

Title (en)
Use of a lubricating oil composition

Title (de)
Verwendung einer Schmierölsammensetzung

Title (fr)
Utilisation d'une composition d'huile lubrifiante

Publication
EP 2083063 B1 20120314 (EN)

Application
EP 09150505 A 20090114

Priority
US 1738508 A 20080122

Abstract (en)
[origin: EP2083063A1] SAE 0W and SAE 5W multigrade crankcase lubricating oil compositions for heavy duty diesel (HDD) engines meeting the performance requirements of at least one of the API CJ-4; API-CI-4, and/or ACEA E7 specifications, having a sulfated ash content of no greater than 1.0 mass %, a sulfur content of no greater than 0.4 mass %, and a phosphorus content of no greater than 0.12 mass %, formulated with a major amount of oil of lubricating viscosity including less than about 30 mass %, based on the total mass of oil of lubricating viscosity, of Group IV and/or Group V base stock, at least 0.3 mass %, of a non-hydrogenated olefin polymer; and greater than about 40 ppm of boron.

IPC 8 full level
C10M 167/00 (2006.01)

CPC (source: EP US)
C10M 167/00 (2013.01 - EP US); **C10M 2203/1025** (2013.01 - EP US); **C10M 2205/026** (2013.01 - EP US); **C10M 2207/028** (2013.01 - EP US); **C10M 2219/046** (2013.01 - EP US); **C10M 2219/068** (2013.01 - EP US); **C10M 2223/045** (2013.01 - EP US); **C10N 2010/04** (2013.01 - EP US); **C10N 2020/04** (2013.01 - EP US); **C10N 2030/06** (2013.01 - EP US); **C10N 2030/42** (2020.05 - EP US); **C10N 2030/43** (2020.05 - EP US); **C10N 2030/44** (2020.05 - EP US); **C10N 2030/45** (2020.05 - EP US); **C10N 2030/52** (2020.05 - EP US); **C10N 2040/252** (2020.05 - EP US); **C10N 2060/14** (2013.01 - EP US)

C-Set (source: EP US)
EP
1. **C10M 2219/068 + C10N 2010/12**
2. **C10M 2223/045 + C10N 2010/04**
3. **C10M 2219/046 + C10N 2010/04**
4. **C10M 2207/028 + C10N 2010/04**
5. **C10M 2203/1025 + C10N 2020/02**
US
1. **C10M 2203/1025 + C10N 2020/02**
2. **C10M 2223/045 + C10N 2010/04**
3. **C10M 2219/068 + C10N 2010/12**
4. **C10M 2219/046 + C10N 2010/04**
5. **C10M 2207/028 + C10N 2010/04**

Cited by
WO2017148835A1; US11268044B2

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 MK MT NL NO PL PT RO SE SI SK TR

DOCDB simple family (publication)
EP 2083063 A1 20090729; EP 2083063 B1 20120314; AT E549389 T1 20120315; CA 2650354 A1 20090722; CN 101492631 A 20090729; JP 2009197230 A 20090903; SG 154416 A1 20090828; US 2009186784 A1 20090723

DOCDB simple family (application)
EP 09150505 A 20090114; AT 09150505 T 20090114; CA 2650354 A 20090121; CN 200910003255 A 20090121; JP 2009033193 A 20090122; SG 2009004474 A 20090121; US 1738508 A 20080122