

Title (en)  
LUBRICATING OIL COMPOSITION

Title (de)  
SCHMIERÖLZUSAMMENSETZUNG

Title (fr)  
COMPOSITION D'HUILE LUBRIFIANTE

Publication  
**EP 1428866 B1 20120523 (EN)**

Application  
**EP 02798810 A 20020906**

Priority  
• JP 0209123 W 20020906  
• JP 2001282319 A 20010917

Abstract (en)  
[origin: EP1428866A1] Lubricating oil compositions particularly suitable for automatic transmissions comprising a lubricating base oil, (A) a boron-containing ashless dispersant in an amount of 0.004 to 0.05 percent by mass in terms of boron, based on the total mass of the composition, (B) an alkaline earth metal-based detergent with a base number of 0 to 500 mgKOH/g in an amount of 0.01 percent by mass or more in terms of an alkaline earth metal, based on the total mass of the composition, and (C) a sulfur-based additive in an amount of 0.01 to 0.3 percent by mass in terms of sulfur, based on the total mass of the composition and having excellent anti-wear properties and improved fatigue life by inhibiting pitching.

IPC 8 full level  
**C10M 163/00** (2006.01); **C10M 169/04** (2006.01); **C10M 129/10** (2006.01); **C10M 129/54** (2006.01); **C10M 135/00** (2006.01); **C10M 135/06** (2006.01); **C10M 135/10** (2006.01); **C10M 135/18** (2006.01); **C10M 135/20** (2006.01); **C10M 135/32** (2006.01); **C10M 135/36** (2006.01); **C10M 139/00** (2006.01); **C10M 155/04** (2006.01); **C10M 159/20** (2006.01); **C10M 159/22** (2006.01); **C10M 159/24** (2006.01); **C10M 167/00** (2006.01); **C10N 10/04** (2006.01); **C10N 10/12** (2006.01); **C10N 20/00** (2006.01); **C10N 30/00** (2006.01); **C10N 30/06** (2006.01); **C10N 40/00** (2006.01); **C10N 40/04** (2006.01); **C10N 40/12** (2006.01); **C10N 40/25** (2006.01); **C10N 40/30** (2006.01)

CPC (source: EP US)  
**C10M 163/00** (2013.01 - EP US); **C10M 167/00** (2013.01 - EP US); **C10M 2207/26** (2013.01 - EP US); **C10M 2207/262** (2013.01 - EP US); **C10M 2209/084** (2013.01 - EP US); **C10M 2215/28** (2013.01 - EP US); **C10M 2219/02** (2013.01 - EP US); **C10M 2219/024** (2013.01 - EP US); **C10M 2219/046** (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 2219/104** (2013.01 - EP US); **C10M 2219/106** (2013.01 - EP US); **C10M 2223/045** (2013.01 - EP US); **C10N 2010/04** (2013.01 - EP US); **C10N 2010/12** (2013.01 - EP US); **C10N 2030/00** (2013.01 - EP US); **C10N 2030/06** (2013.01 - EP US); **C10N 2040/042** (2020.05 - EP US); **C10N 2060/14** (2013.01 - EP US)

Cited by  
EP2913384A1; EP1624043A3; US2021071309A1; US11987892B2; EP1422287B1

Designated contracting state (EPC)  
DE FR GB

DOCDB simple family (publication)  
**EP 1428866 A1 20040616**; **EP 1428866 A4 20090603**; **EP 1428866 B1 20120523**; CN 1273571 C 20060906; CN 1653167 A 20050810; JP 2003082377 A 20030319; JP 5283297 B2 20130904; US 2004171500 A1 20040902; WO 03025104 A1 20030327

DOCDB simple family (application)  
**EP 02798810 A 20020906**; CN 02818165 A 20020906; JP 0209123 W 20020906; JP 2001282319 A 20010917; US 79738704 A 20040310