

Title (en)  
LUBRICANT COMPOSITION

Title (de)  
SCHMIERMITTELZUSAMMENSETZUNG

Title (fr)  
COMPOSITION LUBRIFIANTE

Publication  
**EP 2248876 A4 20111012 (EN)**

Application  
**EP 09710998 A 20090210**

Priority  
• JP 2009052219 W 20090210  
• JP 2008033313 A 20080214

Abstract (en)  
[origin: EP2248876A1] A lubricating oil composition is used in an internal combustion engine that uses a fuel containing at least one fat and oil of natural fat and oil, hydrotreated natural fat and oil, transesterified natural fat and oil and hydrotreated transesterified natural fat and oil. A sulfur compound containing at least one -C-S-C-bond is added to base oil. A content of sulfur contained in the -C-S-C-bond is 0.3 mass% or less based on a total amount of the compound.

IPC 8 full level  
**C10M 135/00** (2006.01); **C10M 129/10** (2006.01); **C10M 133/12** (2006.01); **C10M 135/18** (2006.01); **C10M 135/22** (2006.01); **C10M 159/22** (2006.01); **C10M 159/24** (2006.01); **C10M 163/00** (2006.01); **C10M 169/04** (2006.01); **C10N 10/04** (2006.01); **C10N 30/12** (2006.01); **C10N 40/25** (2006.01)

CPC (source: EP US)  
**C10M 135/00** (2013.01 - EP US); **C10M 163/00** (2013.01 - EP US); **C10M 2203/1025** (2013.01 - EP US); **C10M 2207/026** (2013.01 - EP US); **C10M 2207/262** (2013.01 - EP US); **C10M 2207/2815** (2013.01 - EP US); **C10M 2207/401** (2013.01 - EP US); **C10M 2209/084** (2013.01 - EP US); **C10M 2215/064** (2013.01 - EP US); **C10M 2215/086** (2013.01 - EP US); **C10M 2215/223** (2013.01 - EP US); **C10M 2215/24** (2013.01 - EP US); **C10M 2215/28** (2013.01 - EP US); **C10M 2219/06** (2013.01 - EP US); **C10M 2219/066** (2013.01 - EP US); **C10M 2219/068** (2013.01 - EP US); **C10M 2219/08** (2013.01 - EP US); **C10M 2219/082** (2013.01 - EP US); **C10M 2223/045** (2013.01 - EP US); **C10M 2229/02** (2013.01 - EP US); **C10N 2010/04** (2013.01 - EP US); **C10N 2030/12** (2013.01 - EP US); **C10N 2030/42** (2020.05 - EP US); **C10N 2030/45** (2020.05 - EP US); **C10N 2030/78** (2020.05 - EP US); **C10N 2040/252** (2020.05 - EP US); **C10N 2060/02** (2013.01 - EP US)

C-Set (source: EP US)  
1. **C10M 2207/026 + C10M 2207/281**  
2. **C10M 2207/026 + C10M 2207/283**  
3. **C10M 2207/262 + C10N 2010/04**  
4. **C10M 2223/045 + C10N 2010/04**

Citation (search report)  
• [X] EP 1104800 A2 20010606 - ORONITE JAPAN LTD [JP]  
• [X] WO 2007044820 A1 20070419 - LUBRIZOL CORP [US], et al  
• [A] GARY M PARSONS: "Biodiesel and Engine Lubrication Part 2", INTERNET CITATION, December 2007 (2007-12-01), pages 1 - 16, XP002558102, Retrieved from the Internet <URL:http://www.ehwwolf.com/Oct\_07\_Lubrication\_Mag\_P2\_(biodiesel).pdf> [retrieved on 20091127]  
• See references of WO 2009101933A1

Cited by  
EP2392637A4; CN103517972A; CN103695100A; EP2692840A1; JP2014031514A; US9347018B2; EP2816098A1; US9080126B2; WO2012158595A1

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 2248876 A1 20101110**; **EP 2248876 A4 20111012**; **EP 2248876 B1 20140101**; CN 101945982 A 20110112; JP 2009191165 A 20090827; JP 5571290 B2 20140813; KR 20100124761 A 20101129; TW 200951213 A 20091216; TW I441914 B 20140621; US 2011003723 A1 20110106; WO 2009101933 A1 20090820

DOCDB simple family (application)  
**EP 09710998 A 20090210**; CN 200980105375 A 20090210; JP 2008033313 A 20080214; JP 2009052219 W 20090210; KR 20107020361 A 20090210; TW 98104503 A 20090212; US 86768509 A 20090210