/28** (2013.01 - EP US); **C10M 2219/068** (2013.01 - EP US); **C10M 2223/045** (2013.01 - EP US); **C10M 2229/041** (2013.01 - EP US); **C10N 2010/12** (2013.01 - EP US); **C10N 2020/02** (2013.01 - EP US); **C10N 2020/04** (2013.01 - EP US); **C10N 2030/06** (2013.01 - EP US); **C10N 2030/52** (2020.05 - EP US); **C10N 2030/54** (2020.05 - EP US); **C10N 2040/25** (2013.01 - EP US); **C10N 2040/252** (2020.05 - EP US); **C10N 2040/255** (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

Designated extension state (EPC)
BA ME

DOCDB simple family (publication)
EP 3037505 A1 20160629; **EP 3037505 A4 20170118**; CA 2921209 A1 20150219; CN 105452427 A 20160330; CN 105452427 B 20180410; JP 6270226 B2 20180131; JP WO2015022976 A1 20170302; KR 102075820 B1 20200210; KR 20160042909 A 20160420; MX 2016001860 A 20160516; US 2016152920 A1 20160602; WO 2015022976 A1 20150219

DOCDB simple family (application)
EP 14835748 A 20140813; CA 2921209 A 20140813; CN 201480041176 A 20140813; JP 2014071388 W 20140813; JP 2015531829 A 20140813; KR 20167004328 A 20140813; MX 2016001860 A 20140813; US 201414904496 A 20140813