

## Title (en)

Heated injection system for exhaust gas systems of Diesel engines

## Title (de)

Beheiztes Injektionssystem für Dieselmotor-Abgassysteme

## Title (fr)

Système d'injection chauffé pour systèmes de gaz d'échappement de moteurs diesel

## Publication

**EP 2568137 A1 20130313 (DE)**

## Application

**EP 11180569 A 20110908**

## Priority

EP 11180569 A 20110908

## Abstract (en)

The device (21) has two reservoirs (22, 23) for storing two reducing agents, respectively at room temperature. A heating device (29) heats the two reducing agents and is designed as an electrically operated heating device i.e. glow plug. The two reducing agents are formed as a Adblue(RTM: aqueous urea solution) and hydrocarbon compound i.e. diesel fuel, respectively. An ammonia line (24) and a fuel line (25) extend from the two storage vessels, respectively and open out in a 3-way valve (26) that is connected to an injector via a reducing agent line (27). Independent claims are also included for the following: (1) an emission control system for a combustion engine for reducing nitrogen oxide emissions (2) a method for reducing nitrogen oxides in exhaust gases.

## Abstract (de)

Die vorliegende Erfindung betrifft eine Injektionseinrichtung (21) zur Einspeisung von Reduktionsmitteln in ein Abgasreinigungssystem (20) einer Brennkraftmaschine (2) zur Verringerung des Stickoxidausstoßes, insbesondere eines Dieselmotors. Weitere Gegenstände der vorliegenden Erfindung betreffen ein Verfahren zur Reduzierung von Stickoxiden in Abgasen von Brennkraftmaschinen (2) sowie die Verwendung einer Reduktionsmittelmischung zur Reduzierung von Stickoxiden in Abgasen.

## IPC 8 full level

**F01N 3/20** (2006.01); **F01N 3/36** (2006.01)

## CPC (source: EP US)

**F01N 3/206** (2013.01 - EP US); **F01N 3/36** (2013.01 - EP US); **F01N 2240/16** (2013.01 - EP US); **F01N 2610/01** (2013.01 - EP US); **F01N 2610/02** (2013.01 - EP US); **F01N 2610/03** (2013.01 - EP US); **F01N 2610/10** (2013.01 - EP US); **F01N 2610/14** (2013.01 - EP US); **Y10T 137/6416** (2015.04 - EP US); **Y10T 137/87571** (2015.04 - EP US); **Y10T 137/87652** (2015.04 - EP US)

## Citation (applicant)

- EP 1004347 B1 20060719 - UMICORE AG & CO KG [DE]
- DE 10348800 A1 20040617 - FORD GLOBAL TECH LLC [US]
- DE 102006049591 A1 20070531 - FLEETGUARD INC [US]
- DE 102007029674 A1 20090108 - EMCON TECH GERMANY A GMBH [DE]
- EP 0708230 B1 20030709 - BOSCH GMBH ROBERT [DE]

## Citation (search report)

- [Y] JP 2006009606 A 20060112 - HINO MOTORS LTD
- [Y] DE 102008063515 A1 20100624 - DEUTZ AG [DE]
- [Y] FR 2919339 A1 20090130 - PEUGEOT CITROEN AUTOMOBILES SA [FR]
- [Y] FR 2928688 A1 20090918 - FAURECIA SYS ECHAPPEMENT [FR]
- [Y] EP 1676628 A1 20060705 - GRUNDFOS MANAGEMENT AS [DK]

## 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)

**EP 2568137 A1 20130313**; **EP 2568137 B1 20150805**; CN 102989316 A 20130327; US 2013064744 A1 20130314

## DOCDB simple family (application)

**EP 11180569 A 20110908**; CN 201210332547 A 20120910; US 201213592231 A 20120822