

Title (en)  
MARINE DIESEL ENGINE LUBRICATING OIL COMPOSITION

Title (de)  
SCHMIERÖLZUSAMMENSETZUNG FÜR SCHIFFSDIESELMOTOR

Title (fr)  
COMPOSITIONS D'HUILE LUBRIFIANTE POUR MOTEUR DIESEL MARIN

Publication  
**EP 3250663 A4 20180627 (EN)**

Application  
**EP 16743963 A 20160126**

Priority

- US 201562107577 P 20150126
- US 201562108701 P 20150128
- US 2016014926 W 20160126

Abstract (en)  
[origin: US2016215234A1] A marine diesel lubricating oil composition having a TBN from about 5 to about 120 containing a base oil of lubricating viscosity, an overbased alkylaryl C10-40 sulfonate detergent and an overbased isomerized C10-40 normal alpha olefin based phenate detergent, wherein the weight ratio of the overbased sulfonate detergent to the overbased isomerized normal alpha olefin based phenate detergent ranges from 1:9 to 9:1.

IPC 8 full level  
**C10M 105/38** (2006.01); **C10M 125/10** (2006.01); **C10M 135/02** (2006.01); **C10M 135/10** (2006.01); **C10M 159/20** (2006.01); **C10M 159/24** (2006.01); **C10M 169/04** (2006.01)

CPC (source: EP KR US)  
**C10M 101/02** (2013.01 - KR); **C10M 135/02** (2013.01 - EP KR US); **C10M 135/10** (2013.01 - EP KR US); **C10M 159/20** (2013.01 - EP US); **C10M 159/24** (2013.01 - EP KR US); **C10M 169/04** (2013.01 - KR); **C10M 169/042** (2013.01 - EP US); **C10M 2203/1006** (2013.01 - EP US); **C10M 2203/1025** (2013.01 - EP KR US); **C10M 2207/028** (2013.01 - EP KR US); **C10M 2219/0406** (2013.01 - KR); **C10M 2219/046** (2013.01 - EP US); **C10M 2219/089** (2013.01 - EP US); **C10M 2223/045** (2013.01 - EP US); **C10N 2010/04** (2013.01 - EP US); **C10N 2020/071** (2020.05 - EP US); **C10N 2030/02** (2013.01 - EP US); **C10N 2030/04** (2013.01 - EP US); **C10N 2030/08** (2013.01 - EP US); **C10N 2030/10** (2013.01 - EP US); **C10N 2030/26** (2020.05 - EP US); **C10N 2040/252** (2020.05 - EP US)

Citation (search report)

- [XP] WO 2015067723 A1 20150514 - CHEVRON ORONITE TECHNOLOGY BV [NL]
- [E] EP 3215592 A1 20170913 - CHEVRON ORONITE TECH BV [NL]
- [X] EP 2497818 A1 20120912 - PETROCHINA CO LTD [CN]
- [X] CN 102676281 B 20130904 - CHINA NAT PETROLEUM CORP
- See references of WO 2016123106A2

Designated contracting state (EPC)  
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)  
**US 2016215234 A1 20160728**; CN 107406784 A 20171128; EP 3250663 A2 20171206; EP 3250663 A4 20180627; JP 2018504498 A 20180215; KR 20170137709 A 20171213; SG 11201706060X A 20170830; WO 2016123106 A2 20160804; WO 2016123106 A3 20161006

DOCDB simple family (application)  
**US 201615006639 A 20160126**; CN 201680007190 A 20160126; EP 16743963 A 20160126; JP 2017539322 A 20160126; KR 20177023605 A 20160126; SG 11201706060X A 20160126; US 2016014926 W 20160126