

Title (en)

PUMP FOR CONVEYING AN EXHAUST GAS AFTERTREATMENT MEDIUM, PARTICULARLY A UREA-WATER SOLUTION, FOR DIESEL ENGINES

Title (de)

PUMPE ZUR FORDERUNG EINES ABGASNACHBEHANDLUNGSMEDIUMS, INSBESONDERE EINER HARNSTOFF-WASSER-LOSUNG, FÜR DIESELMOTO-REN

Title (fr)

POMPE DE REFOULEMENT D'UN MILIEU DE TRAITEMENT POST RIEUR, EN PARTICULIER D'UNE SOLUTION UR E-EAU, POUR MOTEURS DIESEL

Publication

EP 1660774 A1 20060531 (DE)

Application

EP 04762689 A 20040819

Priority

- DE 2004001848 W 20040819
- DE 10341995 A 20030902
- DE 102004011123 A 20040308

Abstract (en)

[origin: WO2005024232A1] Disclosed is a pump for conveying an exhaust gas aftertreatment medium, particularly a urea-water solution, for diesel engines. Said pump comprises a pump housing in which a pump element is accommodated that conveys the medium from a reservoir to the outlet. In order to be able to convey the exhaust gas aftertreatment medium in a flawless and reliable manner in the conditions occurring in diesel vehicles, the pump element is embodied as a piston which can be displaced counter to an antagonistic force and is separated from the medium by means of a membrane such that the piston is corrosion-resistant as it does not enter in contact with the medium. The membrane seals the piston, rendering sealing of the shaft in the media contact area unnecessary. The inventive pump is used in exhaust gas aftertreatment devices for diesel engines.

IPC 1-7

F04B 17/00; **F04B 17/04**

IPC 8 full level

F04B 17/00 (2006.01); **F04B 17/04** (2006.01); **F04B 43/02** (2006.01); **F04B 43/04** (2006.01)

CPC (source: EP US)

F04B 17/003 (2013.01 - EP US); **F04B 17/042** (2013.01 - EP US); **F04B 17/046** (2013.01 - EP US); **F04B 43/04** (2013.01 - EP US)

Citation (search report)

See references of WO 2005024232A1

Citation (examination)

- DD 67037 A1 19690520 - GRILLE MAX [DD], et al
- DE 10147172 A1 20030424 - SIEMENS AG [DE]
- DE 19819408 A1 19991111 - FREUDENBERG CARL FA [DE]

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)

WO 2005024232 A1 20050317; DE 112004002131 D2 20060713; EP 1660774 A1 20060531; JP 2007504396 A 20070301; US 2007020123 A1 20070125

DOCDB simple family (application)

DE 2004001848 W 20040819; DE 112004002131 T 20040819; EP 04762689 A 20040819; JP 2006525611 A 20040819; US 57016506 A 20060417