

Title (en)

ADDITIVE FOR LUBRICATING OILS AND LUBRICATING OIL COMPOSITION

Title (de)

ZUSATZ FÜR SCHMIERÖLE UND SCHMIERÖLZUSAMMENSETZUNG

Title (fr)

ADDITIF POUR HUILES DE GRAISSAGE ET COMPOSITION D'HUILE DE GRAISSAGE

Publication

**EP 2778216 A4 20150304 (EN)**

Application

**EP 12794008 A 20120507**

Priority

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- JP 2012061681 W 20120507

Abstract (en)

[origin: US2014100147A1] A lubricant additive containing (A) a nitrogen-containing compound represented by the general formula (1) and (B) a borate ester compound represented by the general formula (2) and/or a borate ester compound represented by the general formula (3); and a lubricant oil composition containing the lubricant additive and a lubricant base oil, the lubricant additive and the lubricant oil composition containing an oiliness agent-type friction modifier that can exhibit a better friction reduction effect than that of conventional oiliness agent-type friction modifiers under a wider range of friction conditions.

IPC 8 full level

**C10M 141/12** (2006.01); **C10M 107/02** (2006.01); **C10M 133/20** (2006.01); **C10M 139/00** (2006.01); **C10N 40/04** (2006.01); **C10N 40/25** (2006.01)

CPC (source: EP US)

**C10M 141/12** (2013.01 - EP US); **C10M 2205/0285** (2013.01 - EP US); **C10M 2215/08** (2013.01 - EP US); **C10M 2215/102** (2013.01 - EP US); **C10M 2219/068** (2013.01 - EP US); **C10M 2223/045** (2013.01 - EP US); **C10M 2227/061** (2013.01 - EP US); **C10N 2030/06** (2013.01 - EP US); **C10N 2030/54** (2020.05 - EP US); **C10N 2040/02** (2013.01 - EP US); **C10N 2040/042** (2020.05 - EP US); **C10N 2040/045** (2020.05 - EP US); **C10N 2040/25** (2013.01 - EP US)

Citation (search report)

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- [X] US 2005250655 A1 20051110 - ADAMS PAUL E [US], et al
- [Y] US 4280916 A 19810728 - RICHARDS HARRY F, et al
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Designated contracting state (EPC)

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DOCDB simple family (publication)

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DOCDB simple family (application)

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