

Title (en)
LUBRICATING OIL ADDITIVE AND LUBRICATING OIL COMPOSITION

Title (de)
SCHMIERÖLADDITIV UND SCHMIERÖLZUSAMMENSETZUNG

Title (fr)
ADDITIF POUR HUILE LUBRIFIANTE ET COMPOSITION D'HUILE LUBRIFIANTE

Publication
EP 1686168 A4 20080604 (EN)

Application
EP 04773710 A 20041004

Priority
• JP 2004014976 W 20041004
• JP 2003350600 A 20031009

Abstract (en)
[origin: EP1686168A1] The present invention is directed to a lubricating oil additive containing a reaction product of a succinimide compound and a phosphorus atom-containing compound, and to a lubricating oil composition containing a mineral oil and/or a synthetic base oil, and the above lubricating oil additive.

IPC 8 full level
C10M 159/12 (2006.01); **C10M 125/24** (2006.01); **C10M 133/16** (2006.01); **C10M 137/00** (2006.01); **C10M 139/00** (2006.01); **C10N 30/06** (2006.01); **C10N 40/04** (2006.01); **C10N 40/08** (2006.01)

CPC (source: EP US)
C10M 159/12 (2013.01 - EP US); **C10M 159/123** (2013.01 - EP US); **C10M 2201/085** (2013.01 - EP US); **C10M 2203/1006** (2013.01 - EP US); **C10M 2207/026** (2013.01 - EP US); **C10M 2207/289** (2013.01 - EP US); **C10M 2209/084** (2013.01 - EP US); **C10M 2215/06** (2013.01 - EP US); **C10M 2215/064** (2013.01 - EP US); **C10M 2215/08** (2013.01 - EP US); **C10M 2215/28** (2013.01 - EP US); **C10M 2219/044** (2013.01 - EP US); **C10M 2219/106** (2013.01 - EP US); **C10M 2223/00** (2013.01 - EP US); **C10M 2223/04** (2013.01 - EP US); **C10M 2223/045** (2013.01 - EP US); **C10M 2223/047** (2013.01 - EP US); **C10M 2223/049** (2013.01 - EP US); **C10M 2223/065** (2013.01 - EP US); **C10M 2223/12** (2013.01 - EP US); **C10M 2227/00** (2013.01 - EP US); **C10M 2229/02** (2013.01 - EP US); **C10N 2020/04** (2013.01 - EP US); **C10N 2030/00** (2013.01 - EP US); **C10N 2030/06** (2013.01 - EP US); **C10N 2040/04** (2013.01 - EP US); **C10N 2040/042** (2020.05 - EP US); **C10N 2040/045** (2020.05 - EP US); **C10N 2040/08** (2013.01 - EP US); **C10N 2060/00** (2013.01 - EP US)

Citation (search report)
• [X] EP 1142983 A1 20011010 - IDEMITSU KOSAN CO [JP], et al
• [X] US 6534451 B1 20030318 - WATTS RAYMOND F [US], et al
• [E] EP 1516911 A1 20050323 - NIPPON OIL CORP [JP]
• [X] US 5505868 A 19960409 - RYAN HELEN T [GB], et al
• [X] US 4028258 A 19770607 - KABLAOUI MAHMOUD S, et al
• See references of WO 2005035701A1

Cited by
EP2145941A4; EP3072949A1; US8557751B2

Designated contracting state (EPC)
DE FR GB

DOCDB simple family (publication)
EP 1686168 A1 20060802; **EP 1686168 A4 20080604**; JP 4734117 B2 20110727; JP WO2005035701 A1 20061221; US 2007042918 A1 20070222; WO 2005035701 A1 20050421

DOCDB simple family (application)
EP 04773710 A 20041004; JP 2004014976 W 20041004; JP 2005514624 A 20041004; US 57484304 A 20041004