

Title (en)

LONG-LIFE FUEL-SAVING ENGINE OIL COMPOSITION

Title (de)

LANGLEBIGE KRAFTSTOFFSPARENDE MOTORENÖLZUSAMMENSETZUNG

Title (fr)

COMPOSITION D'HUILE POUR MOTEUR A LONGUE DUREE DE VIE ET PERMETTANT D'ECONOMISER DU CARBURANT

Publication

**EP 1878784 B1 20121219 (EN)**

Application

**EP 06731987 A 20060417**

Priority

- JP 2006308058 W 20060417
- JP 2005122372 A 20050420

Abstract (en)

[origin: EP1878784A1] A long-life fuel-saving engine oil composition which comprises a mineral and/or synthetic base oil; an amine antioxidant and a phenolic antioxidant added to the oil in a total amount of 1.2 mass % or larger in which the ratio of the mass amount of nitrogen (N) contained in the amine antioxidant to the mass amount of oxygen (O) contained in the phenolic antioxidant, (N/O), is 0.20-0.50; and MoDTC incorporated in an amount of 0.055 mass % or larger as molybdenum element amount. There is provided the long-life fuel-saving engine oil composition which has excellent oxidative stability at high temperatures and retains low-frictional properties over long.

IPC 8 full level

**C10M 141/08** (2006.01); **C10M 129/76** (2006.01); **C10M 133/12** (2006.01); **C10M 135/18** (2006.01); **C10N 10/12** (2006.01); **C10N 30/06** (2006.01); **C10N 30/08** (2006.01); **C10N 30/10** (2006.01); **C10N 40/25** (2006.01)

CPC (source: EP)

**C10M 141/08** (2013.01); **C10M 2203/1006** (2013.01); **C10M 2207/026** (2013.01); **C10M 2207/289** (2013.01); **C10M 2215/064** (2013.01); **C10M 2215/065** (2013.01); **C10M 2219/068** (2013.01); **C10N 2010/12** (2013.01); **C10N 2030/06** (2013.01); **C10N 2030/08** (2013.01); **C10N 2030/10** (2013.01); **C10N 2030/54** (2020.05); **C10N 2040/25** (2013.01)

Cited by

EP2280057A4; US8748357B2; US9321981B2

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)

**EP 1878784 A1 20080116**; **EP 1878784 A4 20100428**; **EP 1878784 B1 20121219**; CN 101218330 A 20080709; CN 101218330 B 20110330; ES 2402946 T3 20130510; JP 5170637 B2 20130327; JP WO2006115097 A1 20081218; PL 1878784 T3 20130731; WO 2006115097 A1 20061102

DOCDB simple family (application)

**EP 06731987 A 20060417**; CN 200680021823 A 20060417; ES 06731987 T 20060417; JP 2006308058 W 20060417; JP 2007514586 A 20060417; PL 06731987 T 20060417