

Title (en)
USE AND METHOD OF REDUCING VALVE DEPOSITS IN AN ENGINE

Title (de)
VERWENDUNG UND METHODE ZUR REDUZIERUNG VON VENTILABLAGERUNGEN IN EINEM MOTOR

Title (fr)
UTILISATION ET MÉTHODE POUR RÉDUIRE LES DÉPÔTS DANS LES SOUPAPES D'ADMISSION D'UN MOTEUR

Publication
EP 2633012 A2 20130904 (EN)

Application
EP 11836848 A 20111013

Priority
• US 91619510 A 20101029
• US 2011056179 W 20111013

Abstract (en)
[origin: WO2012058012A2] The present invention generally relates to a method for reducing intake valve deposits in a Direct Injection Spark Ignition engine, the method comprising operating the engine with a lubricating oil composition comprising: (a) a major amount of an oil of lubricating viscosity; and (b) at least one foam inhibitor selected from the group consisting of silicon oils, polysiloxanes, polyacrylates, and polymethacrylates; wherein the foam inhibitor is not poly (phenyl-methyl) siloxane; and further wherein the amount of said foam inhibitor in said lubricating oil composition is at an effective concentration to achieve at least 10% reduction in intake valve deposits in said Direct Injection Spark Ignition engine compared to operating the engine with said lubricating oil composition without any foam inhibitor.

IPC 8 full level
C10M 169/06 (2006.01); **C10M 145/14** (2006.01); **C10M 155/02** (2006.01); **C10M 157/10** (2006.01); **C10N 40/25** (2006.01)

CPC (source: EP US)
C10M 145/14 (2013.01 - EP US); **C10M 155/02** (2013.01 - EP US); **C10M 2203/1025** (2013.01 - EP US); **C10M 2205/0285** (2013.01 - EP US); **C10M 2209/084** (2013.01 - EP US); **C10M 2215/064** (2013.01 - EP US); **C10M 2223/045** (2013.01 - EP US); **C10M 2229/02** (2013.01 - EP US); **C10M 2229/04** (2013.01 - EP US); **C10M 2229/041** (2013.01 - EP US); **C10M 2229/042** (2013.01 - EP US); **C10M 2229/052** (2013.01 - EP US); **C10N 2030/04** (2013.01 - EP US); **C10N 2040/255** (2020.05 - EP US)

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)
WO 2012058012 A2 20120503; **WO 2012058012 A3 20120719**; CA 2816055 A1 20120503; CA 2816055 C 20180828; CN 103201364 A 20130710; CN 103201364 B 20160914; EP 2633012 A2 20130904; EP 2633012 A4 20140723; EP 2633012 B1 20170104; JP 2013540878 A 20131107; JP 5828597 B2 20151209; SG 189464 A1 20130531; US 2012108476 A1 20120503

DOCDB simple family (application)
US 2011056179 W 20111013; CA 2816055 A 20111013; CN 201180052385 A 20111013; EP 11836848 A 20111013; JP 2013536654 A 20111013; SG 2013029608 A 20111013; US 91619510 A 20101029