

Title (en)

REDUCED ENGINE DEPOSITS FROM DISPERSANT TREATED WITH COBALT

Title (de)

REDUZIERTE MASCHINENABLÄGERUNGEN VON MIT KOBALT BEHANDELTEM DISPERGIERMITTEL

Title (fr)

DÉPÔTS DE MOTEUR RÉDUITS GRÂCE À UN AGENT DE DISPERSION TRAITÉ AU COBALT

Publication

**EP 3030640 A1 20160615 (EN)**

Application

**EP 14753416 A 20140806**

Priority

- US 201361863973 P 20130809
- US 2014049908 W 20140806

Abstract (en)

[origin: WO2015021129A1] The invention provides a lubricating composition containing an oil of lubricating viscosity and a dispersant treated with cobalt reagent. The invention further relates to methods of lubricating an internal combustion engine by supplying the described lubricating composition to the internal combustion engine. The invention further relates to the use of a dispersant treated with cobalt to reduce deposits on the inner surfaces of engine components.

IPC 8 full level

**C10M 133/56** (2006.01); **C10M 141/06** (2006.01); **C10M 159/18** (2006.01); **C10M 163/00** (2006.01); **C10N 10/02** (2006.01); **C10N 30/04** (2006.01); **C10N 40/25** (2006.01)

CPC (source: EP US)

**C10M 101/00** (2013.01 - US); **C10M 129/10** (2013.01 - US); **C10M 133/04** (2013.01 - US); **C10M 133/44** (2013.01 - US); **C10M 133/56** (2013.01 - EP US); **C10M 141/06** (2013.01 - EP US); **C10M 159/18** (2013.01 - EP US); **C10M 163/00** (2013.01 - EP US); **C10M 169/04** (2013.01 - US); **C10M 2203/1025** (2013.01 - EP US); **C10M 2205/022** (2013.01 - EP US); **C10M 2207/026** (2013.01 - EP US); **C10M 2215/064** (2013.01 - EP US); **C10M 2215/28** (2013.01 - EP US); **C10M 2219/022** (2013.01 - EP US); **C10M 2219/046** (2013.01 - EP US); **C10M 2223/045** (2013.01 - EP US); **C10M 2227/09** (2013.01 - EP US); **C10N 2010/02** (2013.01 - EP US); **C10N 2030/04** (2013.01 - EP US); **C10N 2030/40** (2020.05 - EP US); **C10N 2030/42** (2020.05 - EP US); **C10N 2030/43** (2020.05 - EP US); **C10N 2040/25** (2013.01 - EP US)

Citation (search report)

See references of WO 2015021129A1

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

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

**WO 2015021129 A1 20150212**; CA 2920023 A1 20150212; CN 105612246 A 20160525; EP 3030640 A1 20160615;  
US 2016186087 A1 20160630

DOCDB simple family (application)

**US 2014049908 W 20140806**; CA 2920023 A 20140806; CN 201480054858 A 20140806; EP 14753416 A 20140806;  
US 201414910398 A 20140806