

Title (en)

METHODS AND USES FOR INTAKE-VALVE AND DIRECT-INJECTOR DEPOSIT CLEAN-UP.

Title (de)

VERFAHREN UND VERWENDUNG FÜR EINLASSVENTIL UND REINIGUNG VON DIREKTINJEKTORABSCHIEDUNGEN

Title (fr)

PROCÉDÉS ET UTILISATIONS POUR LE NETTOYAGE DES DÉPÔTS DE SOUPAPE D'ASPIRATION ET D'INJECTEUR DIRECT

Publication

**EP 3039101 A1 20160706 (EN)**

Application

**EP 14753107 A 20140821**

Priority

- EP 13181878 A 20130827
- EP 2014067869 W 20140821
- EP 14753107 A 20140821

Abstract (en)

[origin: WO2015028392A1] The use as an intake valve deposit clean-up additive in a fuel composition for a port fuel injection spark-ignition internal combustion engine or a fuel injector deposit clean-up additive in a fuel composition for a direct injection spark-ignition internal combustion engine of a combination of: a. at least one hydrocarbyl-substituted aromatic compound; and b. at least one polyalkylene amine.

IPC 8 full level

**C10L 1/238** (2006.01); **C10L 1/14** (2006.01); **C10L 1/22** (2006.01); **C10L 1/2383** (2006.01); **C10L 1/2387** (2006.01); **C10L 10/06** (2006.01); **C10L 10/18** (2006.01)

CPC (source: EP US)

**C10L 1/143** (2013.01 - EP US); **C10L 1/22** (2013.01 - EP US); **C10L 1/2222** (2013.01 - EP US); **C10L 1/238** (2013.01 - EP US); **C10L 1/2383** (2013.01 - EP US); **C10L 1/2387** (2013.01 - EP US); **C10L 10/06** (2013.01 - EP US); **C10L 10/18** (2013.01 - EP US); **C10L 1/1683** (2013.01 - EP US); **C10L 1/1691** (2013.01 - EP US); **C10L 1/198** (2013.01 - EP US); **C10L 1/221** (2013.01 - EP US); **C10L 1/2225** (2013.01 - EP US); **C10L 2200/0259** (2013.01 - US); **C10L 2200/0423** (2013.01 - EP US); **C10L 2270/023** (2013.01 - EP US); **C10L 2300/20** (2013.01 - EP US)

Citation (search report)

See references of WO 2015028392A1

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 2015028392 A1 20150305**; AU 2014314325 A1 20151217; AU 2014314325 B2 20170921; CN 105705619 A 20160622; EP 3039101 A1 20160706; RU 2015152538 A 20171004; RU 2015152538 A3 20180515; US 2016168498 A1 20160616

DOCDB simple family (application)

**EP 2014067869 W 20140821**; AU 2014314325 A 20140821; CN 201480047378 A 20140821; EP 14753107 A 20140821; RU 2015152538 A 20140821; US 201414905052 A 20140821