

Title (en)

LUBRICATING OIL COMPOSITION FOR SPARK-IGNITION INTERNAL COMBUSTION ENGINE

Title (de)

SCHMIERÖLZUSAMMENSETZUNG FÜR EINEN VERBRENNUNGSMOTOR MIT FUNKENZÜNDUNG

Title (fr)

COMPOSITION D'HUILE LUBRIFIANTE POUR MOTEUR À COMBUSTION INTERNE À ALLUMAGE COMMANDÉ

Publication

EP 3075821 A1 20161005 (EN)

Application

EP 14864482 A 20141125

Priority

- JP 2013243396 A 20131125
- JP 2014081125 W 20141125

Abstract (en)

The lubricating oil composition for spark-ignition internal combustion engine according to the present invention is a lubricating oil composition to be used for a spark-ignition internal combustion engine including a piston having a piston ring, in which a total tension per piston of tensions applied to the piston ring is 30 N or less, the lubricating oil composition being a lubricating oil composition comprising a base oil, (A) an organic metal-based additive containing an alkali metal and/or an alkaline earth metal, and (B) an organic zinc-based additive, wherein a concentration of the component (A) on a basis of the total amount of the lubricating oil composition is 0.15% by mass or less as converted into a metal content; a concentration of the component (B) on a basis of the total amount of the lubricating oil composition is 0.15% by mass or less as converted into a zinc content; the product of the concentration (% by mass) of the component (A) and a base number (mgKOH/g) of the lubricating oil composition is 1.3 or less; the product of the concentration (% by mass) of the component (B) and an acid number (mgKOH/g) of the lubricating oil composition is 1.2 or less; and the lubricating oil composition has a Noack evaporation loss of 10% by mass or more and a kinematic viscosity at 100°C of 9.3 mm²/s or less. The lubricating oil composition for spark-ignition internal combustion engine according to the present invention is capable of preventing a deterioration of the combustion state of a spark-ignition internal combustion engine.

IPC 8 full level

C10M 171/00 (2006.01); **C10M 137/10** (2006.01); **C10M 139/00** (2006.01); **C10M 141/12** (2006.01); **C10N 10/02** (2006.01); **C10N 10/04** (2006.01); **C10N 10/12** (2006.01); **C10N 20/00** (2006.01); **C10N 20/02** (2006.01); **C10N 30/00** (2006.01); **C10N 40/25** (2006.01)

CPC (source: EP KR US)

C10M 163/00 (2013.01 - EP KR US); **C10M 169/04** (2013.01 - US); **C10M 2203/022** (2013.01 - US); **C10M 2207/026** (2013.01 - EP KR US); **C10M 2207/027** (2013.01 - US); **C10M 2207/262** (2013.01 - EP KR US); **C10M 2209/084** (2013.01 - EP KR US); **C10M 2215/064** (2013.01 - EP KR US); **C10M 2215/28** (2013.01 - EP KR US); **C10M 2219/068** (2013.01 - EP KR US); **C10M 2223/045** (2013.01 - EP KR US); **C10M 2229/02** (2013.01 - EP KR US); **C10N 2010/02** (2013.01 - EP KR US); **C10N 2010/04** (2013.01 - EP KR US); **C10N 2010/12** (2013.01 - EP US); **C10N 2020/02** (2013.01 - EP US); **C10N 2030/00** (2013.01 - EP US); **C10N 2030/02** (2013.01 - EP US); **C10N 2030/52** (2020.05 - US); **C10N 2030/74** (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 3075821 A1 20161005; **EP 3075821 A4 20170809**; CN 105722964 A 20160629; JP WO2015076417 A1 20170316;
KR 20160090296 A 20160729; US 2016304802 A1 20161020; WO 2015076417 A1 20150528

DOCDB simple family (application)

EP 14864482 A 20141125; CN 201480062612 A 20141125; JP 2014081125 W 20141125; JP 2015549228 A 20141125;
KR 20167013190 A 20141125; US 201415038662 A 20141125