

Title (en)
APPARATUS AND METHOD OF OPERATING AN INJECTOR FOR AN EXHAUST GAS AFTERTREATMENT APPARATUS

Title (de)
VORRICHTUNG UND VERFAHREN ZUM BETREIBEN EINES INJEKTORS FÜR EINE ABGASNACHBEHANDLUNGSVORRICHTUNG

Title (fr)
APPAREIL ET PROCÉDÉ DE FONCTIONNEMENT D'UN INJECTEUR POUR UN APPAREIL DE POST-TRAITEMENT DE GAZ D'ÉCHAPPEMENT

Publication
EP 2893163 A4 20160608 (EN)

Application
EP 12881703 A 20120726

Priority
US 2012048277 W 20120726

Abstract (en)
[origin: WO2014018036A2] A method for operating an exhaust aftertreatment system injector to prevent coking includes steps of injecting fuel for heating the aftertreatment devices, when not injecting fuel, flowing air to purge and cool the nozzle to prevent carbon deposits when exhaust gas temperature is low, and substantially stop air flow to allow passive heating of the nozzle by the exhaust for oxidation of any accumulated carbon when exhaust temperature is high enough to support oxidation. Preferably, the nozzle has a catalytic material coating to reduce the temperature necessary for oxidation of the coking material.

IPC 8 full level
F01N 3/20 (2006.01); **F01N 9/00** (2006.01)

CPC (source: EP RU US)
F01N 3/2033 (2013.01 - RU US); **F01N 3/206** (2013.01 - EP RU US); **F01N 9/00** (2013.01 - EP RU US); **F01N 11/002** (2013.01 - RU US); **F01N 2610/03** (2013.01 - EP US); **F01N 2610/08** (2013.01 - EP US); **F01N 2610/146** (2013.01 - EP US); **F01N 2610/1493** (2013.01 - EP US); **F01N 2900/1404** (2013.01 - EP US); **Y02T 10/40** (2013.01 - EP US)

Citation (search report)

- [A] US 7874148 B2 20110125 - DUFFIELD KENDALL THOMAS [US]
- [A] US 2011030334 A1 20110210 - GARCIA GARY [US], et al
- [A] US 8006482 B2 20110830 - COX GLENN BRIAN [US], et al
- [A] DE 19951014 A1 20010104 - BOSCH GMBH ROBERT [DE]
- See references of WO 2014018036A2

Cited by
CN106246301A

Designated contracting state (EPC)
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DOCDB simple family (application)
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