

Title (en)
LUBRICATING COMPOSITIONS CONTAINING SULPHONATES AND PHENATES

Title (de)
SULFONATE UND PHENATE ENTHALTENDE SCHMIERMITTELZUSAMMENSETZUNGEN

Title (fr)
COMPOSITIONS LUBRIFIANTES CONTENANT DES SULFONATES ET DES PHENATES

Publication
EP 1680491 A1 20060719 (EN)

Application
EP 04796892 A 20041029

Priority
• US 2004036312 W 20041029
• US 51591503 P 20031030

Abstract (en)
[origin: WO2005042678A1] A lubricating composition containing: (a). at least 3 weight percent of an overbased sulphonate detergent with a metal ratio of about 12.5:1 to about 40:1; (b). at least 1.5 weight percent of a sulphur containing phenate detergent with a metal ratio of not more than 2.5; and (c). an oil of lubricating viscosity, wherein the sulphur containing phenate contains oligomers of hydrocarbyl phenol with at least 50 wt % of said oligomers in the form of the tetramer or higher oligomers. The composition is suitable for internal combustion engines, particularly marine diesel applications to provide improved cleanliness decreased cylinder wear and reduced deposits.

IPC 1-7
C10M 169/04; C10M 159/24; C10M 159/22; C10M 163/00

IPC 8 full level
C10M 159/22 (2006.01); **C10M 159/24** (2006.01); **C10M 163/00** (2006.01); **C10M 169/04** (2006.01)

CPC (source: EP)
C10M 159/22 (2013.01); **C10M 159/24** (2013.01); **C10M 163/00** (2013.01); **C10M 169/04** (2013.01); C10M 2215/28 (2013.01); C10M 2219/046 (2013.01); C10M 2219/088 (2013.01); C10M 2219/089 (2013.01); C10N 2010/02 (2013.01); C10N 2010/04 (2013.01); C10N 2020/01 (2020.05); C10N 2030/04 (2013.01); C10N 2030/10 (2013.01); C10N 2030/52 (2020.05); C10N 2040/252 (2020.05)

Citation (search report)
See references of WO 2005042678A1

Cited by
WO2011022245A1

Designated contracting state (EPC)
DE FR GB

DOCDB simple family (publication)
WO 2005042678 A1 20050512; EP 1680491 A1 20060719; EP 1680491 B1 20121226; JP 2007510049 A 20070419; JP 2011149032 A 20110804; JP 4803740 B2 20111026

DOCDB simple family (application)
US 2004036312 W 20041029; EP 04796892 A 20041029; JP 2006538408 A 20041029; JP 2011103848 A 20110506