

Title (en)

Lubricating oil composition for automobile engine lubrication

Title (de)

Schmierölzusammensetzung für die Schmierung eines Automotors

Title (fr)

Composition d'huile lubrifiante pour la lubrification d'un moteur automobile

Publication

EP 2636725 B1 20190508 (EN)

Application

EP 13157940 A 20130306

Priority

JP 2012051849 A 20120308

Abstract (en)

[origin: EP2636725A1] Provided is a lubricating oil composition that is highly fuel-efficient and has high wear resistance and is particularly suited for lubrication of a motorcycle four-cycle gasoline engine or a diesel engine vehicle having an exhaust gas after-treatment device. The lubricating oil composition, which is a lubricating oil composition having an SAE viscosity grade of 5W20, comprises a base oil and predetermined amounts of additive components comprising of a nitrogen-containing ash-free dispersant, an alkali earth metal-containing detergent, a phosphorus-containing anti-wear agent, an antioxidant, and a viscosity index-improving agent, wherein the viscosity index is within a range of 140 to 230, the high-shear viscosity at 150 °C is 2.9 mPa·s or higher, and the NOACK evaporation loss is 13% or less.

IPC 8 full level

C10M 171/02 (2006.01); **C10N 30/06** (2006.01); **C10N 40/25** (2006.01)

CPC (source: EP KR US)

C10M 125/20 (2013.01 - KR); **C10M 125/24** (2013.01 - KR); **C10M 161/00** (2013.01 - US); **C10M 169/06** (2013.01 - KR); **C10M 171/02** (2013.01 - EP US); **C10M 2203/1025** (2013.01 - EP US); **C10M 2205/022** (2013.01 - EP US); **C10M 2205/163** (2013.01 - EP US); **C10M 2205/173** (2013.01 - EP US); **C10M 2207/026** (2013.01 - EP US); **C10M 2207/028** (2013.01 - EP US); **C10M 2209/084** (2013.01 - EP US); **C10M 2215/064** (2013.01 - EP US); **C10M 2215/28** (2013.01 - EP US); **C10M 2219/022** (2013.01 - EP US); **C10M 2219/046** (2013.01 - EP US); **C10M 2223/045** (2013.01 - EP US); **C10N 2010/12** (2013.01 - EP US); **C10N 2030/06** (2013.01 - EP US); **C10N 2030/54** (2020.05 - EP US); **C10N 2030/68** (2020.05 - EP US); **C10N 2030/74** (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)

C-Set (source: EP US)

EP

1. **C10M 2205/022 + C10M 2205/024**
2. **C10M 2203/1025 + C10N 2020/02**
3. **C10M 2207/028 + C10N 2010/04**
4. **C10M 2219/046 + C10N 2010/04**
5. **C10M 2223/045 + C10N 2010/04**
6. **C10M 2215/28 + C10N 2060/14**

US

1. **C10M 2203/1025 + C10N 2020/02**
2. **C10M 2215/28 + C10N 2060/14**
3. **C10M 2207/028 + C10N 2010/04**
4. **C10M 2219/046 + C10N 2010/04**
5. **C10M 2223/045 + C10N 2010/04**
6. **C10M 2205/022 + C10M 2205/024**

Cited by

WO2019002993A1

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)

EP 2636725 A1 20130911; **EP 2636725 B1 20190508**; CA 2808765 A1 20130908; CN 103305318 A 20130918; JP 2013185087 A 20130919; JP 5902005 B2 20160413; KR 101968322 B1 20190813; KR 20130103388 A 20130923; PH 12013000076 A1 20141124; PH 12013000076 B1 20141124; SG 10201507189W A 20151029; SG 193720 A1 20131030; US 2013237465 A1 20130912; US 2015175929 A1 20150625

DOCDB simple family (application)

EP 13157940 A 20130306; CA 2808765 A 20130306; CN 201310146101 A 20130306; JP 2012051849 A 20120308; KR 20130023829 A 20130306; PH 12013000076 A 20130306; SG 10201507189W A 20130306; SG 2013016506 A 20130306; US 201313786555 A 20130306; US 201514636978 A 20150303