

Title (en)

Lubricating oil composition having improved oxidation stability at high temperatures

Title (de)

Schmiermittelzusammensetzung mit verbesserter Oxidationsstabilität bei hohen Temperaturen

Title (fr)

Composition d'huile lubrifiante à stabilité à l'oxydation améliorée à haute température

Publication

EP 1676902 B1 20190320 (EN)

Application

EP 05258039 A 20051223

Priority

JP 2004380522 A 20041228

Abstract (en)

[origin: EP1676902A1] A lubricating oil composition having a TBN in the range of 5 to 55 mg KOH/g and containing a major amount of a base oil of lubricating viscosity and a) 0.19 to 2.10 wt %, based on the total amount of the lubricating oil composition, of an overbased calcium carboxylate having a TBN of 100 mg KOH/g or more, wherein the wt % is expressed in terms of the calcium content; b) 0.002 to 0.06 wt %, based on the total amount of the lubricating oil composition, of a bis-succinimide compound, wherein the wt % is expressed in terms of the nitrogen content; and c) 0.007 to 0.15 wt %, based on the total amount of the lubricating oil composition, of a zinc dialkylthiophosphate having a secondary alkyl group, wherein the wt % is expressed in terms of the phosphorus content.

IPC 8 full level

C10M 141/10 (2006.01); **C10M 163/00** (2006.01)

CPC (source: EP)

C10M 141/10 (2013.01); **C10M 163/00** (2013.01); **C10M 2207/26** (2013.01); **C10M 2207/262** (2013.01); **C10M 2215/28** (2013.01);
C10M 2223/045 (2013.01); **C10N 2030/08** (2013.01); **C10N 2030/10** (2013.01); **C10N 2030/42** (2020.05); **C10N 2030/52** (2020.05);
C10N 2040/252 (2020.05)

Citation (examination)

- JP 2002220597 A 20020809 - NISSAN MOTOR, et al
- EP 1736529 A1 20061227 - NIPPON OIL CORP [JP], et al

Cited by

EP2791295A4; US9528068B2; WO2012112658A1

Designated contracting state (EPC)

DE FR GB NL

DOCDB simple family (publication)

EP 1676902 A1 20060705; EP 1676902 B1 20190320; CA 2531433 A1 20060628; CA 2531433 C 20140218; JP 2006182987 A 20060713;
JP 5198719 B2 20130515; SG 123779 A1 20060726

DOCDB simple family (application)

EP 05258039 A 20051223; CA 2531433 A 20051223; JP 2004380522 A 20041228; SG 200508401 A 20051227