

Title (en)
LUBRICATING COMPOSITIONS CONTAINING SULPHONATES AND PHENATES

Title (de)
MEHRSTUFIGE OPFERMETALLANODEN FÜR HOCHKORROSIVES UMFELD

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

Publication
EP 1753849 A2 20070221 (EN)

Application
EP 05746634 A 20050509

Priority
• US 2005015995 W 20050509
• US 57139304 P 20040514

Abstract (en)
[origin: WO2005112575A2] A lubricating composition containing (a). at least 3 weight percent of an overbased sulphonate detergent with a metal ratio of 12.5:1 to 40:1; (b). at least 1.5 weight percent of a sulphur containing phenate detergent with a metal ratio of not more 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 8 full level
C10M 163/00 (2006.01)

CPC (source: EP US)
C10M 163/00 (2013.01 - EP US); **C10M 2207/144** (2013.01 - EP US); **C10M 2207/146** (2013.01 - EP US); **C10M 2207/262** (2013.01 - EP US); **C10M 2207/289** (2013.01 - EP US); **C10M 2215/08** (2013.01 - EP US); **C10M 2215/28** (2013.01 - EP US); **C10M 2219/046** (2013.01 - EP US); **C10M 2219/066** (2013.01 - EP US); **C10M 2219/088** (2013.01 - EP US); **C10M 2219/089** (2013.01 - EP US); **C10M 2223/043** (2013.01 - EP US); **C10M 2227/061** (2013.01 - EP US); **C10N 2030/06** (2013.01 - EP US); **C10N 2030/08** (2013.01 - EP US); **C10N 2030/10** (2013.01 - EP US); **C10N 2040/25** (2013.01 - EP US); **C10N 2040/252** (2020.05 - EP US); **C10N 2060/14** (2013.01 - EP US)

Citation (search report)
See references of WO 2005112575A2

Citation (examination)
• WO 2005042678 A1 20050512 - LUBRIZOL CORP [US], et al
• EP 0331359 A1 19890906 - EXXON CHEMICAL PATENTS INC [US]
• THORSTEN BARTELS ET AL: "Lubricants and Lubrication", 15 January 2003 (2003-01-15), pages 43 - 61, XP055065530, Retrieved from the Internet <URL:http://onlinelibrary.wiley.com/store/10.1002/14356007.a15_423/asset/a15_423.pdf?v=1&t=hhlmwqat&s=58288f9086eac916c4f54424492ec23d17dfc31b> [retrieved on 20130606], DOI: 10.1002/14356007.a15

Designated contracting state (EPC)
DE FR GB

DOCDB simple family (publication)
WO 2005112575 A2 20051201; WO 2005112575 A3 20060518; EP 1753849 A2 20070221; JP 2007537334 A 20071220; JP 2011236444 A 20111124; JP 4927714 B2 20120509; US 2011143977 A1 20110616

DOCDB simple family (application)
US 2005015995 W 20050509; EP 05746634 A 20050509; JP 2007513235 A 20050509; JP 2011189986 A 20110831; US 56895105 A 20050509