

Title (en)

Internal-combustion engine lubricant composition

Title (de)

Schmiermittelzusammensetzung für einen Verbrennungsmotor

Title (fr)

Composition de lubrifiant de moteur à combustion interne

Publication

**EP 1985690 A2 20081029 (EN)**

Application

**EP 08155234 A 20080425**

Priority

JP 2007119824 A 20070427

Abstract (en)

[PROBLEMS TO BE SOLVED BY THE INVENTION] To provide a lubricating oil composition excellent in cleanability at high temperature around a piston in spite of its superlow-ash composition substantially free of ashes derived from a metal-base detergent, which cannot be realized by conventional techniques. [MEANS FOR SOLVING THE PROBLEMS] The lubricating oil composition for internal combustion engines, containing the GCD550°C + heavy fraction at 6% by volume or more, and having a sulfated ash content of 0.6% by mass or less and content of an additive containing a boron-base compound of 0.02% by mass or more as boron.

IPC 8 full level

**C10M 163/00** (2006.01); **C10M 169/04** (2006.01)

CPC (source: EP)

**C10M 163/00** (2013.01); **C10M 169/048** (2013.01); **C10M 2201/087** (2013.01); **C10M 2203/10** (2013.01); **C10M 2203/1006** (2013.01);  
**C10M 2205/02** (2013.01); **C10M 2205/0206** (2013.01); **C10M 2207/2835** (2013.01); **C10M 2209/084** (2013.01); **C10M 2215/28** (2013.01);  
**C10M 2229/02** (2013.01); **C10N 2010/04** (2013.01); **C10N 2030/02** (2013.01); **C10N 2030/04** (2013.01); **C10N 2030/10** (2013.01);  
**C10N 2030/45** (2020.05); **C10N 2030/68** (2020.05)

C-Set (source: EP)

1. **C10M 2201/087 + C10N 2010/02**
2. **C10M 2203/10 + C10N 2020/01**
3. **C10M 2203/1006 + C10N 2020/02**
4. **C10M 2215/28 + C10N 2060/14**

Citation (applicant)

- JP H08253782 A 19961001 - IDEMITSU KOSAN CO [JP]
- JP H09111275 A 19970428 - NIPPON OIL CO LTD
- JP 2002060776 A 20020226 - IDEMITSU KOSAN CO
- JP 2004035652 A 20040205 - COSMO SEKIYU LUBRICANTS KK
- JP 2003201496 A 20030718 - PETROLEUM ENERGY CENTER FOUND, et al

Cited by

CN106318553A; EP2835414A4; US2011247578A1; US2014100149A1; CN106318554A; US9388361B2; US9404062B2; WO2020123438A1;  
WO2010050871A1; WO2024137363A1; TWI624587B

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MT NL NO PL PT RO SE SI SK TR

Designated extension state (EPC)

AL BA MK RS

DOCDB simple family (publication)

**EP 1985690 A2 20081029; EP 1985690 A3 20111228**; JP 2008274128 A 20081113; JP 5406433 B2 20140205

DOCDB simple family (application)

**EP 08155234 A 20080425**; JP 2007119824 A 20070427